1. [7-2/Figure 2] The numbers 9 and 27 on a runway indicate that the runway is oriented approximately
A. 009 degrees and 027 degrees true.
B. 090 degrees and 270 degrees true.
C. 090 degrees and 270 degrees magnetic.

2. [7-2/2/5] Green lights announce the runway’s
A. threshold.
B. midpoint.
C. last 2000 feet of usable surface.

3. [7-2/Figure 3] Fill in the blanks:

BASIC RUNWAY LIGHTING
Runway edge lighting consists of
A. _______ lights

Runway end lighting is
B. _______ on this side.

Runway end lighting is
C. _______ on this side.

4. [7-2/2/5] The far end of the active runway is lit in
A. red.
B. green.
C. yellow.

Taxiway Markings

5. [7-4/1/1] Airport taxiway edge lights are identified at night by
A. white directional lights.
B. blue omnidirectional lights.
C. alternate red and green lights.

6. [7-4/Figure 6] Fill in the blanks:

TAXIWAY MARKINGS
All taxiway markings are in _______.

X. Black letters on _______ show intersecting taxiways.

Y. Double _______ taxiway edge line

Z. Yellow letters _______ identifies the taxiway you’re on.
**RUNWAY MARKINGS**

**A** White numbers on indicate mandatory hold points for all tower controlled airports. They indicate that you're about to taxi onto a runway (possibly an active one!).

**B** Runway hold markings consist of four lines: two are solid & two are dashed.

**C** Solid double yellow lines require a to cross at a controlled airport.

**D** If the broken double yellow lines are on your side, you should them and enter the taxiway thus moving clear of the runway area.

**ADDITIONAL RUNWAY MARKINGS**

**A** Protection of the runway area prevents collisions between taxiing and landing airplanes.

**B** Some airports have position markings for taxiways and taxiway intersections consisting of a single yellow dashed line extending across the width of the taxiway.

**C** You should the broken double yellow lines when they're on your side so as to clear the runway safety area.

**D** This is a holding position sign for the runway safety area. An ATC is required to cross the solid yellow hold lines when you're at an airport with an operating control tower.

**E** This is a position sign for Runway 15.

7. [7-4/Figure 8]
8. [7-5/Figure 9]
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9. [7-6/1/1] (Refer to figure in the top left hand corner of the next page.)
The chevrons that appear on the end of Runway 24 indicate that the area
A. may be used only for taxiing.
B. is unusable for taxiing, takeoff, and landing.
C. cannot be used for landing, but may be used for taxiing and takeoff.

10. [7-6/1/2] (Refer to figure in the top left hand corner of the next page.)
That portion of the runway identified by the letter B may be used for
A. landing.
B. taxiing and takeoff.
C. taxiing and landing.

11. [7-6/1/1&2] (Refer to the figure above)
According to the airport diagram, which statement is true?
A. Runway 24 is equipped at position A with emergency arresting gear to provide a means of stopping military aircraft.
B. Takeoffs may be started at position B on Runway 31, and the landing portion of this runway begins at the displaced threshold.
C. The takeoff and landing portion of Runway 6 begins at position A.

12. [7-6/1/1] (Refer to the figure bottom left)
What is the difference between area A and area B on the airport depicted?
A. “A” may be used for taxi and takeoff; “B” may be used only as an overrun.
B. “A” may be used for all operations except heavy aircraft landings; “B” may be used only as an overrun.
C. “A” may not be used at all; “B” may be used for all operations except landings.

13. [7-6/Figure 10] (Refer to the bottom left)
The large yellow “X” markings indicate a
A. stabilized area.
B. multiple heliport.
C. closed runway.

Airport Beacons

14. [7-6/3/2]
Civilian airports with runway lights may be identified by a
A. flashing green and white rotating beacon.
B. flashing yellow light.
C. blue lighted square landing light.

15. [7-6/3/2]
A lighted heliport may be identified by a
A. green, yellow, and white rotating beacon.
B. flashing yellow light.
C. blue lighted square landing light.

16. [7-6/3/2]
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.

17. [7-G6/3/2]
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.

18. [7-7/1/1]
An airport’s rotating beacon operated during daylight hours indicates
A. there are obstructions on the airport.
B. that weather at the airport located within surface-based controlled airspace is below basic VFR weather minimums.
C. the Air Traffic Control tower is not in operation.
19. [7-8/Figure 13] Fill in the blanks:

**THE TRAFFIC PATTERN**

![Diagram of traffic pattern]

20. [7-8/1/3] Airplane takeoffs are made into the wind, and the takeoff flight path is thus called the _______.
A. departure leg.
B. downwind leg.
C. opposite leg.

21. [7-8/2/1] If you’re remaining in the pattern, a turn (generally a left turn) to the _____ will be made when the airplane is beyond the departure end of the runway and within _____ feet of the traffic pattern altitude.
A. departure leg, 500
B. crosswind leg, 300
C. perpendicular part, 1,000

22. [7-8/2/2] As the airplane continues its climb, another 90 degree turn is made. This places the airplane parallel to the runway, going opposite to the direction in which it will land. This is called the _____ because your direction is with the wind.
A. pattern leg
B. upwind leg
C. downwind leg

23. [7-8/3/1] Expect traffic pattern altitudes to range from _____ feet above the airport elevation, typically averaging about 1,000 feet AGL. The downwind leg is flown approximately _____ mile from the landing runway.
A. 600 to 1,500, 1/2 to one
B. 200 to 2,000, 1/10 to 1/5
C. 1,000 to 2,000, 3/8 to 1/2

24. [7-8/2/2] You continue downwind until passing a point abeam the beginning of the landing threshold of the runway. Then it’s another 90 degree turn and you’re on ____. From here you make one more 90 degree turn, onto ___.
A. base leg, final approach
B. final approach, base leg
C. base leg, the upwind leg

25. [7-8/3/2] The _____ is flown parallel to the runway in the direction of landing. It’s often used during go-arounds or overflights to avoid departing traffic.
A. departure leg
B. sidestep leg
C. upwind leg

26. [7-10/18 & 19] The wind in traffic pattern A is from the _____; the wind in traffic pattern B is from the _____.

