05/23/2007
Bank: (Private Pilot)
Airman Knowledge Test Question Bank

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1. H921 PVT

The amount of excess load that can be imposed on the wing of an airplane depends upon the

A) position of the CG.

B) speed of the airplane.

C) abruptness at which the load is applied.

2. H921 PVT

Which basic flight maneuver increases the load factor on an airplane as compared to straight-and-level flight?

A) Climbs.

B) Turns.

C) Stalls.

3. H921 PVT

During an approach to a stall, an increased load factor will cause the airplane to

A) stall at a higher airspeed.

B) have a tendency to spin.

C) be more difficult to control.

4. H921 PVT

(Refer to figure 2.) If an airplane weighs 2,300 pounds, what approximate weight would the airplane structure be required to support during a 60° banked turn while maintaining altitude?

A) 2,300 pounds.

B) 3,400 pounds.

C) 4,600 pounds.

5. H911 PVT

The term 'angle of attack' is defined as the angle

A) between the wing chord line and the relative wind.

B) between the airplane's climb angle and the horizon.

C) formed by the longitudinal axis of the airplane and the chord line of the wing.

6. H910 PVT

(Refer to figure 1.) The acute angle A is the angle of

A) incidence.

B) attack.

C) dihedral.

7. H912 PVT

What is the relationship of lift, drag, thrust, and weight when the airplane is in straight-and-level flight?

A) Lift equals weight and thrust equals drag.

B) Lift, drag, and weight equal thrust.

C) Lift and weight equal thrust and drag.

8. H911 PVT

When are the four forces that act on an airplane in equilibrium?

A) During unaccelerated flight.

B) When the aircraft is accelerating.

C) When the aircraft is at rest on the ground.

9. H911 PVT

The four forces acting on an airplane in flight are

A) lift, weight, thrust, and drag.

B) lift, weight, gravity, and thrust.

C) lift, gravity, power, and friction.

10. H951 PVT

How will frost on the wings of an airplane affect takeoff performance?

A) Frost will disrupt the smooth flow of air over the wing, adversely affecting its lifting capability.

B) Frost will change the camber of the wing, increasing its lifting capability.

C) Frost will cause the airplane to become airborne with a higher angle of attack, decreasing the stall speed.

11. H911 PVT

What force makes an airplane turn?

A) The horizontal component of lift.

B) The vertical component of lift.

C) Centrifugal force.

12. H573 PVT

VFR approaches to land at night should be accomplished

A) at a higher airspeed.

B) with a steeper descent.

C) the same as during daytime.

13. H920 PVT

In what flight condition is torque effect the greatest in a single-engine airplane?

A) Low airspeed, high power, high angle of attack.

B) Low airspeed, low power, low angle of attack.

C) High airspeed, high power, high angle of attack.

14. H920 PVT

The left turning tendency of an airplane caused by P-factor is the result of the

A) clockwise rotation of the engine and the propeller turning the airplane counter-clockwise.

B) propeller blade descending on the right, producing more thrust than the ascending blade on the left.

C) gyroscopic forces applied to the rotating propeller blades acting 90° in advance of the point the force was applied.

15. H920 PVT

When does P-factor cause the airplane to yaw to the left?

A) When at low angles of attack.

B) When at high angles of attack.

C) When at high airspeeds.

16. H917 PVT

What causes an airplane (except a T-tail) to pitch nosedown when power is reduced and controls are not adjusted?

A) The CG shifts forward when thrust and drag are reduced.

B) The downwash on the elevators from the propeller slipstream is reduced and elevator effectiveness is reduced.

C) When thrust is reduced to less than weight, lift is also reduced and the wings can no longer support the weight.

17. H917 PVT

What determines the longitudinal stability of an airplane?

A) The location of the CG with respect to the center of lift.

B) The effectiveness of the horizontal stabilizer, rudder, and rudder trim tab.

C) The relationship of thrust and lift to weight and drag.

18. H917 PVT

An airplane said to be inherently stable will

A) be difficult to stall.

B) require less effort to control.

C) not spin.

19. H540 PVT

In what flight condition must an aircraft be placed in order to spin?

A) Partially stalled with one wing low.

B) In a steep diving spiral.

C) Stalled.

20. H540 PVT

During a spin to the left, which wing(s) is/are stalled?

A) Both wings are stalled.

B) Neither wing is stalled.

C) Only the left wing is stalled.

21. H919 PVT

As altitude increases, the indicated airspeed at which a given airplane stalls in a particular configuration will

A) decrease as the true airspeed decreases.

B) decrease as the true airspeed increases.

C) remain the same regardless of altitude.

22. H919 PVT

The angle of attack at which an airplane wing stalls will

A) increase if the CG is moved forward.

B) change with an increase in gross weight.

C) remain the same regardless of gross weight.

23. J11 PVT

An ATC radar facility issues the following advisory to a pilot flying north in a calm wind:

`TRAFFIC 9 O`CLOCK, 2 MILES, SOUTHBOUND...`

Where should the pilot look for this traffic?

A) South.

B) North.

C) West.

24. H945 PVT

(Refer to figure 36.) What is the expected fuel consumption for a 1,000-nautical mile flight under the following conditions?

Pressure altitude	8,000 ft
Temperature	22 °C
Manifold pressure	20.8 inches Hg
Wind	Calm

A) 60.2 gallons.

B) 70.1 gallons.

C) 73.2 gallons.

25. H948 PVT

(Refer to figure 36.) What fuel flow should a pilot expect at 11,000 feet on a standard day with 65 percent maximum continuous power?

A) 10.6 gallons per hour.

B) 11.2 gallons per hour.

C) 11.8 gallons per hour.

26. H945 PVT

(Refer to figure 8.) What is the effect of a temperature decrease and a pressure altitude increase on the density altitude from 90 °F and 1,250 feet pressure altitude to 55 °F and 1,750 feet pressure altitude?

A) 1,300-foot decrease.

B) 1,700-foot decrease.

C) 1,700-foot increase.

27. H945 PVT

(Refer to figure 8.) Determine the pressure altitude at an airport that is 1,386 feet MSL with an altimeter setting of 29.97.

A) 1,341 feet MSL.

B) 1,451 feet MSL.

C) 1,562 feet MSL.

28. H946 PVT

(Refer to figure 8.) What is the effect of a temperature increase from 30 to 50 °F on the density altitude if the pressure altitude remains at 3,000 feet MSL?

A) 900-foot increase.

B) 1,100-foot decrease.

C) 1,300-foot increase.

29. H946 PVT

(Refer to figure 38.) Determine the approximate total distance required to land over a 50-foot obstacle.

OAT	90 °F
Pressure altitude	4,000 ft
Weight	2,800 lb
Headwind component	10 kts

A) 1,525 feet.

B) 1,775 feet.

C) 1,950 feet.

30. H946 PVT

(Refer to figure 38.) Determine the total distance required to land.

OAT	32 °F
Pressure altitude	8,000 ft
Weight	2,600 lb
Headwind component	20 kts
Obstacle	50 ft

A) 850 feet.

B) 1,400 feet.

C) 1,750 feet.

31. H945 PVT

(Refer to figure 8.) Determine the pressure altitude with an indicated altitude of 1,380 feet MSL with an altimeter setting of 28.22 at standard temperature.

A) 2,913 feet MSL.

B) 2,991 feet MSL.

C) 3,010 feet MSL.

32. H945 PVT

(Refer to figure 8.) Determine the pressure altitude at an airport that is 3,563 feet MSL with an altimeter setting of 29.96.

A) 3,527 feet MSL.

B) 3,556 feet MSL.

C) 3,639 feet MSL.

33. H946 PVT

(Refer to figure 41.) Determine the total distance required for takeoff to clear a 50-foot obstacle.

OAT	Std
Pressure altitude	4,000 ft
Takeoff weight	2,800 lb
Headwind component	Calm

A) 1,500 feet.

B) 1,750 feet.

C) 2,000 feet.

34. J22 PVT

When activated, an emergency locator transmitter (ELT) transmits on

A) 118.0 and 118.8 MHz.

B) 121.5 and 243.0 MHz.

C) 123.0 and 119.0 MHz.

35. B11 PVT

When must the battery in an emergency locator transmitter (ELT) be replaced (or recharged if the battery is rechargeable)?

A) After one-half the battery's useful life.

B) During each annual and 100-hour inspection.

C) Every 24 calendar months.

36. J22 PVT

When may an emergency locator transmitter (ELT) be tested?

A) Anytime.

B) At 15 and 45 minutes past the hour.

C) During the first 5 minutes after the hour.

37. J22 PVT

Which procedure is recommended to ensure that the emergency locator transmitter (ELT) has not been activated?

A) Turn off the aircraft ELT after landing.

B) Ask the airport tower if they are receiving an ELT signal.

C) Monitor 121.5 before engine shutdown.

38. J11 PVT

If Air Traffic Control advises that radar service is terminated when the pilot is departing Class C airspace, the transponder should be set to code

A) 0000.

B) 1200.

C) 4096.

39. H926 PVT

One of the main functions of flaps during approach and landing is to

A) decrease the angle of descent without increasing the airspeed.

B) permit a touchdown at a higher indicated airspeed.

C) increase the angle of descent without increasing the airspeed.

40. H931 PVT

What is an important airspeed limitation that is not color coded on airspeed indicators?

A) Never-exceed speed.

B) Maximum structural cruising speed.

C) Maneuvering speed.

41. H931 PVT

(Refer to figure 4.) What is the maximum structural cruising speed?

A) 100 MPH.

B) 165 MPH.

C) 208 MPH.

42. H931 PVT

(Refer to figure 4.) Which color identifies the power-off stalling speed with wing flaps and landing gear in the landing configuration?

A) Upper limit of the green arc.

B) Upper limit of the white arc.

C) Lower limit of the white arc.

43. H931 PVT

(Refer to figure 4.) What is the maximum flaps-extended speed?

A) 65 MPH.

B) 100 MPH.

C) 165 MPH.

44. H931 PVT

(Refer to figure 4.) Which color identifies the power-off stalling speed in a specified configuration?

A) Upper limit of the green arc.

B) Upper limit of the white arc.

C) Lower limit of the green arc.

45. H931 PVT

(Refer to figure 4.) The maximum speed at which the airplane can be operated in smooth air is

A) 100 MPH.

B) 165 MPH.

C) 208 MPH.

46. H931 PVT

If a pilot changes the altimeter setting from 30.11 to 29.96, what is the approximate change in indication?

A) Altimeter will indicate .15 inches Hg higher.

B) Altimeter will indicate 150 feet higher.

C) Altimeter will indicate 150 feet lower.

47. H931 PVT

How do variations in temperature affect the altimeter?

A) Pressure levels are raised on warm days and the indicated altitude is lower than true altitude.

B) Higher temperatures expand the pressure levels and the indicated altitude is higher than true altitude.

C) Lower temperatures lower the pressure levels and the indicated altitude is lower than true altitude.

48. H931 PVT

Altimeter setting is the value to which the barometric pressure scale of the altimeter is set so the altimeter indicates

A) calibrated altitude at field elevation.

B) absolute altitude at field elevation.

C) true altitude at field elevation.

49. H931 PVT

(Refer to figure 3.) Altimeter 1 indicates
A) 500 feet.
B) 1,500 feet.
C) 10,500 feet.

50. H931 PVT
If it is necessary to set the altimeter from 29.15 to 29.85, what change occurs?
A) 70-foot increase in indicated altitude.
B) 70-foot increase in density altitude.
C) 700-foot increase in indicated altitude.

51. H931 PVT
Under what condition is indicated altitude the same as true altitude?
A) If the altimeter has no mechanical error.
B) When at sea level under standard conditions.
C) When at 18,000 feet MSL with the altimeter set at 29.92.

52. H931 PVT
What is pressure altitude?
A) The indicated altitude corrected for position and installation error.
B) The altitude indicated when the barometric pressure scale is set to 29.92.
C) The indicated altitude corrected for nonstandard temperature and pressure.

53. H931 PVT
What is true altitude?
A) The vertical distance of the aircraft above sea level.
B) The vertical distance of the aircraft above the surface.
C) The height above the standard datum plane.

54. H931 PVT
What is absolute altitude?
A) The altitude read directly from the altimeter.
B) The vertical distance of the aircraft above the surface.
C) The height above the standard datum plane.

55. H931 PVT
What is density altitude?
A) The height above the standard datum plane.

B) The pressure altitude corrected for nonstandard temperature.

C) The altitude read directly from the altimeter.

56. H932 PVT

(Refer to figure 7.) The proper adjustment to make on the attitude indicator during level flight is to align the

A) horizon bar to the level-flight indication.

B) horizon bar to the miniature airplane.

C) miniature airplane to the horizon bar.

57. H932 PVT

(Refer to figure 7.) How should a pilot determine the direction of bank from an attitude indicator such as the one illustrated?

A) By the direction of deflection of the banking scale (A).

B) By the direction of deflection of the horizon bar (B).

C) By the relationship of the miniature airplane (C) to the deflected horizon bar (B).

58. H933 PVT

In the Northern Hemisphere, if an aircraft is accelerated or decelerated, the magnetic compass will normally indicate

A) a turn momentarily.

B) correctly when on a north or south heading.

C) a turn toward the south.

59. H933 PVT

In the Northern Hemisphere, a magnetic compass will normally indicate initially a turn toward the west if

A) a left turn is entered from a north heading.

B) a right turn is entered from a north heading.

C) an aircraft is accelerated while on a north heading.

60. H933 PVT

Deviation in a magnetic compass is caused by the

A) presence of flaws in the permanent magnets of the compass.

B) difference in the location between true north and magnetic north.

C) magnetic fields within the aircraft distorting the lines of magnetic force.

61. H933 PVT

During flight, when are the indications of a magnetic compass accurate?

A) Only in straight-and-level unaccelerated flight.

B) As long as the airspeed is constant.

C) During turns if the bank does not exceed 18°.

62. H933 PVT

In the Northern Hemisphere, the magnetic compass will normally indicate a turn toward the south when

A) a left turn is entered from an east heading.

B) a right turn is entered from a west heading.

C) the aircraft is decelerated while on a west heading.

63. H932 PVT

(Refer to figure 5.) A turn coordinator provides an indication of the

A) movement of the aircraft about the yaw and roll axis.

B) angle of bank up to but not exceeding 30°.

C) attitude of the aircraft with reference to the longitudinal axis.

64. H931 PVT

If the pitot tube and outside static vents become clogged, which instruments would be affected?

A) The altimeter, airspeed indicator, and turn-and-slip indicator.

B) The altimeter, airspeed indicator, and vertical speed indicator.

C) The altimeter, attitude indicator, and turn-and-slip indicator.

65. H928 PVT

The presence of carburetor ice in an aircraft equipped with a fixed-pitch propeller can be verified by applying carburetor heat and noting

A) an increase in RPM and then a gradual decrease in RPM.

B) a decrease in RPM and then a constant RPM indication.

C) a decrease in RPM and then a gradual increase in RPM.

66. H927 PVT

With regard to carburetor ice, float-type carburetor systems in comparison to fuel injection systems are generally considered to be

A) more susceptible to icing.

B) equally susceptible to icing.

C) susceptible to icing only when visible moisture is present.

67. H927 PVT

Which condition is most favorable to the development of carburetor icing?

A) Any temperature below freezing and a relative humidity of less than 50 percent.

B) Temperature between 32 and 50 °F and low humidity.

C) Temperature between 20 and 70 °F and high humidity.

68. H927 PVT

The operating principle of float-type carburetors is based on the

A) automatic metering of air at the venturi as the aircraft gains altitude.

B) difference in air pressure at the venturi throat and the air inlet.

C) increase in air velocity in the throat of a venturi causing an increase in air pressure.

69. H927 PVT

While cruising at 9,500 feet MSL, the fuel/air mixture is properly adjusted. What will occur if a descent to 4,500 feet MSL is made without readjusting the mixture?

A) The fuel/air mixture may become excessively lean.

B) There will be more fuel in the cylinders than is needed for normal combustion, and the excess fuel will absorb heat and cool the engine.

C) The excessively rich mixture will create higher cylinder head temperatures and may cause detonation.

70. H927 PVT

Generally speaking, the use of carburetor heat tends to

A) decrease engine performance.

B) increase engine performance.

C) have no effect on engine performance.

71. H927 PVT

If an aircraft is equipped with a fixed-pitch propeller and a float-type carburetor, the first indication of carburetor ice would most likely be

A) a drop in oil temperature and cylinder head temperature.

B) engine roughness.

C) loss of RPM.

72. H927 PVT

Applying carburetor heat will

A) result in more air going through the carburetor.

B) enrich the fuel/air mixture.

C) not affect the fuel/air mixture.

73. H928 PVT

On aircraft equipped with fuel pumps, when is the auxiliary electric driven pump used?

A) All the time to aid the engine-driven fuel pump.

B) In the event engine-driven fuel pump fails.

C) Constantly except in starting the engine.

74. H515 PVT

Should it become necessary to handprop an airplane engine, it is extremely important that a competent pilot

A) call 'contact' before touching the propeller.

B) be at the controls in the cockpit.

C) be in the cockpit and call out all commands.

75. H928 PVT

If the grade of fuel used in an aircraft engine is lower than specified for the engine, it will most likely cause

A) a mixture of fuel and air that is not uniform in all cylinders.

B) lower cylinder head temperatures.

C) detonation.

76. H928 PVT

One purpose of the dual ignition system on an aircraft engine is to provide for

A) improved engine performance.

B) uniform heat distribution.

C) balanced cylinder head pressure.

77. H928 PVT

Detonation occurs in a reciprocating aircraft engine when

A) the spark plugs are fouled or shorted out or the wiring is defective.

B) hot spots in the combustion chamber ignite the fuel/air mixture in advance of normal ignition.

C) the unburned charge in the cylinders explodes instead of burning normally.

78. H928 PVT

If a pilot suspects that the engine (with a fixed-pitch propeller) is detonating during climb-out after takeoff, the initial corrective action to take would be to

A) lean the mixture.

B) lower the nose slightly to increase airspeed.

C) apply carburetor heat.

79. H928 PVT

The uncontrolled firing of the fuel/air charge in advance of normal spark ignition is known as

A) combustion.

B) pre-ignition.

C) detonation.

80. H928 PVT

What should be the first action after starting an aircraft engine?

A) Adjust for proper RPM and check for desired indications on the engine gauges.

B) Place the magneto or ignition switch momentarily in the OFF position to check for proper grounding.

C) Test each brake and the parking brake.

81. H928 PVT

What is one procedure to aid in cooling an engine that is overheating?

A) Enrichen the fuel mixture.

B) Increase the RPM.

C) Reduce the airspeed.

82. H928 PVT

If the engine oil temperature and cylinder head temperature gauges have exceeded their normal operating range, the pilot may have been operating with

A) the mixture set too rich.

B) higher-than-normal oil pressure.

C) too much power and with the mixture set too lean.

83. H928 PVT

During the run-up at a high-elevation airport, a pilot notes a slight engine roughness that is not affected by the magneto check but grows worse during the carburetor heat check. Under these circumstances, what would be the most logical initial action?

A) Check the results obtained with a leaner setting of the mixture.

B) Taxi back to the flight line for a maintenance check.

C) Reduce manifold pressure to control detonation.

84. H928 PVT

The basic purpose of adjusting the fuel/air mixture at altitude is to

A) decrease the amount of fuel in the mixture in order to compensate for increased air density.

B) decrease the fuel flow in order to compensate for decreased air density.

C) increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air.

85. H928 PVT

An abnormally high engine oil temperature indication may be caused by

A) the oil level being too low.

B) operating with a too high viscosity oil.

C) operating with an excessively rich mixture.

86. H928 PVT

A precaution for the operation of an engine equipped with a constant-speed propeller is to

A) avoid high RPM settings with high manifold pressure.

B) avoid high manifold pressure settings with low RPM.

C) always use a rich mixture with high RPM settings.

87. H928 PVT

How is engine operation controlled on an engine equipped with a constant-speed propeller?

A) The throttle controls power output as registered on the manifold pressure gauge and the propeller control regulates engine RPM.

B) The throttle controls power output as registered on the manifold pressure gauge and the propeller control regulates a constant blade angle.

C) The throttle controls engine RPM as registered on the tachometer and the mixture control regulates the power output.

88. H928 PVT

What effect does high density altitude, as compared to low density altitude, have on propeller efficiency and why?

A) Efficiency is increased due to less friction on the propeller blades.

