Date revised: July 16, 2014

The following sample exam for Commercial Pilot-Airplane (CAX) is suitable study material for the Commercial Pilot-Airplane Rating. These questions are a representation of questions that can be found on all Commercial Pilot-Airplane Rating tests. The applicant must realize that these questions are to be used as a study guide, and are not necessarily actual test questions. The full CAX test contains 100 questions. The Application Identification, Information Verification and Authorization Requirements Matrix lists all FAA exams. It is available at:  http://www.faa.gov/training_testing/testing/media/testing_matrix.pdf

The FAA testing system is supported by a series of supplement publications. These publications include the graphics, legends, and maps that are needed to successfully respond to certain test questions. FAA-CT-8080-1, Computer Testing Supplement Commercial Pilot is available at:  http://www.faa.gov/training_testing/testing/test_questions/media/FAA-CT-8080-1C.pdf

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. Matching the learning statement codes with the codes listed on your Airman Knowledge Test Report assists in the evaluation of knowledge areas missed on your exam. It is available at:  http://www.faa.gov/training_testing/testing/media/LearningStatementReferenceGuide.pdf

SAMPLE CAX EXAM:

1. PLT310
A load factor of 1.2 means the total load on an aircraft’s structure is 1.2 times its
   A) gross weight.
   B) load limit.
   C) gust factor.

2. PLT018
If the airspeed is decreased from 98 knots to 85 knots during a coordinated level 45° banked turn, the load factor will
   A) remain the same, but the radius of turn will decrease.
   B) decrease, and the rate of turn will decrease.
   C) remain the same, but the radius of turn will increase.

3. PLT018
If the airspeed is increased from 89 knots to 98 knots during a coordinated level 45° banked turn, the load factor will
   A) decrease, and the radius of turn will decrease.
   B) remain the same, but the radius of turn will increase.
   C) increase, but the rate of turn will decrease.

4. PLT477
The stalling speed of an airplane is most affected by
   A) changes in air density.
   B) variations in flight altitude.
   C) variations in airplane loading.

5. PLT168
During the transition from straight-and-level flight to a climb, the angle of attack is increased and lift
   A) is momentarily decreased.
   B) remains the same.
   C) is momentarily increased.
6. PLT237
As airspeed decreases in level flight below that speed for maximum lift/drag ratio, total drag of an airplane
A) decreases because of lower parasite drag.
B) increases because of increased induced drag.
C) increases because of increased parasite drag.

7. PLT242
An aircraft airfoil is designed to produce lift resulting from a difference in the
A) negative air pressure below and a vacuum above the airfoil’s surface.
B) vacuum below the airfoil’s surface and greater air pressure above the airfoil’s surface.
C) higher air pressure below the airfoil’s surface and lower air pressure above the airfoil’s surface.

8. PLT168
To hold an airplane in level flight at airspeeds from very slow to very fast, a pilot must coordinate thrust and
A) angle of incidence.
B) gross weight.
C) angle of attack.

9. PLT012
(Refer to figure 11.) What would be the approximate true airspeed and fuel consumption per hour at an altitude of
7,500 feet, using 52 percent power?
A) 103 MPH TAS, 6.3 GPH.
B) 105 MPH TAS, 6.2 GPH.
C) 105 MPH TAS, 6.6 GPH.

10. PLT002
(Refer to figure 2.) Select the correct statement regarding stall speeds.
A) Power-off stalls occur at higher airspeeds with the gear and flaps down.
B) In a 60° bank the airplane stalls at a lower airspeed with the gear up.
C) Power-on stalls occur at lower airspeeds in shallower banks.

11. PLT002
What is the stall speed of an airplane under a load factor of 2.5 G’s if the unaccelerated stall speed is 60 knots?
(Refer to figure 4. To use the chart, enter the figure from the far left vertical scale, Load Factor. Move horizontally
right to the Load Factor curve. From that point, move vertically up to the intersection of the Stall Speed Increase
curve. Next, move horizontally left to the vertical axis labeled Percent Increase in Stall Speed.)
A) 62 knots.
B) 84 knots.
C) 96 knots.