B) Efficiency is reduced because the propeller exerts less force at high density altitudes than at low density altitudes.

C) Efficiency is reduced due to the increased force of the propeller in the thinner air.

89. J13 PVT

When should pilots decline a land and hold short (LAHSO) clearance?

A) Pilots can not decline clearance.

B) Only when the tower operator concurs.

C) When it will compromise safety.

90. J13 PVT

Who should not participate in the Land and Hold Short Operations (LAHSO) program?

A) Recreational pilots only.

B) Student pilots.

C) Military pilots.

91. J03 PVT

A slightly high glide slope indication from a precision approach path indicator is

A) four white lights.

B) three white lights and one red light.

C) two white lights and two red lights.

92. J03 PVT

An airport's rotating beacon operated during daylight hours indicates

A) there are obstructions on the airport.

B) that weather at the airport located in Class D airspace is below basic VFR weather minimums.

C) the Air Traffic Control tower is not in operation.

93. J03 PVT

To set the high intensity runway lights on medium intensity, the pilot should click the microphone seven times, and then click it

A) one time within four seconds.

B) three time within three seconds.

C) five times within five seconds.

94. H568 PVT

Airport taxiway edge lights are identified at night by

A) white directional lights.

B) blue omnidirectional lights.

C) alternate red and green lights.

95. J03 PVT

(Refer to figure 48.) Illustration A indicates that the aircraft is

A) below the glide slope.

B) on the glide slope.

C) above the glide slope.

96. J03 PVT

An above glide slope indication from a tri-color VASI is

A) a white light signal.

B) a green light signal.

C) an amber light signal.

97. J03 PVT

A below glide slope indication from a pulsating approach slope indicator is a

A) pulsating white light.

B) steady white light.

C) pulsating red light.

98. J03 PVT

A below glide slope indication from a tri-color VASI is a

A) red light signal.

B) pink light signal.

C) green light signal.

99. J05 PVT

(Refer to figure 49.) Area C on the airport depicted is classified as a

A) stabilized area.

B) multiple heliport.

C) closed runway.

100. J05 PVT

(Refer to figure 49.) What is the difference between area A and area E on the airport depicted?

A) 'A' may be used for taxi and takeoff; 'E' may be used only as an overrun.

B) 'A' may be used for all operations except heavy aircraft landings; 'E' may be used only as an overrun.

C) 'A' may be used only for taxiing; 'E' may be used for all operations except landings.

101. J05 PVT

(Refer to figure 49.) According to the airport diagram, which statement is true?

A) Runway 30 is equipped at position E with emergency arresting gear to provide a means of stopping military aircraft.

B) Takeoffs may be started at position A on Runway 12, and the landing portion of this runway begins at position B.

C) The takeoff and landing portion of Runway 12 begins at position B.

102. J05 PVT

The numbers 9 and 27 on a runway indicate that the runway is oriented approximately

A) 009° and 027° true.

B) 090° and 270° true.

C) 090° and 270° magnetic.

103. J13 PVT

(Refer to figure 51.) The segmented circle indicates that a landing on Runway 26 will be with a

A) right-quartering headwind.

B) left-quartering headwind.

C) right-quartering tailwind.

104. J13 PVT

(Refer to figure 51.) The traffic patterns indicated in the segmented circle have been arranged to avoid flights over an area to the

A) south of the airport.

B) north of the airport.

C) southeast of the airport.

105. J13 PVT

(Refer to figure 51.) The segmented circle indicates that the airport traffic is

A) left-hand for Runway 36 and right-hand for Runway 18.

B) left-hand for Runway 18 and right-hand for Runway 36.

C) right-hand for Runway 9 and left-hand for Runway 27.

106. J13 PVT

(Refer to figure 50.) If the wind is as shown by the landing direction indicator, the pilot should land on

A) Runway 18 and expect a crosswind from the right.

B) Runway 22 directly into the wind.

C) Runway 36 and expect a crosswind from the right.

107. J13 PVT

(Refer to figure 50.) Select the proper traffic pattern and runway for landing.

A) Left-hand traffic and Runway 18.

B) Right-hand traffic and Runway 18.

C) Left-hand traffic and Runway 22.

108. H937 PVT

During the preflight inspection who is responsible for determining the aircraft is safe for flight?

A) The pilot in command.

B) The certificated mechanic who performed the annual inspection.

C) The owner or operator.

109. H516 PVT

When taxiing with strong quartering tailwinds, which aileron positions should be used?

A) Aileron down on the downwind side.

B) Ailerons neutral.

C) Aileron down on the side from which the wind is blowing.

110. H516 PVT

(Refer to figure 9, area A.) How should the flight controls be held while taxiing a tricycle-gear equipped airplane into a left quartering headwind?

A) Left aileron up, elevator neutral.

B) Left aileron down, elevator neutral.

C) Left aileron up, elevator down.

111. J13 PVT

If instructed by ground control to taxi to Runway 9, the pilot may proceed

A) via taxiways and across runways to, but not onto, Runway 9.

B) to the next intersecting runway where further clearance is required.

C) via taxiways and across runways to Runway 9, where an immediate takeoff may be made.

112. J13 PVT

After landing at a tower-controlled airport, when should the pilot contact ground control?

A) When advised by the tower to do so.

B) Prior to turning off the runway.

C) After reaching a taxiway that leads directly to the parking area.

113. J12 PVT

If the aircraft`s radio fails, what is the recommended procedure when landing at a controlled airport?

A) Observe the traffic flow, enter the pattern, and look for a light signal from the tower.

B) Enter a crosswind leg and rock the wings.

C) Flash the landing lights and cycle the landing gear while circling the airport.

114. J14 PVT

What ATC facility should the pilot contact to receive a special VFR departure clearance in Class D airspace?

A) Automated Flight Service Station.

B) Air Traffic Control Tower.

C) Air Route Traffic Control Center.

115. J11 PVT

(Refer to figure 26, area 3.) If Redbird Tower is not in operation, which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to monitor airport traffic?

A) 120.3 MHz.

B) 122.95 MHz.

C) 126.35 MHz.

116. J11 PVT

(Refer to figure 21, area 3.) What is the recommended communications procedure for a landing at Currituck County Airport?

A) Transmit intentions on 122.9 MHz when 10 miles out and give position reports in the traffic pattern.

B) Contact Elizabeth City FSS for airport advisory service.

C) Contact New Bern FSS for area traffic information.

117. J11 PVT

(Refer to figure 23, area 2; and figure 32.) At Coeur D'Alene , which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to self-announce position and intentions?

A) 122.05 MHz.

B) 122.1/108.8 MHz.

C) 122.8 MHz.

118. J11 PVT

(Refer to figure 23, area 2; and figure 32.) At Coeur D'Alene, which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to monitor airport traffic?

A) 122.05 MHz.

B) 135.075 MHz.

C) 122.8 MHz.

119. J11 PVT

(Refer to figure 23, area 2; and figure 32.) What is the correct UNICOM frequency to be used at Coeur D'Alene to request fuel?

A) 135.075 MHz.

B) 122.1/108.8 MHz.

C) 122.8 MHz.

120. J11 PVT

(Refer to figure 27, area 2.) What is the recommended communication procedure when inbound to land at Cooperstown Airport?

A) Broadcast intentions when 10 miles out on the CTAF/MULTICOM frequency, 122.9 MHz.

B) Contact UNICOM when 10 miles out on 122.8 MHz.

C) Circle the airport in a left turn prior to entering traffic.

121. J11 PVT

(Refer to figure 27, area 4.) The CTAF/UNICOM frequency at Jamestown Airport is

A) 122.0 MHz.

B) 123.0 MHz.

C) 123.6 MHz.

122. J27 PVT

When departing behind a heavy aircraft, the pilot should avoid wake turbulence by maneuvering the aircraft

A) below and downwind from the heavy aircraft.

B) above and upwind from the heavy aircraft.

C) below and upwind from the heavy aircraft.

123. J27 PVT

When landing behind a large aircraft, the pilot should avoid wake turbulence by staying

A) above the large aircraft's final approach path and landing beyond the large aircraft's touchdown point.

B) below the large aircraft's final approach path and landing before the large aircraft's touchdown point.

C) above the large aircraft's final approach path and landing before the large aircraft's touchdown point.

124. J27 PVT

The greatest vortex strength occurs when the generating aircraft is

A) light, dirty, and fast.

B) heavy, dirty, and fast.

C) heavy, clean, and slow.

125. J27 PVT

When taking off or landing at an airport where heavy aircraft are operating, one should be particularly alert to the hazards of wingtip vortices because this turbulence tends to

A) rise from a crossing runway into the takeoff or landing path.

B) rise into the traffic pattern area surrounding the airport.

C) sink into the flightpath of aircraft operating below the aircraft generating the turbulence.

126. J08 PVT

(Refer to figure 26, area 4.) The floor of Class B airspace overlying Hicks Airport (T67) north-northwest of Fort Worth Meacham Field is

A) at the surface.

B) 3,200 feet MSL.

C) 4,000 feet MSL.

127. J08 PVT

(Refer to figure 26, area 2.) The floor of Class B airspace at Addison Airport is

A) at the surface.

B) 3,000 feet MSL.

C) 3,100 feet MSL.

128. J08 PVT

Which initial action should a pilot take prior to entering Class C airspace?

A) Contact approach control on the appropriate frequency.

B) Contact the tower and request permission to enter.

C) Contact the FSS for traffic advisories.

129. J08 PVT

Under what condition may an aircraft operate from a satellite airport within Class C airspace?

A) The pilot must file a flight plan prior to departure.

B) The pilot must monitor ATC until clear of the Class C airspace.

C) The pilot must contact ATC as soon as practicable after takeoff.

130. J08 PVT

All operations within Class C airspace must be in

A) accordance with instrument flight rules.

B) compliance with ATC clearances and instructions.

C) an aircraft equipped with a 4096-code transponder with Mode C encoding capability.

131. J08 PVT

The normal radius of the outer area of Class C airspace is

A) 5 nautical miles.

B) 15 nautical miles.

C) 20 nautical miles.

132. J08 PVT

The vertical limit of Class C airspace above the primary airport is normally

A) 1,200 feet AGL.

B) 3,000 feet AGL.

C) 4,000 feet AGL.

133. J37 PVT

(Refer to figure 24, area 3.) What is the floor of the Savannah Class C airspace at the shelf area (outer circle)?

A) 1,300 feet AGL.

B) 1,300 feet MSL.

C) 1,700 feet MSL.

134. J08 PVT

A non-tower satellite airport, within the same Class D airspace as that designated for the primary airport, requires radio communications be established and maintained with the

A) satellite airport's UNICOM.

B) associated Flight Service Station.

C) primary airport's control tower.

135. J08 PVT

The lateral dimensions of Class D airspace are based on

A) the number of airports that lie within the Class D airspace.

B) 5 statute miles from the geographical center of the primary airport.

C) the instrument procedures for which the controlled airspace is established.

136. J08 PVT

(Refer to figure 23, area 3.) The vertical limits of that portion of Class E airspace designated as a Federal Airway over Magee Airport are

A) 1,200 feet AGL to 17,999 feet MSL.

B) 700 feet MSL to 12,500 feet MSL.

C) 7,500 feet MSL to 17,999 feet MSL.

137. J10 PVT

(Refer to figure 22, area 3.) What type military flight operations should a pilot expect along IR 644?

A) IFR training flights above 1,500 feet AGL at speeds in excess of 250 knots.

B) VFR training flights above 1,500 feet AGL at speeds less than 250 knots.

C) Instrument training flights below 1,500 feet AGL at speeds in excess of 150 knots.

138. J11 PVT

An ATC radar facility issues the following advisory to a pilot flying on a heading of 090°:

'TRAFFIC 3 O'CLOCK, 2 MILES, WESTBOUND...'

Where should the pilot look for this traffic?

A) East.

B) South.

C) West.

139. J09 PVT

Responsibility for collision avoidance in an alert area rests with

A) the controlling agency.

B) all pilots.

C) Air Traffic Control.

140. J09 PVT

(Refer to figure 27, area 2.) What hazards to aircraft may exist in areas, such as Devils Lake East MOA?

A) Unusual, often invisible, hazards to aircraft, such as artillery firing, aerial gunnery, or guided missiles.

B) Military training activities that necessitate acrobatic or abrupt flight maneuvers.

C) High volume of pilot training or an unusual type of aerial activity.

141. J09 PVT

(Refer to figure 21 area 4.) What hazards to aircraft may exist in restricted areas such as R-5302B?

A) Unusual, often invisible, hazards such as aerial gunnery or guided missiles.

B) Military training activities that necessitate acrobatic or abrupt flight maneuvers.

C) High volume of pilot training or an unusual type of aerial activity.

142. J28 PVT

(Refer to figure 27, area 3.) When flying over Arrowwood National Wildlife Refuge, a pilot should fly no lower than

A) 2,000 feet AGL.

B) 2,500 feet AGL.

C) 3,000 feet AGL.

143. J37 PVT

(Refer to figure 27, area 1.) Identify the airspace over Lowe Airport.

A) Class G airspace - surface up to but not including 18,000 feet MSL.

B) Class G airspace - surface up to but not including 700 feet MSL, Class E airspace - 700 feet to 14,500 feet MSL.

C) Class G airspace - surface up to but not including 1,200 feet AGL, Class E airspace - 1,200 feet AGL up to but not including 18,000 feet MSL.

144. H526 PVT

Which would provide the greatest gain in altitude in the shortest distance during climb after takeoff?

A) VY.

B) VA.

C) VX.

145. H527 PVT

After takeoff, which airspeed would the pilot use to gain the most altitude in a given period of time?

A) VY.

B) VX.

C) VA.

146. H567 PVT

During a night flight, you observe a steady red light and a flashing red light ahead and at the same altitude. What is the general direction of movement of the other aircraft?

A) The other aircraft is crossing to the left.

B) The other aircraft is crossing to the right.

C) The other aircraft is approaching head-on.

147. H567 PVT

During a night flight, you observe steady red and green lights ahead and at the same altitude. What is the general direction of movement of the other aircraft?

A) The other aircraft is crossing to the left.

B) The other aircraft is flying away from you.

C) The other aircraft is approaching head-on.

148. H567 PVT

During a night flight, you observe a steady white light and a flashing red light ahead and at the same altitude. What is the general direction of movement of the other aircraft?

A) The other aircraft is flying away from you.

B) The other aircraft is crossing to the left.

C) The other aircraft is crossing to the right.

149. H507 PVT

Prior to starting each maneuver, pilots should

A) check altitude, airspeed, and heading indications.

B) visually scan the entire area for collision avoidance.

C) announce their intentions on the nearest CTAF.

150. H995 PVT

What is the most effective way to use the eyes during night flight?

A) Look only at far away, dim lights.

B) Scan slowly to permit offcenter viewing.

C) Concentrate directly on each object for a few seconds.

151. H995 PVT

The best method to use when looking for other traffic at night is to

A) look to the side of the object and scan slowly.

B) scan the visual field very rapidly.

C) look to the side of the object and scan rapidly.

152. H995 PVT

The most effective method of scanning for other aircraft for collision avoidance during nighttime hours is to use

A) regularly spaced concentration on the 3-, 9-, and 12-o'clock positions.

B) a series of short, regularly spaced eye movements to search each 30-degree sector.

C) peripheral vision by scanning small sectors and utilizing offcenter viewing.

153. J14 PVT

What procedure is recommended when climbing or descending VFR on an airway?

A) Execute gentle banks, left and right for continuous visual scanning of the airspace.

B) Advise the nearest FSS of the altitude changes.

C) Fly away from the centerline of the airway before changing altitude.

154. J27 PVT

Wingtip vortices are created only when an aircraft is

A) operating at high airspeeds.

B) heavily loaded.

C) developing lift.

155. J27 PVT

The wind condition that requires maximum caution when avoiding wake turbulence on landing is a

A) light, quartering headwind.
B) light, quartering tailwind.
C) strong headwind.

156. H994 PVT
Large accumulations of carbon monoxide in the human body result in
A) tightness across the forehead.
B) loss of muscular power.
C) an increased sense of well-being.

157. H994 PVT
Susceptibility to carbon monoxide poisoning increases as
A) altitude increases.
B) altitude decreases.
C) air pressure increases.

158. J31 PVT
What effect does haze have on the ability to see traffic or terrain features during flight?
A) Haze causes the eyes to focus at infinity.
B) The eyes tend to overwork in haze and do not detect relative movement easily.
C) All traffic or terrain features appear to be farther away than their actual distance.

159. J31 PVT
Which statement best defines hypoxia?
A) A state of oxygen deficiency in the body.
B) An abnormal increase in the volume of air breathed.
C) A condition of gas bubble formation around the joints or muscles.

160. J31 PVT
The most effective method of scanning for other aircraft for collision avoidance during daylight hours is to use
A) regularly spaced concentration on the 3-, 9-, and 12-o'clock positions.
B) a series of short, regularly spaced eye movements to search each 10-degree sector.
C) peripheral vision by scanning small sectors and utilizing offcenter viewing.

161. J31 PVT
Rapid or extra deep breathing while using oxygen can cause a condition known as
A) hyperventilation.

B) aerosinusitis.

C) aerotitis.

162. J31 PVT

Which technique should a pilot use to scan for traffic to the right and left during straight-and-level flight?

A) Systematically focus on different segments of the sky for short intervals.

B) Concentrate on relative movement detected in the peripheral vision area.

C) Continuous sweeping of the windshield from right to left.

163. J31 PVT

How can you determine if another aircraft is on a collision course with your aircraft?

A) The other aircraft will always appear to get larger and closer at a rapid rate.

B) The nose of each aircraft is pointed at the same point in space.

C) There will be no apparent relative motion between your aircraft and the other aircraft.

164. J31 PVT

If a pilot experiences spatial disorientation during flight in a restricted visibility condition, the best way to overcome the effect is to

A) rely upon the aircraft instrument indications.

B) concentrate on yaw, pitch, and roll sensations.

C) consciously slow the breathing rate until symptoms clear and then resume normal breathing rate.

165. H994 PVT

Pilots are more subject to spatial disorientation if

A) they ignore the sensations of muscles and inner ear.

B) body signals are used to interpret flight attitude.

C) eyes are moved often in the process of cross-checking the flight instruments.

166. J31 PVT

The danger of spatial disorientation during flight in poor visual conditions may be reduced by

A) shifting the eyes quickly between the exterior visual field and the instrument panel.

B) having faith in the instruments rather than taking a chance on the sensory organs.

C) leaning the body in the opposite direction of the motion of the aircraft.

167. J12 PVT

The correct method of stating 4,500 feet MSL to ATC is

A) 'FOUR THOUSAND FIVE HUNDRED.'

B) 'FOUR POINT FIVE.'
C) 'FORTY-FIVE HUNDRED FEET MSL.'

168. J12 PVT
The correct method of stating 10,500 feet MSL to ATC is
A) 'TEN THOUSAND, FIVE HUNDRED FEET.'
B) 'TEN POINT FIVE.'
C) 'ONE ZERO THOUSAND, FIVE HUNDRED.'

169. J28 PVT
Pilots flying over a national wildlife refuge are requested to fly no lower than
A) 1,000 feet AGL.
B) 2,000 feet AGL.
C) 3,000 feet AGL.

170. J37 PVT
(Refer to figure 21, area 2.) The elevation of the Chesapeake Regional Airport is
A) 20 feet.
B) 36 feet.
C) 360 feet.

171. J37 PVT
(Refer to figure 21, area 5.) The CAUTION box denotes what hazard to aircraft?
A) Unmarked blimp hangers at 300 feet MSL.
B) Unmarked balloon on cable to 3,000 feet AGL.
C) Unmarked balloon on cable to 3,000 feet MSL.

172. J37 PVT
(Refer to figure 22.) On what frequency can a pilot receive Hazardous Inflight Weather Advisory Service (HIWAS) in the vicinity of area 1?
A) 117.1 MHz.
B) 118.0 MHz.
C) 122.0 MHz.

173. J37 PVT
(Refer to figure 26.) At which airports is fixed-wing Special VFR not authorized?
A) Fort Worth Meacham and Fort Worth Spinks.
B) Dallas-Fort Worth International and Dallas Love Field.

C) Addison and Redbird.

174. J37 PVT

(Refer to figure 21, area 2.) The flag symbol at Lake Drummond represents a

A) compulsory reporting point for Norfolk Class C airspace.

B) compulsory reporting point for Hampton Roads Airport.

C) visual checkpoint used to identify position for initial callup to Norfolk Approach Control.

175. J37 PVT

(Refer to figure 22.) Which public use airports depicted are indicated as having fuel?

A) Minot Intl. (area 1) and Mercer County Regional Airport (area 3).

B) Minot Intl. (area 1) and Garrison (area 2).

C) Mercer County Regional Airport (area 3) and Garrison (area 2).

176. J37 PVT

(Refer to figure 26, area 2.) The control tower frequency for Addison Airport is

A) 122.95 MHz.

B) 126.0 MHz.

C) 133.4 MHz.

177. J37 PVT

(Refer to figure 24.) The flag symbols at Statesboro Bullock County Airport, Claxton-Evans County Airport, and Ridgeland Airport are

A) outer boundaries of Savannah Class C airspace.

B) airports with special traffic patterns.

C) visual checkpoints to identify position for initial callup prior to entering Savannah Class C airspace.

178. J37 PVT

(Refer to figure 26, area 4.) The airspace directly overlying Fort Worth Meacham is

A) Class B airspace to 10,000 feet MSL.

B) Class C airspace to 5,000 feet MSL.

C) Class D airspace to 3,200 feet MSL.

179. J37 PVT

(Refer to figure 24, area 3.) What is the height of the lighted obstacle approximately 6 nautical miles southwest of Savannah International?

A) 1,500 feet MSL.

B) 1,531 feet AGL.

C) 1,549 feet MSL.

180. J37 PVT

(Refer to figure 22.) The terrain elevation of the light tan area between Minot (area 1) and Audubon Lake (area 2) varies from

A) sea level to 2,000 feet MSL.

B) 2,000 feet to 2,500 feet MSL.

C) 2,000 feet to 2,700 feet MSL.

181. J37 PVT

(Refer to figure 21, area 1.) What minimum radio equipment is required to land and take off at Norfolk International?

A) Mode C transponder and omnireceiver.

B) Mode C transponder and two-way radio.

C) Mode C transponder, omnireceiver, and DME.

182. J37 PVT

(Refer to figure 26, area 7.) The airspace overlying Mc Kinney (TKI) is controlled from the surface to

A) 700 feet AGL.

B) 2,900 feet MSL.

C) 2,500 feet MSL.

183. J37 PVT

(Refer to figure 27, area 6.) The airspace overlying and within 5 miles of Barnes County Airport is

A) Class D airspace from the surface to the floor of the overlying Class E airspace.

B) Class E airspace from the surface to 1,200 feet MSL.

C) Class G airspace from the surface to 700 feet AGL.

184. J37 PVT

(Refer to figure 26, area 8.) What minimum altitude is required to fly over the Cedar Hill TV towers in the congested area south of NAS Dallas?

A) 2,555 feet MSL.

B) 3,449 feet MSL.

C) 3,349 feet MSL.

185. H981 PVT

(Refer to figure 28.) An aircraft departs an airport in the central standard time zone at 0930 CST for a 2-hour flight to an airport located in the mountain standard time zone. The landing should be at what time?

A) 0930 MST.

B) 1030 MST.

C) 1130 MST.

186. H987 PVT

(Refer to figure 23.) Determine the magnetic heading for a flight from Sandpoint Airport (area 1) to St. Maries Airport (area 4). The wind is from 215° at 25 knots, and the true airspeed is 125 knots.

A) 187°.

B) 169°.

C) 349°.

187. H981 PVT

(Refer to figure 28.) An aircraft departs an airport in the central standard time zone at 0845 CST for a 2-hour flight to an airport located in the mountain standard time zone. The landing should be at what coordinated universal time?

A) 1345Z.

B) 1445Z.

C) 1645Z.

188. H981 PVT

(Refer to figure 28.) An aircraft departs an airport in the mountain standard time zone at 1615 MST for a 2-hour 15-minute flight to an airport located in the Pacific standard time zone. The estimated time of arrival at the destination airport should be

A) 1630 PST.

B) 1730 PST.

C) 1830 PST.

189. H987 PVT

(Refer to figure 25). Determine the magnetic course from Airpark East Airport (area 1) to Winnsboro Airport (area 2). Magnetic variation is 6°30'E.

A) 075°.

B) 082°.

C) 091°.

190. H983 PVT

(Refer to figure 28.) An aircraft departs an airport in the Pacific standard time zone at 1030 PST for a 4-hour flight to an airport located in the central standard time zone. The landing should be at what coordinated universal time?

A) 2030Z.

B) 2130Z.

C) 2230Z.

191. H983 PVT

(Refer to figure 22.) What is the estimated time en route from Mercer County Regional Airport (area 3) to Minot International (area 1)? The wind is from 330° at 25 knots and the true airspeed is 100 knots. Add 3-1/2 minutes for departure and climb-out.

A) 44 minutes.

B) 48 minutes.

C) 52 minutes.

192. H981 PVT

(Refer to figure 28.) An aircraft departs an airport in the mountain standard time zone at 1515 MST for a 2-hour 30-minute flight to an airport located in the Pacific standard time zone. What is the estimated time of arrival at the destination airport?

A) 1645 PST.

B) 1745 PST.

C) 1845 PST.

193. H983 PVT

(Refer to figure 26.) What is the estimated time en route for a flight from Denton Muni (area 1) to Addison (area 2)? The wind is from 200° at 20 knots, the true airspeed is 110 knots, and the magnetic variation is 7° east.

A) 13 minutes.

B) 16 minutes.

C) 19 minutes.

194. H983 PVT

(Refer to figure 23.) Determine the magnetic heading for a flight from St. Maries Airport (area 4) to Priest River Airport (area 1). The wind is from 340° at 10 knots, and the true airspeed is 90 knots.

A) 320°.

B) 327°.

C) 345°.

195. H983 PVT

(Refer to figure 24.) What is the estimated time en route for a flight from Allendale County Airport (area 1) to Claxton-Evans County Airport (area 2)? The wind is from 100° at 18 knots and the true airspeed is 115 knots. Add 2 minutes for climb-out.

A) 27 minutes.

B) 30 minutes.

C) 33 minutes.

196. H983 PVT

(Refer to figure 24.) What is the estimated time en route for a flight from Claxton-Evans County Airport (area 2) to Hampton Varnville Airport (area 1)? The wind is from 290° at 18 knots and the true airspeed is 85 knots. Add 2 minutes for climb-out.

A) 35 minutes.

B) 39 minutes.

C) 44 minutes.

197. H983 PVT

(Refer to figure 24.) Determine the magnetic heading for a flight from Allendale County Airport (area 1) to Claxton-Evans County Airport (area 2). The wind is from 090° at 16 knots, and the true airspeed is 90 knots.

A) 208°.

B) 212°.

C) 230°.

198. H983 PVT

(Refer to figure 24 and 59.) Determine the compass heading for a flight from Claxton-Evans County Airport (area 2) to Hampton Varnville Airport (area 1). The wind is from 280° at 08 knots, and the true airspeed is 85 knots.

A) 033°.

B) 038°.

C) 042°.

199. H987 PVT

(Refer to figure 21.) Determine the magnetic course from First Flight Airport (area 5) to Hampton Roads Airport (area 2).

A) 141°.

B) 321°.

C) 331°.

200. H987 PVT

(Refer to figure 27.) Determine the magnetic course from Breckheimer (Pvt) Airport (area 1) to Jamestown Airport (area 4).

A) 180°.

B) 188°.

C) 360°.

201. H983 PVT

(Refer to figure 21.) En route to First Flight Airport (area 5), your flight passes over Hampton Roads Airport (area 2) at 1456 and then over Chesapeake Municipal at 1501. At what time should your flight arrive at First Flight?

A) 1516.

B) 1521.

C) 1526.

202. H981 PVT

(Refer to figure 22, area 2.) Which airport is located at approximately 47° 39 minutes 30 seconds N latitude and 100° 53 minutes 00 seconds W longitude?

A) Linrud.

B) Crooked Lake.

C) Johnson.

203. H981 PVT

(Refer to figure 28.) An aircraft departs an airport in the eastern daylight time zone at 0945 EDT for a 2-hour flight to an airport located in the central daylight time zone. The landing should be at what coordinated universal time?

A) 1345Z.

B) 1445Z.

C) 1545Z.

204. H987 PVT

(Refer to figure 23.) What is the magnetic heading for a flight from Priest River Airport (area 1) to Shoshone County Airport (area 3)? The wind is from 030° at 12 knots, and the true airspeed is 95 knots.

A) 118°.

B) 143°.

C) 136°.

205. H987 PVT

(Refer to figure 23.) What is the estimated time en route from Sandpoint Airport (area 1) to St. Maries Airport (area 4)? The wind is from 215° at 25 knots, and the true airspeed is 125 knots.

A) 30 minutes.

B) 34 minutes.

C) 38 minutes.

206. H987 PVT

(Refer to figure 23.) Determine the estimated time en route for a flight from Priest River Airport (area 1) to Shoshone County Airport (area 3). The wind is from 030 at 12 knots and the true airspeed is 95 knots. Add 2 minutes for climb-out.

A) 29 minutes.

B) 27 minutes.

C) 31 minutes.

207. H987 PVT

(Refer to figure 23.) What is the estimated time en route for a flight from St. Maries Airport (area 4) to Priest River Airport (area 1)? The wind is from 300° at 14 knots and the true airspeed is 90 knots. Add 3 minutes for climb-out.

A) 38 minutes.

B) 43 minutes.

C) 48 minutes.

208. H981 PVT

(Refer to figure 21, area 3.) Determine the approximate latitude and longitude of Currituck County Airport.

A) 36°24'N - 76°01'W.

B) 36°48'N - 76°01'W.

C) 47°24'N - 75°58'W.

209. H987 PVT

(Refer to figure 26.) Determine the magnetic heading for a flight from Fort Worth Meacham (area 4) to Denton Muni (area 1). The wind is from 330° at 25 knots, the true airspeed is 110 knots, and the magnetic variation is 7° east.

A) 003°.

B) 017°.

C) 023°.

210. J15 PVT

(Refer to figure 52.) If more than one cruising altitude is intended, which should be entered in block 7 of the flight plan?

A) Initial cruising altitude.

B) Highest cruising altitude.

C) Lowest cruising altitude.

211. J15 PVT

(Refer to figure 52.) What information should be entered in block 9 for a VFR day flight?

A) The name of the airport of first intended landing.

B) The name of destination airport if no stopover for more than 1 hour is anticipated.

C) The name of the airport where the aircraft is based.

212. J25 PVT

How should contact be established with an En Route Flight Advisory Service (EFAS) station, and what service would be expected?

A) Call EFAS on 122.2 for routine weather, current reports on hazardous weather, and altimeter settings.

B) Call flight assistance on 122.5 for advisory service pertaining to severe weather.

C) Call Flight Watch on 122.0 for information regarding actual weather and thunderstorm activity along proposed route.

213. H989 PVT

(Refer to figure 31, illustration 8.) If the magnetic bearing TO the station is 135°, the magnetic heading is

A) 135°.

B) 270°.

C) 360°.

214. H989 PVT

(Refer to figure 30, illustration 1.) What outbound bearing is the aircraft crossing?

A) 030°.

B) 150°.

C) 180°.

215. H989 PVT

(Refer to figure 30.) Which ADF indication represents the aircraft tracking TO the station with a right crosswind?

A) 1.

B) 2.

C) 4.

216. H989 PVT

(Refer to figure 30, illustration 3.) What is the magnetic bearing FROM the station?

A) 025°.

B) 115°.

C) 295°.

217. H989 PVT

(Refer to figure 30, illustration 2.) Determine the approximate heading to intercept the 180° bearing TO the station.

A) 040°.

B) 160°.

C) 220°.

218. H989 PVT

(Refer to figure 30, illustration 2.) What magnetic bearing should the pilot use to fly TO the station?

A) 010°.

B) 145°.

C) 190°.

219. H989 PVT

(Refer to figure 30, illustration 1.) Determine the magnetic bearing TO the station.

A) 030°.

B) 180°.

C) 210°.

220. H989 PVT

(Refer to figure 31, illustration 1.) The relative bearing TO the station is

A) 045°.

B) 180°.

C) 315°.

221. H989 PVT

(Refer to figure 29, illustration 8.) The VOR receiver has the indications shown. What radial is the aircraft crossing?

A) 030°.

B) 210°.

C) 300°.

222. H989 PVT

(Refer to figure 27, areas 4 and 3; and figure 29.) The VOR is tuned to Jamestown VOR, and the aircraft is positioned over Cooperstown Airport . Which VOR indication is correct?

A) 1.

B) 4.

C) 6.

223. H989 PVT

(Refer to figure 29, illustration 3.) The VOR receiver has the indications shown. What is the aircraft's position relative to the station?

A) East.

B) Southeast.

C) West.

224. H989 PVT

(Refer to figure 26, area 5.) The VOR is tuned to the Dallas/Fort Worth VORTAC. The omnibearing selector (OBS) is set on 253°, with a TO indication, and a right course deviation indicator (CDI) deflection. What is the aircraft's position from the VORTAC?

A) East-northeast.

B) North-northeast.

C) West-southwest.

225. H989 PVT

(Refer to figure 25, and figure 29.) The VOR is tuned to Bonham VORTAC (area 3), and the aircraft is positioned over the town of Sulphur Springs (area 5). Which VOR indication is correct?

A) 1.

B) 7.

C) 8.

226. H989 PVT

(Refer to figure 25.) On what course should the VOR receiver (OBS) be set in order to navigate direct from Majors Airport (area 1) to Quitman VORTAC (area 2)?

A) 101°.

B) 108°.

C) 281°.

227. H989 PVT

(Refer to figure 22.) What course should be selected on the omnibearing selector (OBS) to make a direct flight from Mercer County Regional Airport (area 3) to the Minot VORTAC (area 1) with a TO indication?

A) 359°.

B) 179°.

C) 001°.

228. H989 PVT

(Refer to figure 21, area 3; and figure 29.) The VOR is tuned to Elizabeth City VOR, and the aircraft is positioned over Shawboro. Which VOR indication is correct?

A) 2.

B) 5.

C) 9.

229. H989 PVT

(Refer to figure 21.) What is your approximate position on low altitude airway Victor 1, southwest of Norfolk (area 1), if the VOR receiver indicates you are on the 340° radial of Elizabeth City VOR (area 3)?

A) 15 nautical miles from Norfolk VORTAC.

B) 18 nautical miles from Norfolk VORTAC.

C) 23 nautical miles from Norfolk VORTAC.

230. H989 PVT

(Refer to figure 25.) What is the approximate position of the aircraft if the VOR receivers indicate the 245° radial of Sulphur Springs VOR-DME (area 5) and the 140° radial of Bonham VORTAC (area 3)?

A) Majors Airport.

B) Meadowview Airport.

C) Glenmar Airport.

231. H987 PVT

(Refer to figure 24.) What is the approximate position of the aircraft if the VOR receivers indicate the 320° radial of Savannah VORTAC (area 3) and the 184° radial of Allendale VOR (area 1)?

A) Town of Guyton.

B) Town of Springfield.

C) 3 miles east of Marlow.

232. H989 PVT

(Refer to figure 24.) On what course should the VOR receiver (OBS) be set to navigate direct from Hampton Varnville Airport (area 1) to Savannah VORTAC (area 3)?

A) 003°.

B) 183°.

C) 200°.

233. J37 PVT

A blue segmented circle on a Sectional Chart depicts which class airspace?

A) Class B.

B) Class C.

C) Class D.

234. J34 PVT

Airspace at an airport with a part-time control tower is classified as Class D airspace only

A) when the weather minimums are below basic VFR.

B) when the associated control tower is in operation.

C) when the associated Flight Service Station is in operation.

235. J34 PVT

(Refer to figure 23, area 2 and legend 1.) For information about the parachute jumping and glider operations at Silverwood Airport, refer to

A) notes on the border of the chart.

B) the Airport/Facility Directory.

C) the Notices to Airmen (NOTAM) publication.

236. A01 PVT

With respect to the certification of aircraft, which is a category of aircraft?

A) Normal, utility, acrobatic.

B) Airplane, rotorcraft, glider.

C) Landplane, seaplane.

237. A01 PVT

With respect to the certification of airmen, which is a class of aircraft?

A) Airplane, rotorcraft, glider, lighter-than-air.

B) Single-engine land and sea, multiengine land and sea.

C) Lighter-than-air, airship, hot air balloon, gas balloon.

238. A02 PVT

Which V-speed represents maneuvering speed?

A) VA.

B) VLO.

C) VNE.

239. A15 PVT

Preventive maintenance has been performed on an aircraft. What paperwork is required?

A) A full, detailed description of the work done must be entered in the airframe logbook.

B) The date the work was completed, and the name of the person who did the work must be entered in the airframe and engine logbook.

C) The signature, certificate number, and kind of certificate held by the person approving the work and a description of the work must be entered in the aircraft maintenance records.

240. A21 PVT

How soon after the conviction for driving while intoxicated by alcohol or drugs shall it be reported to the FAA, Civil Aviation Security Division?

A) No later than 60 days after the motor vehicle action.

B) No later than 30 working days after the motor vehicle action.

C) Required to be reported upon renewal of medical certificate.

241. A20 PVT

Each person who holds a pilot certificate or a medical certificate shall present it for inspection upon the request of the Administrator, the National Transportation Safety Board, or any

A) authorized representative of the Department of Transportation.

B) person in a position of authority.

C) federal, state, or local law enforcement officer.

242. A20 PVT

A Third-Class Medical Certificate is issued to a 36-year-old pilot on August 10, this year. To exercise the privileges of a Private Pilot Certificate, the medical certificate will be valid until midnight on

A) August 10, 2 years later.

B) August 31, 3 years later.

C) August 31, 2 years later.

243. A20 PVT

What document(s) must be in your personal possession or readily accessible in the aircraft while operating as pilot in command of an aircraft?

A) Certificates showing accomplishment of a checkout in the aircraft and a current biennial flight review.

B) A pilot certificate with an endorsement showing accomplishment of an annual flight review and a pilot logbook showing recency of experience.

C) An appropriate pilot certificate and an appropriate current medical certificate if required.

244. A23 PVT

What exception, if any, permits a private pilot to act as pilot in command of an aircraft carrying passengers who pay for the flight?

A) If the passengers pay all the operating expenses.

B) If a donation is made to a charitable organization for the flight.

C) There is no exception.

245. A21 PVT

A certificated private pilot may not act as pilot in command of an aircraft towing a glider unless there is entered in the pilot's logbook a minimum of

A) 100 hours of pilot flight time in any aircraft, that the pilot is using to tow a glider.

B) 100 hours of pilot-in-command time in the aircraft category, class, and type, if required, that the pilot is using to tow a glider.

C) 200 hours of pilot-in-command time in the aircraft category, class, and type, if required, that the pilot is using to tow a glider.

246. A20 PVT

Before a person holding a private pilot certificate may act as pilot in command of a high-performance airplane, that person must have

A) passed a flight test in that airplane from an FAA inspector.

B) an endorsement in that person's logbook that he or she is competent to act as pilot in command.

C) received ground and flight instruction from an authorized flight instructor who then endorses that person's logbook.

247. A20 PVT

The pilot in command is required to hold a type rating in which aircraft?

A) Aircraft operated under an authorization issued by the Administrator.

B) Aircraft having a gross weight of more than 12,500 pounds.

C) Aircraft involved in ferry flights, training flights, or test flights.

248. A66 PVT

Unless otherwise specified, Federal Airways include that Class E airspace extending upward from

A) 700 feet above the surface up to and including 17,999 feet MSL.

B) 1,200 feet above the surface up to and including 17,999 feet MSL.

C) the surface up to and including 18,000 feet MSL.

249. B12 PVT

No person may operate an aircraft in acrobatic flight when

A) flight visibility is less than 5 miles.

B) over any congested area of a city, town, or settlement.

C) less than 2,500 feet AGL.

250. B12 PVT

What is the lowest altitude permitted for acrobatic flight?

A) 1,000 feet AGL.

B) 1,500 feet AGL.

C) 2,000 feet AGL.

251. B12 PVT

No person may operate an aircraft in acrobatic flight when the flight visibility is less than

A) 3 miles.

B) 5 miles.

C) 7 miles.

252. B12 PVT

Which is normally prohibited when operating a restricted category civil aircraft?

A) Flight under instrument flight rules.

B) Flight over a densely populated area.

C) Flight within Class D airspace.

253. B07 PVT

Where may an aircraft`s operating limitations be found?