12. PLT015
If fuel consumption is 80 pounds per hour and groundspeed is 180 knots, how much fuel is required for an
airplane to travel 460 NM?
A) 205 pounds.
B) 212 pounds.
C) 460 pounds.

13. PLT012
If an aircraft is consuming 9.5 gallons of fuel per hour at a cruising altitude of 6,000 feet and the groundspeed is
135 knots, how much fuel is required to travel 380 NM?
A) 27 gallons.
B) 30 gallons.
C) 35 gallons.
14. PLT074
(Refer to figure 5.) The vertical line from point E to point F is represented on the airspeed indicator by the
A) upper limit of the yellow arc.
B) upper limit of the green arc.
C) blue radial line.

15. PLT004
(Refer to figure 13.)
GIVEN:
- Aircraft weight: 4,000 lb
- Airport pressure altitude: 2,000 ft
- Temperature at 2,000 feet: 32 °C
Using a maximum rate of climb under the given conditions, how much time would be required to climb to a
pressure altitude of 8,000 feet?
A) 7 minutes.
B) 8.4 minutes.
C) 11.2 minutes.

16. PLT008
(Refer to figure 35.)
GIVEN:
- Temperature: 85 °F
- Pressure altitude: 6,000 ft
- Weight: 2,800 lb
- Headwind: 14 kts
Determine the approximate ground roll.
A) 742 feet.
B) 1,280 feet.
C) 1,480 feet.

17. PLT134
The performance tables of an aircraft for takeoff and climb are based on
A) pressure/density altitude.
B) cabin altitude.
C) true altitude.

18. PLT015
If an airplane is consuming 12.5 gallons of fuel per hour at a cruising altitude of 8,500 feet and the groundspeed
is 145 knots, how much fuel is required to travel 435 NM?
A) 27 gallons.
B) 34 gallons.
C) 38 gallons.

19. PLT012
If an aircraft is consuming 9.5 gallons of fuel per hour at a cruising altitude of 6,000 feet and the groundspeed is
135 knots, how much fuel is required to travel 420 NM?
A) 27 gallons.
B) 30 gallons.
C) 35 gallons.

20. PLT127
Density altitude is the vertical distance above mean sea level in the standard atmosphere at which
A) pressure altitude is corrected for standard temperature.
B) a given atmospheric density is to be found.
C) temperature, pressure, altitude, and humidity are considered.
21. PLT343
Frequent inspections should be made of aircraft exhaust manifold-type heating systems to minimize the possibility of
A) exhaust gases leaking into the cockpit.
B) a power loss due to back pressure in the exhaust system.
C) a cold-running engine due to the heat withdrawn by the heater.

22. PLT343
An abnormally high engine oil temperature indication may be caused by
A) a defective bearing.
B) the oil level being too low.
C) operating with an excessively rich mixture.

23. PLT140
Once a pilot-in-command accepts a ‘land and hold short’ (LAHSO) clearance, the clearance must be adhered to, just as any other ATC clearance, unless
A) an amended clearance is obtained or an emergency occurs.
B) the wind changes or Available Landing Distance decreases.
C) Available Landing Distance decreases or density altitude increases.

24. PLT141
‘Runway Holding Position Markings’ on taxiways
A) identify where aircraft are prohibited to taxi when not cleared to proceed by ground control.
B) identify where aircraft are supposed to stop when not cleared to proceed onto the runway.
C) allow an aircraft permission onto the runway.

25. PLT141
(Refer to figure 64.) You see this sign when holding short of the runway. You receive clearance to back taxi on the runway for a full-length runway 8 departure. Which way should you turn when first taxiing on to the runway for takeoff?
A) Left.
B) Right.
C) Need more information.

26. PLT141
This taxiway sign would be expected
A) at the intersection of runway 04/22 departure end and the taxiway.
B) near the intersection of runways 04 and 22.
C) at a taxiway intersecting runway 04/22.

27. PLT141
This sign confirms your position on
A) runway 22.
B) routing to runway 22.
C) taxiway 22.

28. PLT141
This signage and pavement markings confirms you are
A) at the approach end of runway 22.
B) about to enter a runway at the intersection of intersecting crossing runways.
C) about to leave the taxiway and enter the runway at an intersection.

29. PLT444
Who has the final authority to accept or decline any ‘land and hold short’ (LAHSO) clearance?
A) ATC approach controller.
B) ATC tower controller.
C) Pilot-in-command.
30. PLT141
The 'yellow demarcation bar' marking indicates
A) runway with a displaced threshold that precedes the runway.
B) a hold line from a taxiway to a runway.
C) the beginning of available runway for landing on the approach side.

31. PLT141
This sign is a visual clue that
A) confirms the aircraft’s location to be on taxiway "B."
B) warns the pilot of approaching taxiway "B."
C) indicates "B" holding area is ahead.

32. PLT141
The runway holding position sign is located on
A) runways that intersect other runways.
B) taxiways protected from an aircraft approaching a runway.
C) runways that intersect other taxiways.

33. PLT141
(Refer to figure 57.) You are directed to taxi to runway 10. You see this sign at a taxiway intersection while taxiing. Which way should you proceed?
A) Left.
B) Right.
C) Straight ahead.

34. PLT141
(Refer to figure 64.) If cleared for an intersection takeoff on runway 8, you see this sign at the intersection hold short position. Which way should you turn when taxiing onto the runway?
A) Left.
B) Right.
C) Need more information.

35. PLT141
From the cockpit, this marking confirms the aircraft to be
A) on a taxiway, about to enter runway zone.
B) on a runway, about to clear.
C) near an instrument approach clearance zone.

36. PLT040
(Refer to figure 52, point 5) The floor of the Class E airspace over University Airport (005) is
A) the surface.
B) 700 feet AGL.
C) 1,200 feet AGL.

37. PLT434
When operating an aircraft in the vicinity of an airport with an operating control tower, in Class E airspace, a pilot must establish communications prior to
A) 5 NM, and up to and including 3,000 feet AGL.
B) 8 NM, and up to and including 3,000 feet AGL.
C) 4 NM, and up to and including 2,500 feet AGL.

38. PLT162
Which is true regarding flight operations in Class A airspace?
A) May conduct operations under visual flight rules.
B) Aircraft must be equipped with approved distance measuring equipment (DME).
C) Aircraft must be equipped with an ATC transponder and altitude reporting equipment.
39. PLT044
When approaching to land at an airport with an ATC facility, in Class D airspace, the pilot must establish communications prior to
A) 4 NM, up to and including 2,500 feet AGL.
B) 10 NM, up to and including 3,000 feet AGL.
C) 30 SM, and be transponder equipped.

40. PLT064
When a dashed blue circle surrounds an airport on a sectional aeronautical chart, it will depict the boundary of
A) special VFR airspace.
B) Class D airspace.
C) Class B airspace.

41. PLT162
Which is true regarding flight operations in Class B airspace?
A) The pilot in command must hold at least a private pilot certificate with an instrument rating.
B) The pilot in command must hold at least a student pilot certificate.
C) The aircraft must be equipped with an ATC transponder and altitude reporting equipment.

42. PLT162
Which is true regarding flight operations in Class B airspace?
A) The pilot must receive an ATC clearance before operating an aircraft in that area.
B) Flight under VFR is not authorized unless the pilot in command is instrument rated.
C) Solo student pilot operations are not authorized.

43. PLT162
Which is true regarding flight operations in Class A airspace?
A) Must conduct operations under instrument flight rules.
B) Aircraft must be equipped with approved distance measuring equipment (DME).
C) Aircraft must be equipped with an approved ATC transponder.