A) On the Airworthiness Certificate.

B) In the current, FAA-approved flight manual, approved manual material, markings, and placards, or any combination thereof.

C) In the aircraft airframe and engine logbooks.

254. B13 PVT

If an alteration or repair substantially affects an aircraft's operation in flight, that aircraft must be test flown by an appropriately-rated pilot and approved for return to service prior to being operated

A) by any private pilot.

B) with passengers aboard.

C) for compensation or hire.

255. B13 PVT

The responsibility for ensuring that maintenance personnel make the appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service lies with the

A) owner or operator.

B) pilot in command.

C) mechanic who performed the work.

256. B13 PVT

What aircraft inspections are required for rental aircraft that are also used for flight instruction?

A) Annual condition and 100-hour inspections.

B) Biannual condition and 100-hour inspections.

C) Annual condition and 50-hour inspections.

257. B08 PVT

When flying in a VFR corridor designated through Class B airspace, the maximum speed authorized is

A) 180 knots.

B) 200 knots.

C) 250 knots.

258. B08 PVT

Which is the correct traffic pattern departure procedure to use at a noncontrolled airport?

A) Depart in any direction consistent with safety, after crossing the airport boundary.

B) Make all turns to the left.

C) Comply with any FAA traffic pattern established for the airport.

259. B08 PVT

When flying in the airspace underlying Class B airspace, the maximum speed authorized is

A) 200 knots.

B) 230 knots.

C) 250 knots.

260. B09 PVT

What minimum flight visibility is required for VFR flight operations on an airway below 10,000 feet MSL?

A) 1 mile.

B) 3 miles.

C) 4 miles.

261. B09 PVT

What minimum visibility and clearance from clouds are required for VFR operations in Class G airspace at 700 feet AGL or below during daylight hours?

A) 1 mile visibility and clear of clouds.

B) 1 mile visibility, 500 feet below, 1,000 feet above, and 2,000 feet horizontal clearance from clouds.

C) 3 miles visibility and clear of clouds.

262. B09 PVT

The minimum distance from clouds required for VFR operations on an airway below 10,000 feet MSL is

A) remain clear of clouds.

B) 500 feet below, 1,000 feet above, and 2,000 feet horizontally.

C) 500 feet above, 1,000 feet below, and 2,000 feet horizontally.

263. B09 PVT

During operations within controlled airspace at altitudes of less than 1,200 feet AGL, the minimum horizontal distance from clouds requirement for VFR flight is

A) 1,000 feet.

B) 1,500 feet.

C) 2,000 feet.

264. B08 PVT

What minimum radio equipment is required for operation within Class C airspace?

A) Two-way radio communications equipment and a 4096-code transponder.

B) Two-way radio communications equipment, a 4096-code transponder, and DME.

C) Two-way radio communications equipment, a 4096-code transponder, and an encoding altimeter.

265. B08 PVT

In which type of airspace are VFR flights prohibited?

A) Class A.

B) Class B.

C) Class C.

266. B08 PVT

An operable 4096-code transponder and Mode C encoding altimeter are required in

A) Class B airspace and within 30 miles of the Class B primary airport.

B) Class D airspace.

C) Class E airspace below 10,000 feet MSL.

267. B08 PVT

What minimum pilot certification is required for operation within Class B airspace?

A) Recreational Pilot Certificate.

B) Private Pilot Certificate or Student Pilot Certificate with appropriate logbook endorsements.

C) Private Pilot Certificate with an instrument rating.

268. B09 PVT

Outside controlled airspace, the minimum flight visibility requirement for VFR flight above 1,200 feet AGL and below 10,000 feet MSL during daylight hours is

A) 1 mile.

B) 3 miles.

C) 5 miles.

269. B13 PVT

Who is primarily responsible for maintaining an aircraft in airworthy condition?

A) Owner or operator.

B) Pilot-in-command.

C) Mechanic.

270. B12 PVT

Unless otherwise specifically authorized, no person may operate an aircraft that has an experimental certificate

A) beneath the floor of Class B airspace.

B) over a densely populated area or in a congested airway.

C) from the primary airport within Class D airspace.

271. B13 PVT

The responsibility for ensuring that an aircraft is maintained in an airworthy condition is primarily that of the

A) pilot in command.

B) owner or operator.

C) mechanic who performs the work.

272. B07 PVT

No person may attempt to act as a crewmember of a civil aircraft with

A) .008 percent by weight or more alcohol in the blood.

B) .004 percent by weight or more alcohol in the blood.

C) .04 percent by weight or more alcohol in the blood.

273. B07 PVT

Under what condition, if any, may a pilot allow a person who is obviously under the influence of drugs to be carried aboard an aircraft?

A) In an emergency or if the person is a medical patient under proper care.

B) Only if the person does not have access to the cockpit or pilot's compartment.

C) Under no condition.

274. B07 PVT

A person may not act as a crewmember of a civil aircraft if alcoholic beverages have been consumed by that person within the preceding

A) 8 hours.

B) 12 hours.

C) 24 hours.

275. B13 PVT

Completion of an annual condition inspection and the return of the aircraft to service should always be indicated by

A) the relicensing date on the Registration Certificate.

B) an appropriate notation in the aircraft maintenance records.

C) an inspection sticker placed on the instrument panel that lists the annual inspection completion date.

276. B08 PVT

When would a pilot be required to submit a detailed report of an emergency which caused the pilot to deviate from an ATC clearance?

A) Within 48 hours if requested by ATC.

B) Immediately.

C) Within 7 days.

277. B09 PVT

Normal VFR operations in Class D airspace with an operating control tower require the ceiling and visibility to be at least

A) 1,000 feet and 1 mile.

B) 1,000 feet and 3 miles.

C) 2,500 feet and 3 miles.

278. B08 PVT

No person may operate an aircraft in formation flight

A) over a densely populated area.

B) in Class D airspace under special VFR.

C) except by prior arrangement with the pilot in command of each aircraft.

279. B09 PVT

What is the specific fuel requirement for flight under VFR during daylight hours in an airplane?

A) Enough to complete the flight at normal cruising speed with adverse wind conditions.

B) Enough to fly to the first point of intended landing and to fly after that for 30 minutes at normal cruising speed.

C) Enough to fly to the first point of intended landing and to fly after that for 45 minutes at normal cruising speed.

280. B09 PVT

What is the specific fuel requirement for flight under VFR at night in an airplane?

A) Enough to complete the flight at normal cruising speed with adverse wind conditions.

B) Enough to fly to the first point of intended landing and to fly after that for 30 minutes at normal cruising speed.

C) Enough to fly to the first point of intended landing and to fly after that for 45 minutes at normal cruising speed.

281. B08 PVT

A steady green light signal directed from the control tower to an aircraft in flight is a signal that the pilot

A) is cleared to land.

B) should give way to other aircraft and continue circling.

C) should return for landing.

282. B13 PVT

An aircraft’ s annual inspection was performed on July 12, this year. The next annual inspection will be due no later than

A) July 1, next year.

B) July 13, next year.

C) July 31, next year.

283. B08 PVT

What action, if any, is appropriate if the pilot deviates from an ATC instruction during an emergency and is given priority?

A) Take no special action since you are pilot in command.

B) File a detailed report within 48 hours to the chief of the appropriate ATC facility, if requested.

C) File a report to the FAA Administrator, as soon as possible.

284. B07 PVT

Who is responsible for determining if an aircraft is in condition for safe flight?

A) A certificated aircraft mechanic.

B) The pilot in command.

C) The owner or operator.

285. B07 PVT

If an in-flight emergency requires immediate action, the pilot in command may

A) deviate from any rule of 14 CFR part 91 to the extent required to meet the emergency, but must submit a written report to the Administrator within 24 hours.

B) deviate from any rule of 14 CFR part 91 to the extent required to meet that emergency.

C) not deviate from any rule of 14 CFR part 91 unless prior to the deviation approval is granted by the Administrator.

286. B07 PVT

Under what conditions may objects be dropped from an aircraft?

A) Only in an emergency.

B) If precautions are taken to avoid injury or damage to persons or property on the surface.

C) If prior permission is received from the Federal Aviation Administration.

287. B07 PVT

Flight crewmembers are required to keep their safety belts and shoulder harnesses fastened during

A) takeoffs and landings.

B) all flight conditions.

C) flight in turbulent air.

288. B08 PVT

As Pilot in Command of an aircraft, under which situation can you deviate from an ATC clearance?

A) When operating in Class A airspace at night.

B) If an ATC clearance is not understood and in VFR conditions.

C) In response to a traffic alert and collision avoidance system resolution advisory.

289. B07 PVT

Which preflight action is specifically required of the pilot prior to each flight?

A) Check the aircraft logbooks for appropriate entries.

B) Become familiar with all available information concerning the flight.

C) Review wake turbulence avoidance procedures.

290. B07 PVT

In addition to other preflight actions for a VFR flight away from the vicinity of the departure airport, regulations specifically require the pilot in command to

A) review traffic control light signal procedures.

B) check the accuracy of the navigation equipment and the emergency locator transmitter (ELT).

C) determine runway lengths at airports of intended use and the aircraft's takeoff and landing distance data.

291. B08 PVT

Which aircraft has the right-of-way over the other aircraft listed?

A) Glider.

B) Airship.

C) Aircraft refueling other aircraft.

292. B08 PVT

What action is required when two aircraft of the same category converge, but not head-on?

A) The faster aircraft shall give way.

B) The aircraft on the left shall give way.

C) Each aircraft shall give way to the right.

293. B08 PVT

A seaplane and a motorboat are on crossing courses. If the motorboat is to the left of the seaplane, which has the right-of-way?

A) The motorboat.

B) The seaplane.

C) Both should alter course to the right.

294. B09 PVT

What are the minimum requirements for airplane operations under special VFR in Class D airspace at night?

A) The airplane must be under radar surveillance at all times while in Class D airspace.

B) The airplane must be equipped for IFR with an altitude reporting transponder.

C) The pilot must be instrument rated, and the airplane must be IFR equipped.

295. B09 PVT

A special VFR clearance authorizes the pilot of an aircraft to operate VFR while within Class D airspace when the visibility is

A) less than 1 mile and the ceiling is less than 1,000 feet.

B) at least 1 mile and the aircraft can remain clear of clouds.

C) at least 3 miles and the aircraft can remain clear of clouds.

296. B11 PVT

An operable 4096-code transponder with an encoding altimeter is required in which airspace?

A) Class A, Class B (and within 30 miles of the Class B primary airport), and Class C.

B) Class D and Class E (below 10,000 feet MSL).

C) Class D and Class G (below 10,000 feet MSL).

297. B08 PVT

Unless otherwise authorized, two-way radio communications with Air Traffic Control are required for landings or takeoffs

A) at all tower controlled airports regardless of weather conditions.

B) at all tower controlled airports only when weather conditions are less than VFR.

C) at all tower controlled airports within Class D airspace only when weather conditions are less than VFR.

298. G11 PVT

Which incident requires an immediate notification to the nearest NTSB field office?

A) A forced landing due to engine failure.

B) Landing gear damage, due to a hard landing.

C) Flight control system malfunction or failure.

299. G11 PVT

If an aircraft is involved in an accident which results in substantial damage to the aircraft, the nearest NTSB field office should be notified

A) immediately.

B) within 48 hours.

C) within 7 days.

300. G13 PVT

The operator of an aircraft that has been involved in an accident is required to file an accident report within how many days?

A) 5.

B) 7.

C) 10.

301. G12 PVT

May aircraft wreckage be moved prior to the time the NTSB takes custody?

A) Yes, but only if moved by a federal, state, or local law enforcement officer.

B) Yes, but only to protect the wreckage from further damage.

C) No, it may not be moved under any circumstances.

302. I57 PVT

What information is contained in a CONVECTIVE SIGMET?

A) Tornadoes, embedded thunderstorms, and hail 3/4 inch or greater in diameter.

B) Severe icing, severe turbulence, or widespread dust storms lowering visibility to less than 3 miles.

C) Surface winds greater than 40 knots or thunderstorms equal to or greater than video integrator processor (VIP) level 4.

303. I57 PVT

Which in-flight advisory would contain information on severe icing not associated with thunderstorms?

A) Convective SIGMET.

B) SIGMET.

C) AIRMET.

304. I57 PVT

SIGMETs are issued as a warning of weather conditions hazardous to which aircraft?

A) Small aircraft only.

B) Large aircraft only.

C) All aircraft.

305. I57 PVT

AIRMETs are advisories of significant weather phenomena but of lower intensities than Sigmets and are intended for dissemination to

A) only IFR pilots.

B) only VFR pilots.

C) all pilots.

306. I54 PVT

When requesting weather information for the following morning, a pilot should request

A) an outlook briefing.

B) a standard briefing.

C) an abbreviated briefing.

307. I57 PVT

When the term 'light and variable' is used in reference to a Winds Aloft Forecast, the coded group and windspeed is

A) 0000 and less than 7 knots.

B) 9900 and less than 5 knots.

C) 9999 and less than 10 knots.

308. I57 PVT

What values are used for Winds Aloft Forecasts?
A) Magnetic direction and knots.
B) Magnetic direction and miles per hour.
C) True direction and knots.

309. I57 PVT
(Refer to figure 17.) What wind is forecast for STL at 9,000 feet?
A) 230° true at 32 knots.
B) 230° true at 25 knots.
C) 230° magnetic at 25 knots.

310. I55 PVT
For aviation purposes, ceiling is defined as the height above the Earth's surface of the
A) lowest reported obscuration and the highest layer of clouds reported as overcast.
B) lowest broken or overcast layer or vertical visibility into an obscuration.
C) lowest layer of clouds reported as scattered, broken, or thin.

311. I55 PVT
(Refer to figure 12.) The wind direction and velocity at KJFK is from
A) 180° true at 4 knots.
B) 180° magnetic at 4 knots.
C) 040° true at 18 knots.

312. I55 PVT
(Refer to figure 12.) The remarks section for KMDW has RAB35 listed. This entry means
A) blowing mist has reduced the visibility to 1-1/2 SM.
B) rain began at 1835Z.
C) the barometer has risen .35 inches Hg.

313. I55 PVT
(Refer to figure 12.) What are the current conditions depicted for Chicago Midway Airport (KMDW)?
A) Sky 700 feet overcast, visibility 1-1/2SM, rain.
B) Sky 7000 feet overcast, visibility 1-1/2SM, heavy rain.
C) Sky 700 feet overcast, visibility 11, occasionally 2SM, with rain.

314. I55 PVT
(Refer to figure 12.) Which of the reporting stations have VFR weather?
A) All.

B) KINK, KBOI, and KJFK.
C) KINK, KBOI, and KLAX.

315. I54 PVT
When telephoning a weather briefing facility for preflight weather information, pilots should state
A) the aircraft identification or the pilot's name.
B) true airspeed.
C) fuel on board.

316. J25 PVT
Below FL180, en route weather advisories should be obtained from an FSS on
A) 122.0 MHz.
B) 122.1 MHz.
C) 123.6 MHz.

317. I56 PVT
(Refer to figure 14.) The intensity of the turbulence reported at a specific altitude is
A) moderate at 5,500 feet and at 7,200 feet.
B) moderate from 5,500 feet to 7,200 feet.
C) light from 5,500 feet to 7,200 feet.

318. I56 PVT
(Refer to figure 14.) The base and tops of the overcast layer reported by a pilot are
A) 1,800 feet MSL and 5,500 feet MSL.
B) 5,500 feet AGL and 7,200 feet MSL.
C) 7,200 feet MSL and 8,900 feet MSL.

319. I56 PVT
(Refer to figure 14.) If the terrain elevation is 1,295 feet MSL, what is the height above ground level of the base of the ceiling?
A) 505 feet AGL.
B) 1,295 feet AGL.
C) 6,586 feet AGL.

320. I56 PVT
(Refer to figure 14.) The intensity and type of icing reported by a pilot is
A) light to moderate.
B) light to moderate clear.

C) light to moderate rime.

321. I56 PVT

(Refer to figure 14.) The wind and temperature at 12,000 feet MSL as reported by a pilot are

A) 090° at 21 MPH and -9 °F.

B) 080° at 21 knots and -7 °C.

C) 090° at 21 knots and -9 °C.

322. I57 PVT

(Refer to figure 15.) What is the valid period for the TAF for KMEM?

A) 1200Z to 1200Z.

B) 1200Z to 1800Z.

C) 1800Z to 1800Z.

323. I57 PVT

(Refer to figure 15.) In the TAF from KOKC, the clear sky becomes

A) overcast at 2,000 feet during the forecast period between 2200Z and 2400Z.

B) overcast at 200 feet with a 40 percent probability of becoming overcast at 600 feet during the forecast period between 2200Z and 2400Z.

C) overcast at 200 feet with the probability of becoming overcast at 400 feet during the forecast period between 2200Z and 2400Z.

324. I57 PVT

(Refer to figure 15.) During the time period from 0600Z to 0800Z, what visibility is forecast for KOKC?

A) Greater than 6 statute miles.

B) Possibly 6 statute miles.

C) Not forecasted.

325. I57 PVT

(Refer to figure 15.) The only cloud type forecast in TAF reports is

A) Nimbostratus.

B) Cumulonimbus.

C) Scattered cumulus.

326. I54 PVT

Individual forecasts for specific routes of flight can be obtained from which weather source?

A) Transcribed Weather Broadcasts (TWEBs).

B) Terminal Forecasts.

C) Area Forecasts.

327. I54 PVT

Transcribed Weather Broadcasts (TWEBs) may be monitored by tuning the appropriate radio receiver to certain

A) airport advisory frequencies.

B) VOR and NDB frequencies.

C) ATIS frequencies.

328. H957 PVT

To get a complete weather briefing for the planned flight, the pilot should request

A) a general briefing.

B) an abbreviated briefing.

C) a standard briefing.

329. H957 PVT

Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?

A) Outlook briefing.

B) Abbreviated briefing.

C) Standard briefing.

330. I60 PVT

What information is provided by the Radar Summary Chart that is not shown on other weather charts?

A) Lines and cells of hazardous thunderstorms.

B) Ceilings and precipitation between reporting stations.

C) Types of clouds between reporting stations.

331. I64 PVT

(Refer to figure 20.) Interpret the weather symbol depicted in Utah on the 12-hour Significant Weather Prognostic Chart.

A) Moderate turbulence, surface to 18,000 feet.

B) Thunderstorm tops at 18,000 feet.

C) Base of clear air turbulence, 18,000 feet.

332. I59 PVT

(Refer to figure 18.) What weather phenomenon is causing IFR conditions in central Oklahoma?

A) Low visibility only.

B) Low ceilings and visibility.

C) Heavy rain showers.

333. I59 PVT

(Refer to figure 18.) The marginal weather in central Kentucky is due to low

A) ceiling.

B) visibility.

C) ceiling and visibility.

334. I59 PVT

(Refer to figure 18.) Of what value is the Weather Depiction Chart to the pilot?

A) For determining general weather conditions on which to base flight planning.

B) For a forecast of cloud coverage, visibilities, and frontal activity.

C) For determining frontal trends and air mass characteristics.

335. I58 PVT

(Refer to figure 18.) The IFR weather in northern Texas is due to

A) intermittent rain.

B) low ceilings.

C) dust devils.

336. I58 PVT

(Refer to figure 18.) What is the status of the front that extends from Nebraska through the upper peninsula of Michigan?

A) Stationary.

B) Warm

C) Cold.

337. I59 PVT

(Refer to figure 18.) According to the Weather Depiction Chart, the weather for a flight from southern Michigan to north Indiana is ceilings

A) less than 1,000 feet and/or visibility less than 3 miles.

B) greater than 3, 000 feet and visibility greater than 5 miles.

C) 1,000 to 3,000 feet and/or visibility 3 to 5 miles.

338. I57 PVT

What is indicated when a current CONVECTIVE SIGMET forecasts thunderstorms?

A) Moderate thunderstorms covering 30 percent of the area.

B) Moderate or severe turbulence.

C) Thunderstorms obscured by massive cloud layers.

339. I26 PVT

The suffix 'nimbus,' used in naming clouds, means

A) a cloud with extensive vertical development.

B) a rain cloud.

C) a middle cloud containing ice pellets.

340. I26 PVT

Clouds are divided into four families according to their

A) outward shape.

B) height range.

C) composition.

341. I26 PVT

An almond or lens-shaped cloud which appears stationary, but which may contain winds of 50 knots or more, is referred to as

A) an inactive frontal cloud.

B) a funnel cloud.