44. PLT040
(Refer to figure 53)
GIVEN:
Location - Madera Airport (MAE)
Altitude 1,000 ft AGL
Position 7 NM north of Madera (MAE)
Time 3 p.m. local
Flight visibility 1 SM
You are VFR approaching Madera Airport for a landing from the north. You
A) are in violation of the CFR's; you need 3 miles of visibility under VFR.
B) are required to descend to below 700 feet AGL to remain clear of Class E airspace and may continue for landing.
C) may descend to 800 feet AGL (Pattern Altitude) after entering Class E airspace and continue to the airport.

45. PLT161
The radius of the uncharted Outer Area of Class C airspace is normally
A) 20 NM.
B) 30 NM.
C) 40 NM.

46. PLT219
Name the four fundamentals involved in maneuvering an aircraft.
A) Power, pitch, bank, and trim.
B) Thrust, lift, turns, and glides.
C) Straight-and-level flight, turns, climbs, and descents.
47. PLT208
A pilot's most immediate and vital concern in the event of complete engine failure after becoming airborne on takeoff is
A) maintaining a safe airspeed.
B) landing directly into the wind.
C) turning back to the takeoff field.

48. PLT509
Which procedure should you follow to avoid wake turbulence if a large jet crosses your course from left to right approximately 1 mile ahead and at your altitude?
A) Make sure you are slightly above the path of the jet.
B) Slow your airspeed to VA and maintain altitude and course.
C) Make sure you are slightly below the path of the jet and perpendicular to the course.

49. PLT509
Which is true with respect to vortex circulation in the wake turbulence generated by an aircraft?
A) Helicopters generate downwash turbulence only, not vortex circulation.
B) The vortex strength is greatest when the generating aircraft is heavy, clean, and slow.
C) When vortex circulation sinks into ground effect, it tends to dissipate rapidly and offer little danger.

50. PLT103
When a pilot recognizes a hazardous thought, he or she then should correct it by applying the corresponding antidote. Which of the following is the antidote for the ANTIAUTHORITY/DON'T TELL ME hazardous attitude?
A) It won't happen to me. It could happen to me.
B) Not so fast. Think first.
C) Follow the rules. They are usually right.

51. PLT103
What should a pilot do when recognizing a thought as hazardous?
A) Label that thought as hazardous, then correct that thought by stating the corresponding learned antidote.
B) Avoid developing this hazardous thought.
C) Develop this hazardous thought and follow through with modified action.

52. PLT104
While on an IFR flight, a pilot emerges from a cloud to find himself within 300 feet of a helicopter. Which of the following alternatives best illustrates the 'MACHO' reaction?
A) He is not too concerned; everything will be alright.
B) He flies a little closer, just to show him.
C) He quickly turns away and dives, to avoid collision.

53. PLT022
What are some of the hazardous attitudes dealt with in Aeronautical Decision Making (ADM)?
A) Risk management, stress management, and risk elements.
B) Poor decision making, situational awareness, and judgment.
C) Antiauthority (don't tell me), impulsivity (do something quickly without thinking), macho (I can do it).

54. PLT103
Most pilots have fallen prey to dangerous tendencies or behavior problems at some time. Some of these dangerous tendencies or behavior patterns which must be identified and eliminated include:
A) Deficiencies in instrument skills and knowledge of aircraft systems or limitations.
B) Peer pressure, get-there-itis, loss of positional or situation awareness, and operating without adequate fuel reserves.
C) Performance deficiencies from human factors such as, fatigue, illness or emotional problems.
55. PLT022
An early part of the Aeronautical Decision Making (ADM) process involves
A) taking a self-assessment hazardous attitude inventory test.
B) understanding the drive to have the ‘right stuff.’
C) obtaining proper flight instruction and experience during training.

56. PLT103
What is the first step in neutralizing a hazardous attitude in the ADM process?
A) Dealing with improper judgment.
B) Recognition of hazardous thoughts.
C) Recognition of invulnerability in the situation.

57. PLT103
Examples of classic behavioral traps that experienced pilots may fall into are: trying to
A) assume additional responsibilities and assert PIC authority.
B) promote situational awareness and then necessary changes in behavior.
C) complete a flight as planned, please passengers, meet schedules, and demonstrate the ‘right stuff.’