C) a lenticular cloud.

342. I26 PVT

Crests of standing mountain waves may be marked by stationary, lens-shaped clouds known as

A) mammatocumulus clouds.

B) standing lenticular clouds.

C) roll clouds.

343. I26 PVT

What cloud types would indicate convective turbulence?

A) Cirrus clouds.

B) Nimbostratus clouds.

C) Towering cumulus clouds.

344. I26 PVT

What clouds have the greatest turbulence?

A) Towering cumulus.

B) Cumulonimbus.

C) Nimbostratus.

345. I31 PVT

What situation is most conducive to the formation of radiation fog?

A) Warm, moist air over low, flatland areas on clear, calm nights.

B) Moist, tropical air moving over cold, offshore water.

C) The movement of cold air over much warmer water.

346. I31 PVT

If the temperature/dewpoint spread is small and decreasing, and the temperature is 62 °F, what type weather is most likely to develop?

A) Freezing precipitation.

B) Thunderstorms.

C) Fog or low clouds.

347. I31 PVT

In which situation is advection fog most likely to form?

A) A warm, moist air mass on the windward side of mountains.

B) An air mass moving inland from the coast in winter.

C) A light breeze blowing colder air out to sea.

348. I31 PVT

What types of fog depend upon wind in order to exist?

A) Radiation fog and ice fog.

B) Steam fog and ground fog.

C) Advection fog and upslope fog.

349. I27 PVT

One of the most easily recognized discontinuities across a front is

A) a change in temperature.

B) an increase in cloud coverage.

C) an increase in relative humidity.

350. I27 PVT

One weather phenomenon which will always occur when flying across a front is a change in the

A) wind direction.

B) type of precipitation.

C) stability of the air mass.

351. I27 PVT

Steady precipitation preceding a front is an indication of

A) stratiform clouds with moderate turbulence.

B) cumuliform clouds with little or no turbulence.

C) stratiform clouds with little or no turbulence.

352. I29 PVT

One in-flight condition necessary for structural icing to form is

A) small temperature/dewpoint spread.

B) stratiform clouds.

C) visible moisture.

353. I29 PVT

In which environment is aircraft structural ice most likely to have the highest accumulation rate?

A) Cumulus clouds with below freezing temperatures.

B) Freezing drizzle.

C) Freezing rain.

354. I33 PVT

Low-level turbulence can occur and icing can become hazardous in which type of fog?

A) Rain-induced fog.

B) Upslope fog.

C) Steam fog.

355. I24 PVT

What is meant by the term 'dewpoint'?

A) The temperature at which condensation and evaporation are equal.

B) The temperature at which dew will always form.

C) The temperature to which air must be cooled to become saturated.

356. I24 PVT

The amount of water vapor which air can hold depends on the

A) dewpoint.

B) air temperature.

C) stability of the air.

357. I24 PVT

Clouds, fog, or dew will always form when

A) water vapor condenses.

B) water vapor is present.

C) relative humidity reaches 100 percent.

358. I24 PVT

What are the processes by which moisture is added to unsaturated air?

A) Evaporation and sublimation.

B) Heating and condensation.

C) Supersaturation and evaporation.

359. I24 PVT

Which conditions result in the formation of frost?

A) The temperature of the collecting surface is at or below freezing when small droplets of moisture fall on the surface.

B) The temperature of the collecting surface is at or below the dewpoint of the adjacent air and the dewpoint is below freezing.

C) The temperature of the surrounding air is at or below freezing when small drops of moisture fall on the collecting surface.

360. I24 PVT

The presence of ice pellets at the surface is evidence that there

A) are thunderstorms in the area.

B) has been cold frontal passage.

C) is a temperature inversion with freezing rain at a higher altitude.

361. I22 PVT

Which factor would tend to increase the density altitude at a given airport?

A) An increase in barometric pressure.

B) An increase in ambient temperature.

C) A decrease in relative humidity.

362. H951 PVT

What are the standard temperature and pressure values for sea level?

A) 15 °C and 29.92 inches Hg.

B) 59 °C and 1013.2 millibars.

C) 59 °F and 29.92 millibars.

363. I22 PVT

Under which condition will pressure altitude be equal to true altitude?

A) When the atmospheric pressure is 29.92 inches Hg.

B) When standard atmospheric conditions exist.

C) When indicated altitude is equal to the pressure altitude.

364. I22 PVT

Under what condition is pressure altitude and density altitude the same value?

A) At sea level, when the temperature is 0 °F.

B) When the altimeter has no installation error.

C) At standard temperature.

365. I22 PVT

If a flight is made from an area of low pressure into an area of high pressure without the altimeter setting being adjusted, the altimeter will indicate

A) the actual altitude above sea level.

B) higher than the actual altitude above sea level.

C) lower than the actual altitude above sea level.

366. I22 PVT

Under what condition will true altitude be lower than indicated altitude?

A) In colder than standard air temperature.

B) In warmer than standard air temperature.

C) When density altitude is higher than indicated altitude.

367. I25 PVT

What is the approximate base of the cumulus clouds if the surface air temperature at 1,000 feet MSL is 70 °F and the dewpoint is 48 °F?

A) 4,000 feet MSL.

B) 5,000 feet MSL.

C) 6,000 feet MSL.

368. I25 PVT

What are characteristics of a moist, unstable air mass?

A) Cumuliform clouds and showery precipitation.

B) Poor visibility and smooth air.

C) Stratiform clouds and showery precipitation.

369. I25 PVT

What are characteristics of unstable air?
A) Turbulence and good surface visibility.
B) Turbulence and poor surface visibility.
C) Nimbostratus clouds and good surface visibility.

370. H955 PVT
A stable air mass is most likely to have which characteristic?
A) Showery precipitation.
B) Turbulent air.
C) Poor surface visibility.

371. I25 PVT
Moist, stable air flowing upslope can be expected to
A) produce stratus type clouds.
B) cause showers and thunderstorms.
C) develop convective turbulence.

372. I25 PVT
What feature is associated with a temperature inversion?
A) A stable layer of air.
B) An unstable layer of air.
C) Chinook winds on mountain slopes.

373. I25 PVT
If an unstable air mass is forced upward, what type clouds can be expected?
A) Stratus clouds with little vertical development.
B) Stratus clouds with considerable associated turbulence.
C) Clouds with considerable vertical development and associated turbulence.

374. I25 PVT
What measurement can be used to determine the stability of the atmosphere?
A) Atmospheric pressure.
B) Actual lapse rate.
C) Surface temperature.

375. I25 PVT
What would decrease the stability of an air mass?
A) Warming from below.

B) Cooling from below.

C) Decrease in water vapor.

376. I25 PVT

What is a characteristic of stable air?

A) Stratiform clouds.

B) Unlimited visibility.

C) Cumulus clouds.

377. I21 PVT

Every physical process of weather is accompanied by, or is the result of, a

A) movement of air.

B) pressure differential.

C) heat exchange.

378. I21 PVT

What causes variations in altimeter settings between weather reporting points?

A) Unequal heating of the Earth's surface.

B) Variation of terrain elevation.

C) Coriolis force.

379. I21 PVT

A temperature inversion would most likely result in which weather condition?

A) Clouds with extensive vertical development above an inversion aloft.

B) Good visibility in the lower levels of the atmosphere and poor visibility above an inversion aloft.

C) An increase in temperature as altitude is increased.

380. I21 PVT

The most frequent type of ground or surface-based temperature inversion is that which is produced by

A) terrestrial radiation on a clear, relatively still night.

B) warm air being lifted rapidly aloft in the vicinity of mountainous terrain.

C) the movement of colder air under warm air, or the movement of warm air over cold air.

381. I21 PVT

Which weather conditions should be expected beneath a low-level temperature inversion layer when the relative humidity is high?

A) Smooth air, poor visibility, fog, haze, or low clouds.

B) Light wind shear, poor visibility, haze, and light rain.
C) Turbulent air, poor visibility, fog, low stratus type clouds, and showery precipitation.

382. I30 PVT
Which weather phenomenon signals the beginning of the mature stage of a thunderstorm?
A) The appearance of an anvil top.
B) Precipitation beginning to fall.
C) Maximum growth rate of the clouds.

383. I30 PVT
The conditions necessary for the formation of cumulonimbus clouds are a lifting action and
A) unstable air containing an excess of condensation nuclei.
B) unstable, moist air.
C) either stable or unstable air.

384. I30 PVT
What conditions are necessary for the formation of thunderstorms?
A) High humidity, lifting force, and unstable conditions.
B) High humidity, high temperature, and cumulus clouds.
C) Lifting force, moist air, and extensive cloud cover.

385. I30 PVT
During the life cycle of a thunderstorm, which stage is characterized predominately by downdrafts?
A) Cumulus.
B) Dissipating.
C) Mature.

386. I30 PVT
Thunderstorms reach their greatest intensity during the
A) mature stage.
B) downdraft stage.
C) cumulus stage.

387. I30 PVT
Thunderstorms which generally produce the most intense hazard to aircraft are
A) squall line thunderstorms.
B) steady-state thunderstorms.
C) warm front thunderstorms.

388. I30 PVT

A nonfrontal, narrow band of active thunderstorms that often develop ahead of a cold front is a known as a

A) prefrontal system.

B) squall line.

C) dry line.

389. I30 PVT

If there is thunderstorm activity in the vicinity of an airport at which you plan to land, which hazardous atmospheric phenomenon might be expected on the landing approach?

A) Precipitation static.

B) Wind-shear turbulence.

C) Steady rain.

390. I30 PVT

Upon encountering severe turbulence, which flight condition should the pilot attempt to maintain?

A) Constant altitude and airspeed.

B) Constant angle of attack.

C) Level flight attitude.

391. I30 PVT

What feature is normally associated with the cumulus stage of a thunderstorm?

A) Roll cloud.

B) Continuous updraft.

C) Frequent lightning.

392. I36 PVT

Which weather phenomenon is always associated with a thunderstorm?

A) Lightning.

B) Heavy rain.

C) Hail.

393. I28 PVT

Possible mountain wave turbulence could be anticipated when winds of 40 knots or greater blow

A) across a mountain ridge, and the air is stable.

B) down a mountain valley, and the air is unstable.

C) parallel to a mountain peak, and the air is stable.

394. I23 PVT

The wind at 5,000 feet AGL is southwesterly while the surface wind is southerly. This difference in direction is primarily due to

A) stronger pressure gradient at higher altitudes.

B) friction between the wind and the surface.

C) stronger Coriolis force at the surface.

395. H953 PVT

Where does wind shear occur?

A) Only at higher altitudes.

B) Only at lower altitudes.

C) At all altitudes, in all directions.

396. H953 PVT

When may hazardous wind shear be expected?

A) When stable air crosses a mountain barrier where it tends to flow in layers forming lenticular clouds.

B) In areas of low-level temperature inversion, frontal zones, and clear air turbulence.

C) Following frontal passage when stratocumulus clouds form indicating mechanical mixing.

397. I28 PVT

A pilot can expect a wind-shear zone in a temperature inversion whenever the windspeed at 2,000 to 4,000 feet above the surface is at least

A) 10 knots.

B) 15 knots.

C) 25 knots.

398. H940 PVT

Loading an airplane to the most aft CG will cause the airplane to be

A) less stable at all speeds.

B) less stable at slow speeds, but more stable at high speeds.

C) less stable at high speeds, but more stable at low speeds.

399. H940 PVT

(Refer to figures 33 and 34.) What is the maximum amount of baggage that can be carried when the airplane is loaded as follows?

Front seat occupants	387 lb
Rear seat occupants	293 lb
Fuel	35 gal

A) 45 pounds.

B) 63 pounds.

C) 220 pounds.

400. H940 PVT

GIVEN:

	WEIGHT (LB)	ARM (IN)	MOMENT (LB-IN)
Empty weight	1,495.0	101.4	151,593.0
Pilot and passengers	380.0	64.0	
Fuel (30 gal usable no reserve)		96.0	

The CG is located how far aft of datum?

A) CG 92.44.

B) CG 94.01.

C) CG 119.8.

401. H940 PVT

An aircraft is loaded 110 pounds over maximum certificated gross weight. If fuel (gasoline) is drained to bring the aircraft weight within limits, how much fuel should be drained?

A) 15.7 gallons.

B) 16.2 gallons.

C) 18.4 gallons.

402. H940 PVT

(Refer to figures 33 and 34.) Determine if the airplane weight and balance is within limits.

Front seat occupants	415 lb
Rear seat occupants	110 lb
Fuel, main tanks	44 gal
Fuel, aux. tanks	19 gal
Baggage	32 lb

A) 19 pounds overweight, CG within limits.

B) 19 pounds overweight, CG out of limits forward.

C) Weight within limits, CG out of limits.

403. H941 PVT

(Refer to figure 35.) What is the maximum amount of baggage that may be loaded aboard the airplane for the CG to remain within the moment envelope?

WEIGHT (LB) MOM/1000

Empty weight	1,350	51.5
Pilot and front passenger	250	---
Rear passengers	400	---
Baggage	---	---
Fuel, 30 gal	---	---
Oil, 8 qt	---	-0.2

A) 105 pounds.

B) 110 pounds.

C) 120 pounds.

404. H941 PVT

(Refer to figure 35.) Calculate the moment of the airplane and determine which category is applicable.

	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	310	---
Rear passengers	96	---
Fuel, 38 gal	---	---
Oil, 8 qt	---	-0.2

A) 79.2, utility category.

B) 80.8, utility category.

C) 81.2, normal category.

405. H940 PVT

(Refer to figure 35.) What is the maximum amount of fuel that may be aboard the airplane on takeoff if loaded as follows?

	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	340	---
Rear passengers	310	---
Baggage	45	---
Oil, 8 qt	---	---

A) 24 gallons.

B) 32 gallons.

C) 40 gallons.

406. H940 PVT

An airplane has been loaded in such a manner that the CG is located aft of the aft CG limit. One undesirable flight characteristic a pilot might experience with this airplane would be

A) a longer takeoff run.

B) difficulty in recovering from a stalled condition.

C) stalling at higher-than-normal airspeed.

407. H928 PVT

What is an advantage of a constant-speed propeller?

A) Permits the pilot to select and maintain a desired cruising speed.

B) Permits the pilot to select the blade angle for the most efficient performance.

C) Provides a smoother operation with stable RPM and eliminates vibrations.

408. H983 PVT

(Refer to figure 24.) While en route on Victor 185, a flight crosses the 248° radial of Allendale VOR at 0953 and then crosses the 216° radial of Allendale VOR at 1000. What is the estimated time of arrival at Savannah VORTAC?

A) 1023.

B) 1028.

C) 1036.

409. A20 PVT

What is the definition of a high-performance airplane?

A) An airplane with 180 horsepower, or retractable landing gear, flaps, and a fixed-pitch propeller.

B) An airplane with an engine of more than 200 horsepower.

C) An airplane with a normal cruise speed in excess of 200 knots.

410. A20 PVT

If recency of experience requirements for night flight are not met and official sunset is 1830, the latest time passengers may be carried is

A) 1829.

B) 1859.

C) 1929.

411. B07 PVT

With certain exceptions, safety belts are required to be secured about passengers during

A) taxi, takeoffs, and landings.

B) all flight conditions.

C) flight in turbulent air.

412. B07 PVT

Preflight action, as required for all flights away from the vicinity of an airport, shall include

A) the designation of an alternate airport.

B) a study of arrival procedures at airports/ heliports of intended use.

C) an alternate course of action if the flight cannot be completed as planned.

413. O30 PVT

The term 'weigh-off' means to determine the

A) static equilibrium of the balloon as loaded for flight.

B) amount of gas required for an ascent to a preselected altitude.

C) standard weight and balance of the balloon.

414. O150 PVT

What would cause a gas balloon to start a descent if a cold air mass is encountered and the envelope becomes cooled?

A) A density differential.

B) A barometric pressure differential.

C) The contraction of the gas.

415. O220 PVT

The part of a balloon that bears the entire load is the

A) envelope material.

B) envelope seams.

C) load tapes (or cords).

416. J09 PVT

What action should a pilot take when operating under VFR in a Military Operations Area (MOA)?

A) Obtain a clearance from the controlling agency prior to entering the MOA.

B) Operate only on the airways that transverse the MOA.

C) Exercise extreme caution when military activity is being conducted.

417. J09 PVT

A balloon flight through a restricted area is

A) permitted at certain times, but only with prior permission by the appropriate authority.

B) permitted anytime, but caution should be exercised because of high-speed military aircraft.

C) never permitted.

418. J09 PVT

Under what condition, if any, may pilots fly through a restricted area?

A) When flying on airways with an ATC clearance.

B) With the controlling agency's authorization.

C) Regulations do not allow this.

419. P03 PVT

What action should be taken if a balloon encounters unforecast weather and shifts direction abruptly while in the vicinity of a thunderstorm?

A) Land immediately.

B) Descend to and maintain the lowest altitude possible.

C) Ascend to an altitude which will ensure adequate obstacle clearance in all directions.

420. O30 PVT

The minimum size a launch site should be is at least

A) twice the height of the balloon.

B) 100 feet for every 1 knot of wind.

C) 500 feet on the downwind side.

421. O30 PVT

What is the relationship of false lift with the wind?

A) False lift increases as the wind accelerates the balloon.

B) False lift does not exist if the surface winds are calm.

C) False lift decreases as the wind accelerates the balloon.

422. J37 PVT

(Refer to figure 21, area 4.) A balloon launched at the town of Edenton drifts northeasterly along the railroad. What minimum altitude must it maintain to clear all of the obstacles in the vicinity of Hertford by at least 500 feet?

A) 805 feet MSL.

B) 1,000 feet MSL.

C) 1,015 feet MSL.

423. J37 PVT

(Refer to figure 22, area 1.) A balloon launched at Flying S Airport drifts southward towards the lighted obstacle. If the altimeter was set to the current altimeter setting upon launch, what should it indicate if the balloon is to clear the obstacle at 500 feet above the top?

A) 1,531 feet MSL.

B) 1,809 feet MSL.

C) 3,649 feet MSL.

424. H982 PVT

(Refer to figure 23, area 2.) If a balloon is launched at Ranch Aero (Pvt) Airport with a reported wind from 220° at 5 knots, what should be its approximate position after 2 hours of flight?

A) Near Hackney (Pvt) Airport.

B) Crossing the railroad southwest of Granite Airport.

C) 3-1/2 miles southwest of Rathdrum.

425. H983 PVT

(Refer to figure 27, area 5.) A balloon drifts over the town of Eckelson on a magnetic course of 328° at 10 MPH. If wind conditions remain constant, where will the balloon be after 2 hours 30 minutes?

A) Over Hoggarth Airport (Pvt).

B) 4.5 miles north-north west of Hoggarth Airport (Pvt).

C) Over Buchanan.

426. J37 PVT

(Refer to figure 23, area 1.) A balloon, launched at CX Airport located near the east end of Lake Pend Oreille, drifts south-southwest. What is the approximate elevation of the highest terrain for 20 miles along its path?

A) 2,000 - 4,000 feet MSL.

B) 4,000 - 6,000 feet MSL.

C) 6,000 - 7,000 feet MSL.

427. M52 PVT

FAA advisory circulars (some free, others at cost) are available to all pilots and are obtained by

A) distribution from the nearest FAA district office.

B) ordering those desired from the Government Printing Office.

C) subscribing to the Federal Register.

428. M52 PVT

FAA advisory circulars containing subject matter specifically related to Airspace are issued under which subject number?

A) 60.

B) 70.

C) 90.

429. M52 PVT

FAA advisory circulars containing subject matter specifically related to Airmen are issued under which subject number?

A) 60.

B) 70.

C) 90.

430. A01 PVT

The definition of nighttime is

A) sunset to sunrise.

B) 1 hour after sunset to 1 hour before sunrise.

C) the time between the end of evening civil twilight and the beginning of morning civil twilight.

431. A20 PVT

If a certificated pilot changes permanent mailing address and fails to notify the FAA Airmen Certification Branch of the new address, the pilot is entitled to exercise the privileges of the pilot certificate for a period of only

A) 30 days after the date of the move.

B) 60 days after the date of the move.

C) 90 days after the date of the move.

432. A20 PVT

To act as pilot in command of an aircraft carrying passengers, a pilot must show by logbook endorsement the satisfactory completion of a flight review or completion of a pilot proficiency check within the preceding

A) 6 calendar months.

B) 12 calendar months.

C) 24 calendar months.