58. PLT272
What does good cockpit stress management begin with?
A) Knowing what causes stress.
B) Good life stress management.
C) Eliminating life and cockpit stress issues.

59. PLT205
To rid itself of all the alcohol contained in one beer, the human body requires about
A) 1 hour.
B) 3 hours.
C) 4 hours.

60. PLT280
To cope with spatial disorientation, pilots should rely on
A) body sensations and outside visual references.
B) adequate food, rest, and night adaptation.
C) proficient use of the aircraft instruments.

61. PLT083
(Refer to figure 30) When approaching the VOR/DME-A, the symbol [2800] in the MSA circle represents a
minimum safe sector altitude within 25 NM of
A) DEANI intersection.
B) White Cloud VORTAC.
C) Baldwin Municipal Airport.

62. PLT083
(Refer to figure 27.) The symbol [9200] in the MSA circle of the ILS RWY 35R procedure at DEN represents a
minimum safe sector altitude within 25 NM of
A) Denver VORTAC.
B) Dymon outer marker.
C) Cruup I-AQD DME fix.

63. PLT083
(Refer to figure 30.) What minimum navigation equipment is required to complete the VOR/DME-A procedure?
A) One VOR receiver.
B) One VOR receiver and DME.
C) Two VOR receivers and DME.
64. PLT056
(Refer to figure 17.) Which statement is true regarding illustration 2, if the present heading is maintained? The aircraft will
A) cross the 180 radial at a 45° angle outbound.
B) intercept the 225 radial at a 45° angle.
C) intercept the 360 radial at a 45° angle inbound.

65. PLT012
GIVEN:
Wind 175° at 20 kts
Distance 135 NM
True course 075°
True airspeed 80 kts
Fuel consumption 105 lb/hr
Determine the time en route and fuel consumption.
A) 1 hour 28 minutes and 73.2 pounds.
B) 1 hour 38 minutes and 158 pounds.
C) 1 hour 40 minutes and 175 pounds.

66. PLT012
An airplane departs an airport under the following conditions:
Airport elevation 1,000 ft
Cruise altitude 9,500 ft
Rate of climb 500 ft/min
Average true airspeed 135 kts
True course 215°
Average wind velocity 290° at 20 kts
Variation 3°W
Deviation -2°
Average fuel consumption 13 gal/hr
Determine the approximate time, compass heading, distance, and fuel consumed during the climb.
A) 14 minutes, 234°, 26 NM, 3.9 gallons.
B) 17 minutes, 224°, 36 NM, 3.7 gallons.
C) 17 minutes, 242°, 31 NM, 3.5 gallons.

67. PLT101
(Refer to figure 53, point 1) This thin black shaded line is most likely
A) an arrival route.
B) a military training route.
C) a state boundary line.

68. PLT014
The ADF is tuned to a radiobeacon. If the magnetic heading is 040° and the relative bearing is 290°, the magnetic bearing TO that radiobeacon would be
A) 150°.
B) 285°.
C) 330°.

69. PLT091
If the relative bearing to a nondirectional radiobeacon is 045° and the magnetic heading is 355°, the magnetic bearing TO that radio beacon would be
A) 040°.
B) 065°.
C) 220°.
70. PLT090
An aircraft 60 miles from a VOR station has a CDI indication of one-fifth deflection, this represents a course centerline deviation of approximately
A) 6 miles.
B) 2 miles.
C) 1 mile.

71. PLT012
GIVEN:
Wingtip bearing change 15°
Elapsed time between bearing change 7.5 min
True airspeed 85 kts
Rate of fuel consumption 9.6 gal/hr
The time, distance, and fuel required to fly to the station is
A) 30 minutes; 42.5 miles; 4.80 gallons.
B) 32 minutes; 48 miles; 5.58 gallons.
C) 48 minutes; 48 miles; 4.58 gallons.