433. A20 PVT

Prior to becoming certified as a private pilot with a balloon rating, the pilot must have in his or her possession what class of medical?

A) A third-class medical certificate.

B) A statement from a designated medical examiner.

C) A medical certificate is not required.

434. I57 PVT

Which weather reports and forecasts are most important for local area balloon operations?

A) Winds Aloft Forecasts and Radar Summary Charts.

B) Winds Aloft Forecasts and Surface Analysis Charts.

C) Winds Aloft Forecasts and Aviation Routine Weather Reports.

435. I54 PVT

Which type of weather briefing should a pilot request to supplement mass disseminated data?

A) An outlook briefing.

B) A supplemental briefing.

C) An abbreviated briefing.

436. I60 PVT

Radar weather reports are of special interest to pilots because they indicate

A) large areas of low ceilings and fog.

B) location of precipitation along with type, intensity, and trend.

C) location of precipitation along with type, intensity, and cell movement of precipitation.

437. H401 PVT

The lifting forces which act on a hot air balloon are primarily the result of the interior air temperature being

A) greater than ambient temperature.

B) less than ambient temperature.

C) equal to ambient temperature.

438. H418 PVT

(Refer to figure 57.) The gross weight of the balloon is 1,200 pounds and the maximum height the pilot needs to attain is 5,000 feet. The maximum temperature to achieve this performance is

A) +37 °F.

B) +70 °F.

C) +97 °F.

439. H418 PVT

(Refer to figure 58.) What is the maximum altitude for the balloon if the gross weight is 1,100 pounds and standard temperature exists at all altitudes?

A) 1,000 feet.

B) 4,000 feet.

C) 5,500 feet.

440. H418 PVT

(Refer to figure 58.) What is the maximum altitude for the balloon if the gross weight is 1,000 pounds and standard temperature exists at all altitudes?

A) 4,000 feet.

B) 5,500 feet.

C) 11,000 feet.

441. H418 PVT

(Refer to figure 57.) The gross weight of the balloon is 1,350 pounds and the outside air temperature (OAT) is +51°F. The maximum height would be

A) 5,000 feet.

B) 8,000 feet.

C) 10,000 feet.

442. H407 PVT

All fuel tanks should be fired during preflight to determine

A) the burner pressure and condition of the valves.

B) that the pilot light functions properly on each tank.

C) if there are any leaks in the tank.

443. H427 PVT

Why should propane tanks not be refueled in a closed trailer or truck?

A) Propane vapor is one and one-half times heavier than air and will linger in the floor of the truck or trailer.

B) The propane vapor is odorless and the refuelers may be overcome by the fumes.

C) Propane is very cold and could cause damage to the truck or trailer.

444. O220 PVT

When ample liquid propane is available, propane will vaporize sufficiently to provide proper operation between the temperatures of

A) +30 to +90 °F.

B) -44 to +25 °F.

C) -51 to +20 °F.

445. O170 PVT

The initial temperature at which propane boils is

A) +32 °F.

B) -44 °F.

C) -60 °F.

446. O170 PVT

In hot air balloons, propane is preferred to butane or other hydrocarbons because it

A) is less volatile.

B) is slower to vaporize.

C) has a lower boiling point.

447. O220 PVT

If ample propane is available, within which temperature range will propane vaporize sufficiently to provide enough pressure for burner operation during flight?

A) 0 to 30 °F.

B) 10 to 30 °F.

C) 30 to 90 °F.

448. O220 PVT

The valve located on each tank that indicates when the tank is filled to 80 percent capacity is the

A) main tank valve.

B) vapor-bleed valve.

C) pilot valve.

449. H427 PVT

The valve located on the top of the propane tank which opens automatically when the pressure in the tank exceeds maximum allowable pressure is the

A) pressure relief valve.

B) metering valve.

C) blast valve.

450. O220 PVT

Burner efficiency of a hot air balloon decreases approximately what percent for each 1,000 feet above MSL?

A) 4 percent.

B) 8 percent.

C) 15 percent.

451. H415 PVT

On a balloon equipped with a blast valve, the blast valve is used for

A) climbs and descents only.

B) altitude control.

C) emergencies only.

452. O220 PVT

What is one procedure for relighting the burner while in flight?

A) Open the regulator or blast valve full open and light the pilot light.

B) Close the tank valves, vent the fuel lines, reopen the tank valves, and light the pilot light.

C) Open another tank valve, open the regulator or blast valve, and light the main jets with reduced flow.

453. O220 PVT

Which precaution should be exercised if confronted with the necessity of having to land a balloon when the air is turbulent?

A) Land in any available lake close to the upwind shore.

B) Land in the center of the largest available field.

C) Land in the trees to absorb shock forces, thus cushioning the landing.

454. O30 PVT

What causes false lift which sometimes occurs during launch procedures?

A) Closing the maneuvering vent too rapidly.

B) Excessive temperature within the envelope.

C) Venturi effect of the wind on the envelope.

455. H418 PVT

What is a potential hazard when climbing at maximum rate?

A) The envelope may collapse.

B) Deflation ports may be forced open.

C) The rapid flow of air may extinguish the burner and pilot light.

456. H415 PVT

In a balloon, best fuel economy in level flight can be accomplished by

A) riding the haze line in a temperature inversion.

B) short blasts of heat at high frequency.

C) long blasts of heat at low frequency.

457. J37 PVT

(Refer to figure 27, area 2.) The visibility and cloud clearance requirements to operate VFR during daylight hours over the town of Cooperstown between 1,200 feet AGL and 10,000 feet MSL are

A) 1 mile and clear of clouds.

B) 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.

C) 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.

458. A20 PVT

To act as pilot in command of an aircraft carrying passengers, the pilot must have made at least three takeoffs and three landings in an aircraft of the same category, class, and if a type rating is required, of the same type, within the preceding

A) 90 days.

B) 12 calendar months.

C) 24 calendar months.

459. B11 PVT

In addition to a valid Airworthiness Certificate, what documents or records must be aboard an aircraft during flight?

A) Aircraft engine and airframe logbooks, and owner's manual.

B) Radio operator's permit, and repair and alteration forms.

C) Operating limitations and Registration Certificate.

460. B13 PVT

Which records or documents shall the owner or operator of an aircraft keep to show compliance with an applicable Airworthiness Directive?

A) Aircraft maintenance records.

B) Airworthiness Certificate and Pilot's Operating Handbook.

C) Airworthiness and Registration Certificates.

461. B08 PVT

Which aircraft has the right-of-way over all other air traffic?

A) A balloon.

B) An aircraft in distress.

C) An aircraft on final approach to land.

462. I54 PVT

A weather briefing that is provided when the information requested is 6 or more hours in advance of the proposed departure time is

A) an outlook briefing.

B) a forecast briefing.

C) a prognostic briefing.

463. I57 PVT

(Refer to figure 15.) Between 1000Z and 1200Z the visibility at KMEM is forecast to be?

A) 1/2 statute mile.

B) 3 statute miles.

C) 6 statute miles.

464. I57 PVT

(Refer to figure 15.) What is the forecast wind for KMEM from 1600Z until the end of the forecast?

A) No significant wind.

B) Variable in direction at 6 knots.

C) Variable in direction at 4 knots.

465. I57 PVT

(Refer to figure 15.) In the TAF from KOKC, the 'FM (FROM) Group' is forecast for the hours from 1600Z to 2200Z with the wind from

A) 180° at 10 knots.

B) 160° at 10 knots.

C) 180° at 10 knots, becoming 200° at 13 knots.

466. I54 PVT

What should pilots state initially when telephoning a weather briefing facility for preflight weather information?

A) Tell the number of occupants on board.

B) Identify themselves as pilots.

C) State their total flight time.

467. I60 PVT

(Refer to figure 19, area D.) What is the direction and speed of movement of the cell?

A) North at 17 knots.

B) North at 17 MPH.

C) South at 17 knots.

468. I60 PVT

(Refer to figure 19, area B.) What is the top for precipitation of the radar return?

A) 24,000 feet AGL.

B) 24,000 feet MSL.

C) 2,400 feet MSL.

469. I60 PVT

What does the heavy dashed line that forms a large rectangular box on a radar summary chart refer to?

A) Areas of heavy rain.

B) Severe weather watch area.

C) Areas of hail 1/4 inch in diameter.

470. I25 PVT

What early morning weather observations indicate the possibility of good weather conditions for balloon flight most of the day?

A) Clear skies and surface winds, 10 knots or less.

B) Low moving, scattered cumulus clouds and surface winds, 5 knots or less.

C) Overcast with stratus clouds and surface winds, 5 knots or less.

471. I23 PVT

What condition does a rising barometer indicate for balloon operations?

A) Decreasing clouds and wind.

B) Chances of thunderstorms.

C) Approaching frontal activity.

472. O220 PVT

(Refer to figure 58.) Determine the maximum weight allowable for pilot and passenger for a flight at approximately 1,000 feet with a temperature of 68 °F. Launch with 20 gallons of propane.

A) 580 pounds.

B) 620 pounds.

C) 720 pounds.

473. O220 PVT

What constitutes the payload of a balloon?

A) Total gross weight.

B) Total weight of passengers, cargo, and fuel.

C) Weight of the aircraft and equipment.

474. J11 PVT

If a control tower and an FSS are located on the same airport, which function is provided by the FSS during those periods when the tower is closed?

A) Automatic closing of the IFR flight plan.

B) Approach control services.

C) Airport Advisory Service.

475. J12 PVT

When flying HAWK N666CB, the proper phraseology for initial contact with McAlester AFSS is

A) 'MC ALESTER RADIO, HAWK SIX SIX SIX CHARLIE BRAVO, RECEIVING ARDMORE VORTAC, OVER.'

B) 'MC ALESTER STATION, HAWK SIX SIX SIX CEE BEE, RECEIVING ARDMORE VORTAC, OVER.'

C) 'MC ALESTER FLIGHT SERVICE STATION, HAWK NOVEMBER SIX CHARLIE BRAVO, RECEIVING ARDMORE VORTAC, OVER.'

476. J13 PVT

When should pilots state their position on the airport when calling the tower for takeoff?

A) When visibility is less than 1 mile.

B) When parallel runways are in use.

C) When departing from a runway intersection.

477. J11 PVT

Automatic Terminal Information Service (ATIS) is the continuous broadcast of recorded information concerning

A) pilots of radar-identified aircraft whose aircraft is in dangerous proximity to terrain or to an obstruction.

B) nonessential information to reduce frequency congestion.

C) noncontrol information in selected high-activity terminal areas.

478. J11 PVT

As standard operating practice, all inbound traffic to an airport without a control tower should continuously monitor the appropriate facility from a distance of

A) 25 miles.

B) 20 miles.

C) 10 miles.

479. J03 PVT

A lighted heliport may be identified by a

A) green, yellow, and white rotating beacon.

B) flashing yellow light.

C) blue lighted square landing area.

480. J03 PVT

A military air station can be identified by a rotating beacon that emits

A) white and green alternating flashes.

B) two quick, white flashes between green flashes.

C) green, yellow, and white flashes.

481. J03 PVT

How can a military airport be identified at night?

A) Alternate white and green light flashes.

B) Dual peaked (two quick) white flashes between green flashes.
C) White flashing lights with steady green at the same location.

482. J05 PVT
What is the purpose of the runway/runway hold position sign?
A) Denotes entrance to runway from a taxiway.
B) Denotes area protected for an aircraft approaching or departing a runway.
C) Denotes intersecting runways.

483. J05 PVT
The numbers 8 and 26 on the approach ends of the runway indicate that the runway is orientated approximately
A) 008° and 026° true.
B) 080° and 260° true.
C) 080° and 260° magnetic.

484. J05 PVT
What does the outbound destination sign identify?
A) Identifies entrance to the runway from a taxiway.
B) Identifies direction to take-off runways.
C) Identifies runway on which an aircraft is located.

485. J05 PVT
When approaching taxiway holding lines from the side with the continuous lines, the pilot
A) may continue taxiing.
B) should not cross the lines without ATC clearance.
C) should continue taxiing until all parts of the aircraft have crossed the lines.

486. J05 PVT
When approaching taxiway holding lines from the side with the continuous lines, the pilot
A) may continue taxiing.
B) should not cross the lines without ATC clearance.
C) should continue taxiing until all parts of the aircraft have crossed the lines.

487. J11 PVT
Absence of the sky condition and visibility on an ATIS broadcast indicates that
A) weather conditions are at or above VFR minimums.
B) the sky condition is clear and visibility is unrestricted.

C) the ceiling is at least 5,000 feet and visibility is 5 miles or more.

488. J11 PVT

From whom should a departing VFR aircraft request radar traffic information during ground operations?

A) Clearance delivery.

B) Tower, just before takeoff.

C) Ground control, on initial contact.

489. J13 PVT

The recommended entry position to an airport traffic pattern is

A) 45° to the base leg just below traffic pattern altitude.

B) to enter 45° at the midpoint of the downwind leg at traffic pattern altitude.

C) to cross directly over the airport at traffic pattern altitude and join the downwind leg.

490. J27 PVT

How does the wake turbulence vortex circulate around each wingtip?

A) Inward, upward, and around each tip.

B) Inward, upward, and counterclockwise.

C) Outward, upward, and around each tip.

491. J09 PVT

Flight through a restricted area should not be accomplished unless the pilot has

A) filed an IFR flight plan.

B) received prior authorization from the controlling agency.

C) received prior permission from the commanding officer of the nearest military base.

492. J08 PVT

(Refer to figure 53.) Which type radar service is provided to VFR aircraft at Lincoln Municipal?

A) Sequencing to the primary Class C airport and standard separation.

B) Sequencing to the primary Class C airport and conflict resolution so that radar targets do not touch, or 1,000 feet vertical separation.

C) Sequencing to the primary Class C airport, traffic advisories, conflict resolution, and safety alerts.

493. J08 PVT

When a control tower, located on an airport within Class D airspace, ceases operation for the day, what happens to the airspace designation?

A) The airspace designation normally will not change.

B) The airspace remains Class D airspace as long as a weather observer or automated weather system is available.

C) The airspace reverts to Class E or a combination of Class E and G airspace during the hours the tower is not in operation.

494. J08 PVT

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495. J08 PVT

With certain exceptions, Class E airspace extends upward from either 700 feet or 1,200 feet AGL to, but does not include,

A) 10,000 feet MSL.

B) 14,500 feet MSL.

C) 18,000 feet MSL.

496. J33 PVT

An ATC clearance provides

A) priority over all other traffic.

B) adequate separation from all traffic.

C) authorization to proceed under specified traffic conditions in controlled airspace.

497. J11 PVT

TRSA Service in the terminal radar program provides

A) IFR separation (1,000 feet vertical and 3 miles lateral) between all aircraft.

B) warning to pilots when their aircraft are in unsafe proximity to terrain, obstructions, or other aircraft.

C) sequencing and separation for participating VFR aircraft.

498. J10 PVT

Prior to entering an Airport Advisory Area, a pilot should

A) monitor ATIS for weather and traffic advisories.

B) contact approach control for vectors to the traffic pattern.

C) contact the local FSS for airport and traffic advisories.

499. J31 PVT

How can you determine if another aircraft is on a collision course with your aircraft?

A) The nose of each aircraft is pointed at the same point in space.

B) The other aircraft will always appear to get larger and closer at a rapid rate.

C) There will be no apparent relative motion between your aircraft and the other aircraft.

500. L34 PVT

Most midair collision accidents occur during

A) hazy days.

B) clear days.

C) cloudy nights.

501. L34 PVT

Most midair collision accidents occur during

A) hazy days.

B) clear days.

C) cloudy nights.

502. J11 PVT

When an air traffic controller issues radar traffic information in relation to the 12-hour clock, the reference the controller uses is the aircraft`s

A) true course.

B) ground track.

C) magnetic heading.

503. H583 PVT

If an emergency situation requires a downwind landing, pilots should expect a faster

A) airspeed at touchdown, a longer ground roll, and better control throughout the landing roll.

B) groundspeed at touchdown, a longer ground roll, and the likelihood of overshooting the desired touchdown point.

C) groundspeed at touchdown, a shorter ground roll, and the likelihood of undershooting the desired touchdown point.

504. H557 PVT

To minimize the side loads placed on the landing gear during touchdown, the pilot should keep the

A) direction of motion of the aircraft parallel to the runway.

B) longitudinal axis of the aircraft parallel to the direction of its motion.

C) downwind wing lowered sufficiently to eliminate the tendency for the aircraft to drift.

505. H532 PVT

Select the four flight fundamentals involved in maneuvering an aircraft.

A) Aircraft power, pitch, bank, and trim.

B) Starting, taxiing, takeoff, and landing.

C) Straight-and-level flight, turns, climbs, and descents.

506. H545 PVT

(Refer to figure 63.) In flying the rectangular course, when would the aircraft be turned less than 90°?

A) Corners 1 and 4.

B) Corners 1 and 2.

C) Corners 2 and 4.

507. H545 PVT

(Refer to figure 67.) While practicing S-turns, a consistently smaller half-circle is made on one side of the road than on the other, and this turn is not completed before crossing the road or reference line. This would most likely occur in turn

A) 1-2-3 because the bank is decreased too rapidly during the latter part of the turn.

B) 4-5-6 because the bank is increased too rapidly during the early part of the turn.

C) 4-5-6 because the bank is increased too slowly during the latter part of the turn.

508. J34 PVT

(Refer to figure 53.) Traffic patterns in effect at Lincoln Municipal are

A) to the right on Runway 17L and Runway 35L; to the left on Runway 17R and Runway 35R.

B) to the left on Runway 17L and Runway 35L; to the right on Runway 17R and Runway 35R.

C) to the right on Runways 14 - 32.

509. J34 PVT

(Refer to figure 53.) Where is Loup City Municipal located with relation to the city?

A) Northeast approximately 3 miles.

B) Northwest approximately 1 mile.

C) East approximately 10 miles.

510. J34 PVT

Information concerning parachute jumping sites may be found in the

A) NOTAMs.

B) Airport/Facility Directory.

C) Graphic Notices and Supplemental Data.

511. J15 PVT

(Refer to figure 52.) What information should be entered in block 12 for a VFR day flight?

A) The estimated time en route plus 30 minutes.

B) The estimated time en route plus 45 minutes.

C) The amount of usable fuel on board expressed in time.

512. J34 PVT

(Refer to figure 53.) What is the recommended communications procedure for landing at Lincoln Municipal during the hours when the tower is not in operation?

A) Monitor airport traffic and announce your position and intentions on 118.5 MHz.

B) Contact UNICOM on 122.95 MHz for traffic advisories.

C) Monitor ATIS for airport conditions, then announce your position on 122.95 MHz.

513. J34 PVT

The letters VHF/DF appearing in the Airport/Facility Directory for a certain airport indicate that

A) this airport is designated as an airport of entry.

B) the Flight Service Station has equipment with which to determine your direction from the station.

C) this airport has a direct-line phone to the Flight Service Station.

514. J01 PVT

How many satellites make up the Global Positioning System (GPS)?

A) 22.

B) 24.

C) 25.

515. H989 PVT

How many Global Positioning System (GPS) satellites are required to yield a three dimensional position (latitude, longitude, and altitude) and time solution?

A) 4.

B) 5.

C) 6.

516. J01 PVT

To use VHF/DF facilities for assistance in locating an aircraft's position, the aircraft must have a

A) VHF transmitter and receiver.

B) 4096-code transponder.

C) VOR receiver and DME.

517. J11 PVT

Basic radar service in the terminal radar program is best described as

A) safety alerts, traffic advisories, and limited vectoring to VFR aircraft.

B) mandatory radar service provided by the Automated Radar Terminal System (ARTS) program.

C) wind-shear warning at participating airports.

518. J15 PVT

What information is contained in the Notices to Airman Publication (NTAP)?

A) Current NOTAM (D) and FDC NOTAMs.

B) All Current NOTAMs.

C) Current NOTAM (L) and FDC NOTAMs.

519. A01 PVT

With respect to the certification of aircraft, which is a class of aircraft?

A) Airplane, rotorcraft, glider, balloon.

B) Normal, utility, acrobatic, limited.

C) Transport, restricted, provisional.

520. A13 PVT

What should an owner or operator know about Airworthiness Directives (AD's)?

A) They are mandatory.

B) They are voluntary.

C) For Informational purposes only.

521. A13 PVT

May a pilot operate an aircraft that is not in compliance with an Airworthiness Directive (AD)?

A) Yes, AD's are only voluntary.

B) Yes, if allowed by the AD.

C) Yes, under VFR conditions only.

522. A16 PVT

Which operation would be described as preventive maintenance?

A) Repair of landing gear brace struts.

B) Replenishing hydraulic fluid.

C) Repair of portions of skin sheets by making additional seams.

523. A15 PVT

Who may perform preventive maintenance on an aircraft and approve it for return to service?

1. Student or Recreational pilot.

2. Private or Commercial pilot.

3. None of the above.

A) 1.

B) 2.

C) Neither 1 or 2.

524. A15 PVT

What regulation allows a private pilot to perform preventive maintenance?

A) 14 CFR Part 91.403.

B) 14 CFR Part 61.113.

C) 14 CFR Part 43.7.

525. A20 PVT

If a recreational or private pilot had a flight review on August 8, this year, when is the next flight review required?

A) August 8, next year.

B) August 31, 1 year later.

C) August 31, 2 years later.

526. B12 PVT

In which class of airspace is acrobatic flight prohibited?

A) Class E airspace not designated for Federal Airways above 1,500 feet AGL.

B) Class E airspace below 1,500 feet AGL.

C) Class G airspace above 1,500 feet AGL.

527. B11 PVT

Except in Alaska, during what time period should lighted position lights be displayed on an aircraft?

A) End of evening civil twilight to the beginning of morning civil twilight.

B) 1 hour after sunset to 1 hour before sunrise.

C) Sunset to sunrise.

528. B13 PVT

An aircraft had a 100-hour inspection when the tachometer read 1259.6. When is the next 100-hour inspection due?

A) 1349.6 hours.

B) 1359.6 hours.

C) 1369.6 hours.

529. B08 PVT

Unless otherwise authorized, what is the maximum indicated airspeed at which a person may operate an aircraft below 10,000 feet MSL?

A) 200 knots.

B) 250 knots.

C) 288 knots.

530. B09 PVT

During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum flight visibility for VFR flight at night is

A) 1 mile.

B) 3 miles.

C) 5 miles.

531. B09 PVT

During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum distance below clouds requirement for VFR flight at night is

A) 500 feet.

B) 1,000 feet.

C) 1,500 feet.

532. B09 PVT

The minimum flight visibility required for VFR flights above 10,000 feet MSL and more than 1,200 feet AGL in controlled airspace is

A) 1 mile.

B) 3 miles.

C) 5 miles.

533. B13 PVT

Who is responsible for ensuring Airworthiness Directives (AD's) are complied with?

A) Owner or operator.

B) Mechanic with inspection authorization (IA).

C) Repair station.

534. B13 PVT

The airworthiness of an aircraft can be determined by a preflight inspection and a

A) review of the maintenance records.

B) statement from the owner or operator that the aircraft is airworthy.

C) log book endorsement from a flight instructor.

535. B08 PVT

If an altimeter setting is not available before flight, to which altitude should the pilot adjust the altimeter?

A) The elevation of the nearest airport corrected to mean sea level.

B) The elevation of the departure area.

C) Pressure altitude corrected for nonstandard temperature.

536. B08 PVT

While operating in class D airspace, each pilot of an aircraft approaching to land on a runway served by a visual approach slope indicator (VASI) shall

A) maintain a 3° glide until approximately 1/2 mile to the runway before going below the VASI.

B) maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

C) stay high until the runway can be reached in a power-off landing.

537. B13 PVT

An aircraft`s annual condition inspection was performed on July 12, this year. The next annual inspection will be due no later than

A) July 1, next year.

B) July 13, next year.

C) July 31, next year.

538. B08 PVT

Except when necessary for takeoff or landing, what is the minimum safe altitude for a pilot to operate an aircraft anywhere?

A) An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

B) An altitude of 500 feet above the surface and no closer than 500 feet to any person, vessel, vehicle, or structure.

C) An altitude of 500 feet above the highest obstacle within a horizontal radius of 1,000 feet.

539. B07 PVT

The final authority as to the operation of an aircraft is the

A) Federal Aviation Administration.

B) pilot in command.

C) aircraft manufacturer.

540. B07 PVT

When must a pilot who deviates from a regulation during an emergency send a written report of that deviation to the Administrator?

A) Within 7 days.

B) Within 10 days.

C) Upon request.

541. B11 PVT

When operating an aircraft at cabin pressure altitudes above 12,500 feet MSL up to and including 14,000 feet MSL, supplemental oxygen shall be used during

A) the entire flight time at those altitudes.

B) that flight time in excess of 10 minutes at those altitudes.

C) that flight time in excess of 30 minutes at those altitudes.

542. B13 PVT

Maintenance records show the last transponder inspection was performed on September 1,2006. The next inspection will be due no later than

A) September 30, 2007.

B) September 1, 2008.

C) September 30, 2008.

543. B11 PVT

When are non-rechargeable batteries of an emergency locator transmitter (ELT) required to be replaced?

A) Every 24 months.

B) When 50 percent of their useful life expires.

C) At the time of each 100-hour or annual inspection.

544. B11 PVT

When must batteries in an emergency locator transmitter (ELT) be replaced or recharged, if rechargeable?

A) After any inadvertent activation of the ELT.

B) When the ELT has been in use for more than 1 cumulative hour.

C) When the ELT can no longer be heard over the airplane's communication radio receiver.

545. B13 PVT

No person may use an ATC transponder unless it has been tested and inspected within at least the preceding

A) 6 calendar months.

B) 12 calendar months.

C) 24 calendar months.

546. B09 PVT

Which cruising altitude is appropriate for a VFR flight on a magnetic course of 135°?

A) Even thousandths.

B) Even thousandths plus 500 feet.

C) Odd thousandths plus 500 feet.

547. H957 PVT

To determine the freezing level and areas of probable icing aloft,the pilot should refer to the

A) Inflight Aviation Weather Advisories.

B) Weather Depiction Chart.

C) Area Forecast.

548. I57 PVT

(Refer to figure 16.) What sky conditon and visibility are forecast for upper Michigan in the eastern portions after 2300Z?

A) Ceiling 1,000 feet overcast and 3 to 5 statute miles visibility.

B) Ceiling 1,000 feet overcast and 3 to 5 nautical miles visibility.

C) Ceiling 100 feet overcast and 3 to 5 statute miles visibility.

549. I57 PVT

The section of the Area Forecast entitled 'VFR CLDS/ WX' contains a general description of

A) cloudiness and weather significant to flight operations broken down by states or other geographical areas.

B) forecast sky cover, cloud tops, visibility, and obstructions to vision along specific routes.

C) clouds and weather which cover an area greater than 3,000 square miles and is significant to VFR flight operations.

550. I57 PVT

(Refer to figure 16.) What is the outlook for the southern half of Indiana after 0700Z?

A) Scattered clouds at 3,000 feet AGL.

B) Scattered clouds at 10,000 feet.

C) VFR.

551. I57 PVT

From which primary source should information be obtained regarding expected weather at the estimated time of arrival if your destination has no Terminal Forecast?

A) Low-Level Prognostic Chart.

B) Weather Depiction Chart.

C) Area Forecast.

552. I57 PVT

To best determine general forecast weather conditions over several states, the pilot should refer to

A) Aviation Area Forecasts.

B) Weather Depiction Charts.

C) Satellite Maps.

553. I57 PVT

(Refer to figure 16.) The Chicago FA forecast section is valid until the twenty-fifth at

A) 0800Z.

B) 1400Z.

C) 1945Z.

554. J25 PVT

What service should a pilot normally expect from an En Route Flight Advisory Service (EFAS) station?

A) Actual weather information and thunderstorm activity along the route.

B) Preferential routing and radar vectoring to circumnavigate severe weather.

C) Severe weather information, changes to flight plans, and receipt of routine position reports.

555. I57 PVT

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

A) Transcribed Weather Broadcast (TWEB) on an NDB or a VOR facility.

B) VHF radio receiver tuned to an Automatic Terminal Information Service (ATIS) frequency.

C) regularly scheduled weather broadcast on a VOR frequency.

556. H957 PVT

(Refer to figure 16.) What sky condition and type obstructions to vision are forecast for upper Michigan in the western portions from 0200Z until 0500Z?

A) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 statute miles in mist.

B) Ceiling becoming 1,000 feet overcast with visibility 3 to 5 nautical miles in mist.

C) Ceiling becoming 100 feet overcast with visibility 3 to 5 statue miles in mist.

557. I60 PVT

(Refer to figure 19, area E.) The top of the precipitation of the cell is

A) 16,000 feet AGL.

B) 16,000 feet MSL.

C) 25,000 feet MSL.

558. I64 PVT

(Refer to figure 20.) How are Significant Weather Prognostic Charts best used by a pilot?

A) For overall planning at all altitudes.

B) For determining areas to avoid (freezing levels and turbulence).

C) For analyzing current frontal activity and cloud coverage.

559. I64 PVT

(Refer to figure 20.) At what altitude is the freezing level over the middle of Florida on the12-hour Significant Weather Prognostic Chart?

A) 4,000 feet.

B) 8,000 feet.

C) 12,000 feet.

560. I64 PVT

(Refer to figure 20.) What weather is forecast for the Florida area just ahead of the stationary front during the first 12 hours?

A) Ceiling 1,000 to 3,000 feet and/or visibility 3 to 5 miles with continuous precipitation.

B) Ceiling 1,000 to 3,000 feet and/or visibility 3 to 5 miles with intermittent percipitation.

C) Ceiling less than 1,000 feet and/or visibility less than 3 miles with continuous precipitation.

561. I29 PVT

Why is frost considered hazardous to flight?

A) Frost changes the basic aerodynamic shape of the airfoils, thereby decreasing lift.

B) Frost slows the airflow over the airfoils, thereby increasing control effectiveness.

C) Frost spoils the smooth flow of air over the wings, thereby decreasing lifting capability.

562. I35 PVT

The development of thermals depends upon

A) a counterclockwise circulation of air.

B) temperature inversions.

C) solar heating.

563. H1032 PVT

What effect would gusts and turbulence have on the load factor of a glider with changes in airspeed?

A) Load factor decreases as airspeed increases.

B) Load factor increases as airspeed increases.

C) Load factor increases as airspeed decreases.

564. H1017 PVT

What force provides the forward motion necessary to move a glider through the air?

A) Lift.

B) Centripetal force.

C) Gravity.

565. H1031 PVT

(Refer to figure 55.) What approximate lift/drag ratio will the glider attain at 68 MPH in still air?

A) 10.5:1.

B) 21.7:1.

C) 28.5:1.

566. H1041 PVT

What corrective action should the sailplane pilot take during takeoff if the towplane is still on the ground and the sailplane is airborne and drifting to the left?

A) Crab into the wind by holding upwind (right) rudder pressure.

B) Crab into the wind so as to maintain a position directly behind the towplane.

C) Establish a right wing low drift correction to remain in the flightpath of the towplane.

567. H1040 PVT

(Refer to figure 56.) Which illustration means the towplane cannot release?

A) 6.

B) 8.

C) 9.

568. H1040 PVT

(Refer to figure 56.) Illustration 3 means

A) stop operations.

B) release towline.

C) take up slack.

569. H1040 PVT

(Refer to figure 56.) Illustration 2 means

A) release towline.

B) ready to tow.

C) hold position.

570. H1040 PVT

(Refer to figure 56.) Which illustration is a signal to stop operation?

A) 2.

B) 3.

C) 7.

571. H1040 PVT

(Refer to figure 56.) Which illustration is a signal from the sailplane for the towplane to turn right?

A) 5.

B) 6.

C) 11.

572. H1040 PVT

(Refer to figure 56.) Which illustration is a signal that the glider is unable to release?

A) 8.

B) 10.

C) 11.

573. N31 PVT

To stop pitch oscillation (porpoising) during a winch launch, the pilot should

A) release back pressure and then pull back against the cycle of pitching oscillation to get in phase with the undulations.

B) signal the ground crew to increase the speed of the tow.

C) relax the back pressure on the control stick and shallow the angle of climb.

574. N31 PVT

Which is an advantage of using a CG hook for a winch tow rather than the nose hook?

A) A greater percent of the line length can be used to reach altitude.

B) Maximum release altitude is limited.

C) It is the safest method of launching.

575. H1040 PVT

(Refer to figure 56.) Which illustration is a signal to the towplane to reduce airspeed?

A) 7.

B) 10.

C) 12.

576. H1022 PVT

(Refer to figure 11.) Which yaw string and inclinometer illustrations indicate a slipping right turn?

A) 3 and 6.

B) 2 and 6.

C) 2 and 4.

577. N27 PVT

A sailplane has a best glide ratio of 30:1. How many nautical miles will the glider travel while losing 2,000 feet?

A) 10 nautical miles.

B) 15 nautical miles.

C) 21 nautical miles.

578. N27 PVT

A sailplane has lost 2,000 feet in 9 nautical miles. The best glide ratio for this sailplane is approximately

A) 24:1.

B) 27:1.

C) 30:1.

579. N27 PVT

How many feet will a glider sink in 10 nautical miles if its lift/drag ratio is 23:1?

A) 2,400 feet.

B) 2,600 feet.

C) 4,300 feet.

580. N34 PVT

What is the proper airspeed to use when flying between thermals on a cross-country flight against a headwind?

A) The best lift/drag speed increased by one-half the estimated wind velocity.

B) The minimum sink speed increased by one-half the estimated wind velocity.

C) The best lift/drag speed decreased by one-half the estimated wind velocity.

581. N21 PVT

To obtain maximum distance over the ground, the airspeed to use is the

A) minimum control speed.

B) best lift/drag speed.

C) minimum sink speed.

582. N27 PVT

A sailplane has a best glide ratio of 23:1. How many feet will the glider lose in 8 nautical miles?

A) 1,840 feet.

B) 2,100 feet.

C) 2,750 feet.

583. N27 PVT

How many feet will a sailplane sink in 15 nautical miles if its lift/drag ratio is 22:1?

A) 2,700 feet.

B) 3,600 feet.

C) 4,100 feet.

584. N21 PVT

(Refer to figure 55.) How many feet will the glider sink in 1 statute mile at 53 MPH in still air?

A) 144 feet.

B) 171 feet.

C) 211 feet.

585. N21 PVT

(Refer to figure 55.) At what speed will the glider attain a sink rate of 5 feet per second in still air?

A) 75 MPH.

B) 79 MPH.

C) 84 MPH.

586. N21 PVT

(Refer to figure 55.) At what speed will the glider gain the most distance while descending 1,000 feet in still air?

A) 44 MPH.

B) 53 MPH.

C) 83 MPH.

587. N21 PVT

(Refer to figure 55.) How many feet will the glider descend at minimum sink speed for 1 statute mile in still air?

A) 132 feet.

B) 170 feet.

C) 180 feet.

588. H1116 PVT

(Refer to figure 27.) If a glider is launched over Barnes County Airport (area 6) with sufficient altitude to glide to Jamestown Airport (area 4), how long will it take for the flight at an average of 40 MPH groundspeed?

A) 20 minutes.

B) 27 minutes.

C) 48 minutes.

589. H1116 PVT

(Refer to figure 25, area 1.) A glider is launched over Caddo Mills Airport with sufficient altitude to glide to Airpark East Airport, south of Caddo Mills. How long will it take for the flight at an average of 35 MPH groundspeed?

A) 31 minutes.

B) 27 minutes.

C) 25 minutes.

590. A20 PVT

Prior to becoming certified as a private pilot with a glider rating, the pilot must have in his or her possession what type of medical?

A) A third-class medical certificate.

B) A statement from a designated medical examiner.

C) A medical certificate is not required.

591. A21 PVT

To act as pilot in command of an aircraft towing a glider, a pilot is required to have made within the preceding 12 months

A) at least three flights as observer in a glider being towed by an aircraft.

B) at least three flights in a powered glider.

C) at least three actual or simulated glider tows while accompanied by a qualified pilot.

592. I55 PVT

(Refer to figure 13.) What effect do the clouds mentioned in the weather briefing have on soaring conditions?

A) All thermals stop at the base of the clouds.

B) Thermals persist to the tops of the clouds at 25,000 feet.

C) The scattered clouds indicate thermals at least to the tops of the lower clouds.

593. H1104 PVT

(Refer to figure 21.) Over which area should a glider pilot expect to find the best lift under normal conditions?

A) 5.

B) 6.

C) 7.

594. I35 PVT

Where and under what condition can enough lift be found for soaring when the weather is generally stable?

A) On the upwind side of hills or ridges with moderate winds present.

B) In mountain waves that form on the upwind side of the mountains.

C) Over isolated peaks when strong winds are present.

595. I35 PVT

What is an important precaution when soaring in a dust devil?

A) Avoid the eye of the vortex.

B) Avoid the clear area at the outside edge of the dust.

C) Maintain the same direction as the rotation of the vortex.

596. I35 PVT

Where may the most favorable type thermals for cross-country soaring be found?

A) Just ahead of a warm front.

B) Along thermal streets.

C) Under mountain waves.

597. I35 PVT

How can a pilot locate bubble thermals?

A) Look for wet areas where recent showers have occurred.

B) Look for birds that are soaring in areas of intermittent heating.

C) Fly the area just above the boundary of a temperature inversion.

598. I35 PVT

What is the best visual indication of a thermal?

A) Fragmented cumulus clouds with concave bases.

B) Smooth cumulus clouds with concave bases.

C) Scattered to broken sky with cumulus clouds.

599. I35 PVT

What is a recommended procedure for entering a dust devil for soaring?

A) Enter above 500 feet and circle the edge in the same direction as the rotation.

B) Enter below 500 feet and circle the edge opposite the direction of rotation.

C) Enter at or above 500 feet and circle the edge opposite the direction of rotation.

600. I35 PVT

What is one recommended method for locating thermals?

A) Fly an ever increasing circular path.

B) Maintain a straight track downwind.

C) Look for converging streamers of dust or smoke.

601. I35 PVT

On which side of a rocky knoll, that is surrounded by vegetation, should a pilot find the best thermals?

A) On the side facing the Sun.

B) On the downwind side.

C) Exactly over the center.

602. I35 PVT

Which is considered to be the most hazardous condition when soaring in the vicinity of thunderstorms?

A) Static electricity.

B) Lightning.

C) Wind shear and turbulence.

603. I35 PVT

Convective circulation patterns associated with sea breezes are caused by

A) warm, dense air moving inland from over the water.

B) water absorbing and radiating heat faster than the land.

C) cool, dense air moving inland from over the water.

604. I35 PVT

During which period is a sea breeze front most suitable for soaring flight?

A) Shortly after sunrise.

B) During the early forenoon.

C) During the afternoon.

605. I35 PVT

What minimum upward current must a glider encounter to maintain altitude?

A) At least 2 feet per second.

B) The same as the glider's sink rate.

C) The same as the adjacent down currents.

606. H1035 PVT

A pilot plans to fly solo in the front seat of a two-place glider which displays the following placards on the instrument panel:

MINIMUM PILOT WEIGHT: 135 LB

MAXIMUM PILOT WEIGHT: 220 LB

NOTE: Seat ballast should be used as necessary.

The recommended towing speed for all tows is 55 - 65 knots. What action should be taken if the pilot's weight is 125 pounds?

A) Add 10 pounds of seat ballast to the rear seat.

B) Add 10 pounds of seat ballast.

C) Add 45 pounds of seat ballast to obtain the average pilot weight of 170 pounds.

607. H1035 PVT

A pilot plans to fly solo in the front seat of a two-place glider which displays the following placards on the instrument panel:

MINIMUM PILOT WEIGHT: 135 LB

MAXIMUM PILOT WEIGHT: 220 LB

NOTE: Seat ballast should be used as necessary.

The recommended towing speed for all tows is 55 - 65 knots. What action should be taken if the pilot's weight is 115 pounds?

A) Add 20 pounds of seat ballast to the rear seat.

B) Add 55 pounds of seat ballast to obtain the average pilot weight of 170 pounds.

C) Add 20 pounds of seat ballast.

608. H1034 PVT

(Refer to figure 54.) Calculate the weight and balance of the glider, and determine if the CG is within limits.

Pilot (fwd seat) 160 lb

Passenger (aft seat) 185 lb

A) CG 71.65 inches aft of datum - out of limits forward.

B) CG 79.67 inches aft of datum - within limits.

C) CG 83.43 inches aft of datum - within limits.

609. H720 PVT

Which is a result of the phenomenon of ground effect?

A) The induced angle of attack of each rotor blade is increased.

B) The lift vector becomes more horizontal.