72. PLT014
If the relative bearing changes from 090° to 100° in 2.5 minutes of elapsed time, the time to the station would be
A) 12 minutes.
B) 15 minutes.
C) 18 minutes.

73. PLT012
Inbound on the 190 radial, a pilot selects the 195 radial, turns 5° to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 10 minutes. The ETE to the station is
A) 10 minutes.
B) 15 minutes.
C) 20 minutes.

74. PLT012
Inbound on the 090 radial, a pilot rotates the OBS 010° to the left, turns 010° to the right, and notes the time. While maintaining a constant heading, the pilot determines that the elapsed time for the CDI to center is 8 minutes. Based on this information, the ETE to the station is
A) 8 minutes.
B) 16 minutes.
C) 24 minutes.

75. PLT090
(Refer to figure 20.) Which instrument(s) show(s) that the aircraft is getting further from the selected VORTAC?
A) 4.
B) 1 and 4.
C) 2 and 3.

76. PLT091
(Refer to figure 16.) At the position indicated by instrument group 1, what would be the relative bearing if the aircraft were turned to a magnetic heading of 150°?
A) 150°.
B) 190°.
C) 250°.
77. PLT014
(Refer to figure 21.) If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time
to the station?
A) 13 minutes.
B) 17 minutes.
C) 26 minutes.

78. PLT064
(Refer to figure 55) En route on V448 from YKM VORTAC to BTG VORTAC, what minimum navigation
equipment is required to identify ANG00 intersection?
A) One VOR receiver.
B) One VOR receiver and DME.
C) Two VOR receivers.

79. PLT444
In what type of operation, not regulated by 14 CFR part 119, may a commercial pilot act as pilot in command and
receive compensation for services?
A) On-demand, nine or less passenger, charter flights.
B) Aerial application, and bird chasing.
C) On-demand cargo flights.

80. PLT395
14 CFR part 1 defines VY as
A) speed for best rate of descent.
B) speed for best angle of climb.
C) speed for best rate of climb.

81. PLT466
14 CFR part 1 defines VNO as
A) maximum operating limit speed.
B) maximum structural cruising speed.
C) never-exceed speed.

82. PLT447
A second-class medical certificate issued to a commercial pilot on April 10, this year, permits the pilot to exercise
which of the following privileges?
A) Commercial pilot privileges through April 30, next year.
B) Commercial pilot privileges through April 10, 2 years later.
C) Private pilot privileges through, but not after, March 31, next year.

83. PLT220
If a pilot does not meet the recency of experience requirements for night flight and official sunset is 1900 CST,
the latest time passengers should be carried is
A) 1800 CST.
B) 1959 CST.
C) 1900 CST.

84. PLT386
Does a commercial pilot certificate have a specific expiration date?
A) No, it is issued without a specific expiration date.
B) Yes, it expires at the end of the 24th month after the month in which it was issued.
C) No, but commercial privileges expire if a flight review is not satisfactorily completed each 12 months.
85. PLT161
What is the maximum indicated airspeed authorized in the airspace underlying Class B airspace?
A) 156 knots.
B) 200 knots.
C) 230 knots.

86. PLT416
Which airborne incident would require that the nearest NTSB field office be notified immediately?
A) Cabin door opened in-flight.
B) Flight control system malfunction or failure.
C) Cargo compartment door malfunction or failure.

87. PLT466
14 CFR part 1 defines VNE as
A) maximum landing gear extended speed.
B) never-exceed speed.
C) maximum nose wheel extend speed.

88. PLT444
Which of the following preflight actions is the pilot in command required to take in order to comply with the United States Code of Federal Regulations regarding day Visual Flight Rules (VFR)?
A) File a VFR flight plan with a Flight Service Station.
B) Verify the airworthiness certificate is legible to passengers.
C) Verify approved position lights are not burned out.

89. PLT400
Which list accurately reflects some of the documents required to be current and carried in a U.S. registered civil airplane flying in the United States under day Visual Flight Rules (VFR)?
A) Proof of insurance certificate, VFR flight plan or flight itinerary, and the aircraft logbook.
B) VFR sectional(s) chart(s) for the area in which the flight occurs, aircraft logbook, and engine logbook.
C) Airworthiness certificate, approved airplane flight manual, and aircraft registration certificate.

90. PLT405
Which is required equipment for powered aircraft during VFR night flights?
A) Anticollision light system.
B) Gyroscopic direction indicator.
C) Gyroscopic bank-and-pitch indicator.

91. PLT444
Before beginning any flight under IFR, the pilot in command must become familiar with all available information concerning that flight. In addition, the pilot must
A) be familiar with all instrument approaches at the destination airport.
B) list an alternate airport on the flight plan, and confirm adequate takeoff and landing performance at the destination airport.
C) be familiar with the runway lengths at airports of intended use, and the alternatives available, if the flight cannot be completed.

92. PLT414
During a night operation, the pilot of aircraft #1 sees only the green light of aircraft #2. If the aircraft are converging, which pilot has the right-of-way? The pilot of aircraft
A) #2, aircraft #2 is to the right of aircraft #1.
B) #1, aircraft #1 is to the right of aircraft #2.
C) #2, aircraft #2 is to the left of aircraft #1.
93. PLT288
The visibility entry in a Terminal Aerodrome Forecast (TAF) of P6SM implies that the prevailing visibility is expected to be greater than
A) 6 nautical miles.
B) 6 statute miles.
C) 6 kilometers.

94. PLT514
Aviation Area Forecasts (FAs) for the contiguous U.S. are used in conjunction with inflight aviation weather advisories to interpolate
A) temperatures and winds at altitude.
B) conditions at airports for which no TAFs are issued.
C) radar echo precipitation types and intensity levels.

95. PLT287
On a Surface Analysis Chart, the solid lines that depict sea level pressure patterns are called
A) isobars.
B) isogons.
C) millibars.

96. PLT290
SIGMET’s are issued as a warning of weather conditions which are hazardous
A) to all aircraft.
B) particularly to heavy aircraft.
C) particularly to light airplanes.

97. PLT059
What is meant by the Special METAR weather observation for KBOI?
SPECI KBOI 091854Z 32005KT 1 1/2SM RA BR OVC007 17/16 A2990 RMK RAB12
A) Rain and fog are creating an overcast at 700 feet AGL; rain began at 1912Z.
B) The temperature-dew point spread is 1°C; rain began at 1812Z.
C) Rain and overcast at 1200 feet AGL.

98. PLT475
What wind conditions would you anticipate when squalls are reported at your destination?
A) Rapid variations in windspeed of 15 knots or more between peaks and lulls.
B) Peak gusts of at least 35 knots combined with a change in wind direction of 30° or more.
C) Sudden increases in windspeed of at least 16 knots to a sustained speed of 22 knots or more for at least 1 minute.

99. PLT059
The station originating the following METAR observation has a field elevation of 5,000 feet MSL. If the sky cover is one continuous layer, what is the thickness of the cloud layer? (Top of overcast reported at 8,000 feet MSL.)
METAR KHOB 151250Z 17006KT 4SM OVC005 13/11 A2998
A) 2,500 feet.
B) 3,500 feet.
C) 4,000 feet.
GIVEN:

<table>
<thead>
<tr>
<th></th>
<th>WEIGHT</th>
<th>ARM</th>
<th>MOMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empty weight</td>
<td>957</td>
<td>29.07</td>
<td>?</td>
</tr>
<tr>
<td>Pilot (fwd seat)</td>
<td>140</td>
<td>-45.30</td>
<td>?</td>
</tr>
<tr>
<td>Passenger (aft seat)</td>
<td>170</td>
<td>+1.60</td>
<td>?</td>
</tr>
<tr>
<td>Ballast</td>
<td>15</td>
<td>-45.30</td>
<td>?</td>
</tr>
<tr>
<td>TOTALS</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

The CG is located at station
A) -6.43.
B) +16.43.
C) +27.38.