C) The angle of attack generating lift is increased.

610. H720 PVT

(Refer to figure 47.) What is the best rate-of-climb speed for the helicopter?

A) 24 MPH.

B) 40 MPH.

C) 57 MPH.

611. H747 PVT

The principal reason the shaded area of a Height vs. Velocity Chart should be avoided is

A) turbulence near the surface can dephase the blade dampers.

B) rotor RPM may decay before ground contact is made if an engine failure should occur.

C) insufficient airspeed would be available to ensure a safe landing in case of an engine failure.

612. B09 PVT

Under what conditions, if any, may a private pilot operate a helicopter under special VFR at night within Class D airspace?

A) The helicopter must be fully instrument equipped and the pilot must be instrument rated.

B) The flight visibility must be at least 1 mile.

C) There are no conditions; regulations permit this.

613. P01 PVT

Under which condition will an airship float in the air?

A) When buoyant force equals horizontal equilibrium existing between propeller thrust and airship drag.

B) When buoyant force is less than the difference between airship weight and the weight of the air volume being displaced.

C) When buoyant force equals the difference between airship weight and the weight of the air volume being displaced.

614. P11 PVT

Which takeoff procedure is considered to be most hazardous for an airship?

A) Maintaining only 50 percent of the maximum permissible positive angle of inclination.

B) Failing to apply full engine power properly on all takeoffs, regardless of wind.

C) Maintaining a negative angle of inclination during takeoff after elevator response is adequate for controllability.

615. P04 PVT

The pressure height of an airship is the altitude at which

A) the airship would be unable to gain more altitude.

B) gas pressure would reach 3 inches of water.

C) the ballonet(s) would be empty.

616. P11 PVT

If an airship should experience failure of both engines during flight and neither engine can be restarted, what initial immediate action must the pilot take?

A) The airship must be driven down to a landing before control and envelope shape are lost.

B) The emergency auxiliary power unit must be started for electrical power to the airscoop blowers so that ballonet inflation can be maintained.

C) Immediate preparations to operate the airship as a free balloon are necessary.

617. P01 PVT

An airship descending through a steep temperature inversion will

A) show no change in superheat as altitude is lost.

B) show a decrease in superheat as altitude is lost.

C) become progressively lighter, thus becoming increasingly more difficult to drive down.

618. P04 PVT

Below pressure height, each 5 °F of positive superheat amounts to approximately

A) 1 percent of gross lift.

B) 2 percent of net lift.

C) 2 percent of total lift.

619. P01 PVT

What is airship superheat?

A) A condition of excessive exterior temperature of the envelope.

B) The temperature of the lifting gas exceeding the red line.

C) The difference between outside air temperature and the temperature inside the envelope.

620. P11 PVT

Which action is necessary in order to perform a normal descent in an airship?

A) Valve gas.

B) Valve air.

C) Take air into the aft ballonets.

621. P01 PVT

During flight in an airship, when is vertical equilibrium established?

A) When buoyancy is greater than airship weight.

B) When buoyancy equals airship weight.

C) When buoyancy is less than airship weight.

622. P04 PVT

In relation to the operation of an airship, what is the definition of aerostatics?

A) The gravitational factors involving equilibrium of a body freely suspended in the atmosphere.

B) The science of the dynamics involved in the expansion and contraction of hydrogen gas.

C) The expansion and contraction of the lifting gas helium.

623. P04 PVT

How does the pilot know when pressure height has been reached?

A) Liquid in the gas manometer will rise and the liquid in the air manometer will fall below normal levels.

B) Liquid in the gas and air manometers will fall below the normal level.

C) Liquid in the gas manometer will fall and the liquid in the air manometer will rise above normal levels.

624. P04 PVT

When the airship is at pressure height and superheat increases, constant pressure must be maintained by valving

A) gas from the envelope.

B) air from the envelope.

C) gas from the ballonets.

625. P11 PVT

Air damper valves should normally be kept closed during climbs because any air forced into the system would

A) increase the amount of gas that must be exhausted to prevent the airship from ascending at an excessively high rate.

B) increase the amount of air to be exhausted, resulting in a lower rate of ascent.

C) decrease the purity of the gas within the envelope.

626. P11 PVT

To land an airship that is 250 pounds heavy when the wind is calm, the best landing can usually be made if the airship is

A) in trim.

B) nose heavy approximately 20°.

C) tail heavy approximately 20°.

627. H983 PVT

(Refer to figure 25.) An airship passes over the Quitman VOR-DME area 2) at 0940 and then over the intersection of the powerline and Victor 114 at 0948. Approximately what time should the flight arrive over the Bonham VORTAC (area 3)?

A) 1109.

B) 1117.

C) 1138.

628. H983 PVT

(Refer to figure 25.) Estimate the time en route from Majors Airport (area 1) to Winnsboro Airport (area 2). The wind is from 340° at 12 knots and the true airspeed is 36 knots.

A) 55 minutes.

B) 59 minutes.

C) 63 minutes.

629. H983 PVT

(Refer to figure 22.) An airship crosses over Minot VORTAC (area 1) at 1056 and over the creek 8 nautical miles south-southeast on Victor 15 at 1108. What should be the approximate position on Victor 15 at 1211?

A) Over Lake Nettie National Wildlife Refuge.

B) Crossing the road east of Underwood.

C) Over the powerlines east of Washburn Airport.

630. H987 PVT

(Refer to figure 25.) Determine the magnetic heading for a flight from Majors Airport (area 1) to Winnsboro Airport (area 2). The wind is from 340° at 12 knots, the true airspeed is 36 knots, and the magnetic variation is 6°30'E.

A) 078°.

B) 091°.

C) 101°.

631. M52 PVT

FAA advisory circulars containing subject matter specifically related to Air Traffic Control and General Operations are issued under which subject number?

A) 60.

B) 70.

C) 90.

632. P04 PVT

The maximum altitude that a rigid airship can reach (under a given atmospheric condition) and then return safely to the surface is determined by

A) the disposable load.

B) ballonet capacity.

C) pressure altitude.

633. P04 PVT

An unbalanced condition of an airship in flight must be overcome by

A) valving air from the ballonets.

B) valving gas from the envelope.

C) a negative or a positive dynamic force.

634. H940 PVT

Which items are included in the empty weight of an aircraft?

A) Unusable fuel and undrainable oil.

B) Only the airframe, powerplant, and optional equipment.

C) Full fuel tanks and engine oil to capacity.

635. H748 PVT

High airspeeds, particularly in turbulent air, should be avoided primarily because of the possibility of

A) an abrupt pitchup.

B) retreating blade stall.

C) a low-frequency vibration developing.

636. H703 PVT

The upward bending of the rotor blades resulting from the combined forces of lift and centrifugal force is known as

A) coning.

B) blade slapping.

C) inertia.

637. H703 PVT

(Refer to figure 10.) During flight, if cyclic control pressure is applied which results in a maximum increase in pitch angle of the rotor blade at position A, the rotor disc will tilt

A) forward.

B) aft.

C) left.

638. H776 PVT

(Refer to figure 40.) Determine the total takeoff distance required for a gyroplane to clear a 50-foot obstacle if the temperature is 95 °F and the pressure altitude is 1,700 feet.

A) 1,825 feet.

B) 1,910 feet.

C) 2,030 feet.

639. H776 PVT

(Refer to figure 40.) Determine the total landing distance to clear a 50-foot obstacle in a gyroplane. The outside air temperature (OAT) is 75°F and the pressure altitude at the airport is 2,500 feet.

A) 521 feet.

B) 525 feet.

C) 529 feet.

640. H928 PVT

For internal cooling, reciprocating aircraft engines are especially dependent on

A) a properly functioning thermostat.

B) air flowing over the exhaust manifold.

C) the circulation of lubricating oil.

641. H780 PVT

What precaution should be taken while taxiing a gyroplane?

A) The cyclic stick should be held in the neutral position at all times.

B) Avoid abrupt control movements when blades are turning.

C) The cyclic stick should be held slightly aft of neutral at all times.

642. H767 PVT

If the pilot experiences ground resonance, and the rotor r.p.m. is not sufficient for flight,

A) open the throttle full and liftoff.

B) apply the rotor brake and stop the rotor as soon as possible.

C) attempt to takeoff at that power setting.

643. H719 PVT

(Refer to figures 45 and 46.) What is the condition of the weight and balance of the gyroplane as loaded?

	WEIGHT (LB)	MOMENT (1000)
Empty weight	1,074	85.6
Oil, 6 qt	---	1.0
Pilot and passenger	247	---
Fuel, 12 gal	---	---
Baggage	95	---

A) Within limits.

B) Overweight.

C) Out of limits aft.

644. H703 PVT

When a blade flaps up, the CG moves closer to its axis of rotation giving that blade a tendency to

A) decelerate.

B) accelerate.

C) stabilize its rotational velocity.

645. H705 PVT

The primary purpose of the tail rotor system is to

A) assist in making a coordinated turn.

B) maintain heading during forward flight.

C) counteract the torque effect of the main rotor.

646. H703 PVT

The purpose of the lead-lag (drag) hinge in a three-bladed, fully articulated helicopter rotor system is to compensate for

A) Coriolis effect.

B) coning.

C) geometric unbalance.

647. H748 PVT

When operating at high forward airspeeds, retreating blade stalls are more likely to occur under which condition?

A) Low gross weight and low density altitude.

B) High RPM and low density altitude.

C) Steep turns in turbulent air.

648. H703 PVT

Translational lift is the result of

A) decreased rotor efficiency.

B) airspeed.

C) both airspeed and groundspeed.

649. H703 PVT

During a hover, a helicopter tends to drift to the right. To compensate for this, some helicopters have the

A) tail rotor tilted to the left.

B) tail rotor tilted to the right.

C) rotor mast rigged to the left side.

650. H748 PVT

The maximum forward speed of a helicopter is limited by

A) retreating blade stall.

B) the rotor RPM red line.

C) solidity ratio.

651. H720 PVT

With calm wind conditions, which flight operation would require the most power?

A) A right-hovering turn.

B) A left-hovering turn.

C) Hovering out of ground effect.

652. H705 PVT

If RPM is low and manifold pressure is high, what initial corrective action should be taken?

A) Increase the throttle.

B) Lower the collective pitch.

C) Raise the collective pitch.

653. H928 PVT

Which would most likely cause the cylinder head temperature and engine oil temperature gauges to exceed their normal operating ranges?

A) Using fuel that has a lower-than-specified fuel rating.

B) Using fuel that has a higher-than-specified fuel rating.

C) Operating with higher-than-normal oil pressure.

654. H927 PVT

What type fuel can be substituted for an aircraft if the recommended octane is not available?

A) The next higher octane aviation gas.

B) The next lower octane aviation gas.

C) Unleaded automotive gas of the same octane rating.

655. H727 PVT

During surface taxiing, the collective pitch is used to control

A) drift during a crosswind.

B) rate of speed.

C) ground track.

656. H727 PVT

During surface taxiing, the cyclic pitch stick is used to control

A) forward movement.

B) heading.

C) ground track.

657. J11 PVT

Select the UNICOM frequencies normally assigned to stations at landing areas used exclusively as heliports.

A) 122.75 and 123.65 MHz.

B) 123.0 and 122.95 MHz.

C) 123.05 and 123.075 MHz.

658. H746 PVT

Which is a precaution to be observed during an autorotative descent?

A) Normally, the airspeed is controlled with the collective pitch.

B) Normally, only the cyclic control is used to make turns.

C) Do not allow the rate of descent to get too low at zero airspeed.

659. H742 PVT

What is the procedure for a slope landing?

A) When the downslope skid is on the ground, hold the collective pitch at the same position.

B) Minimum RPM shall be held until the full weight of the helicopter is on the skid.

C) When parallel to the slope, slowly lower the upslope skid to the ground prior to lowering the downslope skid.

660. H747 PVT

(Refer to figure 47.) Which airspeed/altitude combination should be avoided during helicopter operations?

A) 30 MPH/200 feet AGL.

B) 50 MPH/300 feet AGL.

C) 60 MPH/20 feet AGL.

661. H747 PVT

(Refer to figure 47.) The airspeed range to avoid while flying in ground effect is

A) 25 - 40 MPH.

B) 25 - 57 MPH.

C) 40 MPH and above.

662. H739 PVT

The proper action to initiate a quick stop is to apply

A) forward cyclic and lower the collective pitch.

B) aft cyclic and raise the collective pitch.

C) aft cyclic and lower the collective pitch.

663. H747 PVT

(Refer to figure 47.) Which airspeed/altitude combination should be avoided during helicopter operations?

A) 20 MPH/200 feet AGL.

B) 35 MPH/175 feet AGL.

C) 40 MPH/75 feet AGL.

664. H738 PVT

Which flight technique is recommended for use during hot weather?

A) Use minimum allowable RPM and maximum allowable manifold pressure during all phases of flight.

B) During hovering flight, maintain minimum engine RPM during left pedal turns, and maximum engine RPM during right pedal turns.

C) During takeoff, accelerate slowly into forward flight.

665. H743 PVT

Which action would be appropriate for confined area operations?

A) Takeoffs and landings must be made into the wind.

B) Plan the flightpath over areas suitable for a forced landing.

C) A very steep angle of descent should be used to land on the selected spot.

666. H742 PVT

Takeoff from a slope is normally accomplished by

A) moving the cyclic in a direction away from the slope.

B) bringing the helicopter to a level attitude before completely leaving the ground.

C) moving the cyclic stick to a full up position as the helicopter nears a level attitude.

667. H738 PVT

Under what condition should a helicopter pilot consider using a running takeoff?

A) When gross weight or density altitude prevents a sustained hover at normal hovering altitude.

B) When a normal climb speed is assured between 10 and 20 feet.

C) When the additional airspeed can be quickly converted to altitude.

668. H987 PVT

(Refer to figure 22.) Determine the magnetic heading for a flight from Mercer County Regional Airport (area 3) to Minot International (area 1). The wind is from 330° at 25 knots, the true airspeed is 100 knots, and the magnetic variation is 10° east.

A) 002°.

B) 012°.

C) 352°.

669. B09 PVT

(Refer to figure 27, area 2.) The day VFR visibility and cloud clearance requirements to operate over the town of Cooperstown, after departing and climbing out of the Cooperstown Airport at or below 700 feet AGL are

A) 1 mile and clear of clouds.

B) 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.

C) 3 miles and clear of clouds.

670. A29 PVT

Outside controlled airspace, the minimum flight visibility requirement for a recreational pilot flying VFR above 1,200 feet AGL and below 10,000 feet MSL during daylight hours is

A) 1 mile.

B) 3 miles.

C) 5 miles.

671. A29 PVT

When, if ever, may a recreational pilot act as pilot in command in an aircraft towing a banner?

A) If the pilot has logged 100 hours of flight time in powered aircraft.

B) If the pilot has an endorsement in his/her pilot logbook from an authorized flight instructor.

C) It is not allowed.

672. A29 PVT

With respect to daylight hours, what is the earliest time a recreational pilot may take off?

A) One hour before sunrise.

B) At sunrise.

C) At the beginning of morning civil twilight.

673. A29 PVT

When may a recreational pilot operate to or from an airport that lies within Class C airspace?

A) Anytime the control tower is in operation.

B) When the ceiling is at least 1,000 feet and the surface visibility is at least 2 miles.

C) After receiving training and a logbook endorsement from an authorized instructor.

674. A29 PVT

Under what conditions may a recreational pilot operate at an airport that lies within Class D airspace and that has a part-time control tower in operation?

A) Between sunrise and sunset when the tower is in operation, the ceiling is at least 2,500 feet, and the visibility is at least 3 miles.

B) Any time when the tower is in operation, the ceiling is at least 3,000 feet, and the visibility is more than 1 mile.

C) Between sunrise and sunset when the tower is closed, the ceiling is at least 1,000 feet, and the visibility is at least 3 miles.

675. A29 PVT

When may a recreational pilot fly above 10,000 feet MSL?

A) When 2,000 feet AGL or below.

B) When 2,500 feet AGL or below.

C) When outside of controlled airspace.

676. A29 PVT

During daytime, what is the minimum flight or surface visibility required for recreational pilots in Class G airspace below 10,000 feet MSL?

A) 1 mile.

B) 3 miles.

C) 5 miles.

677. A29 PVT

What exception, if any, permits a recreational pilot to act as pilot in command of an aircraft carrying a passenger for hire?

A) If the passenger pays no more than the operating expenses.

B) If a donation is made to a charitable organization for the flight.

C) There is no exception.

678. A29 PVT

Under what conditions, if any, may a recreational pilot demonstrate an aircraft in flight to a prospective buyer?

A) The buyer pays all the operating expenses.

B) The flight is not outside the United States.

C) None.

679. A29 PVT

A recreational pilot may act as pilot in command of an aircraft with a maximum engine horsepower of

A) 160.

B) 180.

C) 200.

680. A29 PVT

When may a recreational pilot act as pilot in command of an aircraft at night?

A) When obtaining an additional certificate or rating under the supervision of an authorized instructor, provided the surface or flight visibility is at least 1 statute mile.

B) When obtaining an additional certificate or rating under the supervision of an authorized instructor, provided the surface or flight visibility is at least 3 statute miles.

C) When obtaining an additional certificate or rating under the supervision of an authorized instructor, provided the surface or flight visibility is at least 5 statute miles.

681. A29 PVT

During daytime, what is the minimum flight visibility required for recreational pilots in controlled airspace below 10,000 feet MSL?

A) 1 mile.

B) 3 miles.

C) 5 miles.

682. A29 PVT

A recreational pilot acting as pilot in command must have in his or her personal possession while aboard the aircraft

A) a current logbook endorsement to show that a flight review has been satisfactorily accomplished.

B) a current logbook endorsement that permits flight within 50 nautical miles from the departure airport.

C) the pilot logbook to show recent experience requirements to serve as pilot in command have been met.

683. A29 PVT

May a recreational pilot act as pilot in command of an aircraft in furtherance of a business?

A) Yes, if the flight is only incidental to that business.

B) Yes, providing the aircraft does not carry a person or property for compensation or hire.

C) No, it is not allowed.

684. A20 PVT

If a recreational or private pilot had a flight review on August 8, this year, when is the next flight review required?

A) August 8, 2 years later.

B) August 31, next year.

C) August 31, 2 years later.

685. A20 PVT

Each recreational or private pilot is required to have

A) a biennial flight review.

B) an annual flight review.

C) a semiannual flight review.

686. A29 PVT

How many passengers is a recreational pilot allowed to carry on board?

A) One.

B) Two.

C) Three.

687. A29 PVT

According to regulations pertaining to privileges and limitations, a recreational pilot may

A) be paid for the operating expenses of a flight.

B) not pay less than the pro rata share of the operating expenses of a flight with a passenger.

C) not be paid in any manner for the operating expenses of a flight.

688. A29 PVT

When may a recreational pilot act as pilot in command on a cross-country flight that exceeds 50 nautical miles from the departure airport?

A) After attaining 100 hours of pilot-in-command time and a logbook endorsement.

B) After receiving ground and flight instructions on cross-country training and a logbook endorsement.

C) 12 calendar months after receiving his or her recreational pilot certificate and a logbook endorsement.

689. A29 PVT

A recreational pilot may act as pilot in command of an aircraft that is certificated for a maximum of how many occupants?

A) Four.

B) Three.

C) Two.

690. B09 PVT

What minimum visibility and clearance from clouds are required for a recreational pilot in Class G airspace at 1,200 feet AGL or below during daylight hours?

A) 1 mile visibility and clear of clouds.

B) 3 miles visibility and clear of clouds.

C) 3 miles visibility, 500 feet below the clouds.

691. H745 PVT

While in level cruising flight in a helicopter, a pilot experiences low-frequency vibrations (100 to 400 cycles per minute). These vibrations are normally associated with the

A) engine.

B) cooling fan.

C) main rotor.

692. H745 PVT

Select the helicopter component that, if defective, would cause medium-frequency vibrations.

A) Tail rotor.

B) Main rotor.

C) Engine.

693. H744 PVT

Which is a correct general rule for pinnacle and ridgeline operations?

A) Gaining altitude on takeoff is more important than gaining airspeed.

B) The approach path to a ridgeline is usually perpendicular to the ridge.

C) A climb to a pinnacle or ridgeline should be performed on the upwind side.

694. H743 PVT

If possible, when departing a confined area, what type of takeoff is preferred?

A) A normal takeoff from a hover.

B) A vertical takeoff.

C) A normal takeoff from the surface.