**CROSSWIND CORRECTION**

27. [7-10/3/4] Before entering the traffic pattern at uncontrolled airports, you are expected to
A. observe the flow of traffic and conform to the traffic pattern in use.
B. observe traffic and maneuver any way as long as you don’t cause a traffic conflict.
C. fly a traffic pattern that requires the least amount of maneuvering.
28. [7-11/1/2]
The runway in use is normally determined by
A. noise abatement concerns.
B. wind direction.
C. direction of incoming traffic.

The Segmented Circle

29. [7-12/Figure 21]
The traffic pattern indicated in the segmented circle shown in the figure below has been arranged to avoid flights over an area to the
A. south of the airport.
B. north of the airport.
C. northeast of the airport.

30. [7-13/Figure 22]
(Refer to figure in the top left hand corner.) Which runway and traffic pattern should be used as indicated by the wind cone in the segmented circle (assume landing on a runway most nearly into the wind)?
A. Right hand traffic on Runway 20.
B. Right hand traffic on Runway 17.
C. Left hand traffic on Runway 2.

31. [7-13/Figure 22]
(Refer to figure in the top left hand corner.) If you’re landing on Runway 35 you should
A. expect a crosswind from the east.
B. expect a crosswind from the west.
C. not expect a crosswind on Runway 35.

32. [7-13/Figure 22] (Referring to the figure in the top left hand corner)
The segmented circle indicates that the airport traffic is
A. left-hand for Runway 35 and right-hand for Runway 17.
B. left-hand for Runway 17 and right-hand for Runway 35.
C. right-hand for Runway 2 and left-hand for Runway 20.

33. [7-13/Figure 22] (Referring to the figure above)
The segmented circle indicates that a landing on Runway 20 will be with a
A. right-quartering headwind.
B. left-quartering headwind.
C. left-quartering tailwind.

34. [7-13/Figure 22] (Referring to the figure above)
The segmented circle indicates that a landing on Runway 2 will be with a
A. left-quartering headwind.
B. left-quartering headwind.
C. right-quartering headwind.
35. [7-14/Figure 24] Fill in the blanks:
Based on the landing and wind direction indicators below, indicators _______________, _______________ and _______________ indicate a wind from the east.

36. [7-14/Figure 24] Based on the landing and wind direction indicators below, indicators _____ and _____ indicate a wind from the south.

37. [7-15/1/4] The preferred angle of entry into the downwind leg is to
A. enter at a 45 degree bank to the downwind leg.
B. enter at a 45 degree angle to the downwind leg.
C. enter any way you want onto the downwind leg, just don’t go against the flow of traffic.

38. [7-15/3/2] 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.

39. [7-16/3/2] At many uncontrolled airports a frequency known as the ____ is available for pilots to communicate their intentions and receive information during takeoff or landing.
A. guard frequency (GF)
B. tower frequency (TF)
C. common traffic advisory frequency (CTAF)

40. [7-16/3/2] The Common Traffic Advisory Frequency (CTAF) may be a:
A. CB frequency.
B. unicom, multicom, tower or FSS frequency.
C. FAA frequency.

41. [7-17/Figure 30] What is the recommended communication procedure when inbound to land at Shafter-Minter Airport in the figure below?
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.
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42. [7-17/Figure 30]
What is the recommended communication procedure when inbound to land at Bakersfield airport above?
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.

43. [7-18/1/5]
What is the recommended communication procedure when inbound to land at Paramount Farming airport below?
A. Transmit intentions on 122.75 or 122.85 MHz when 10 miles out and give position reports in the traffic pattern.
B. Contact UNICOM when 10 miles out on 122.8 MHz.
C. Circle the airport in a left turn prior to entering traffic.

44. [7-18/2/1]
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.

Finding Out What’s Common

45. [7-17/See Finding Out What’s Common]
At a non privately-owned airport with no tower and no unicom frequency being used as the CTAF, you should tune your radio to_____ . This frequency is referred to as multicom, because it’s shared by many pilots at many places.
A. 122.9 MHz.
B. 123.0 MHz.
C. 123.6 MHz.

Automatic Terminal Information Service (ATIS)

46. [7-18/3/2]
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. non-essential information to reduce frequency congestion.
C. non-control information in selected high-activity terminal areas.

47. [7-G19/1/2]
When approaching an airport with an ATIS, you should listen to the ATIS broadcast when you’re approximately ___ miles from the airport.
A. 25
B. 350
C. 10

48. [7-19/1/2 & Figure 32]
The control tower frequency for Meadows airport (below) is
A. 118.1 MHz.
B. 118.6 MHz.
C. 122.95 MHz.

49. [7-17/1/2 & Figure 32]
The CTAF frequency for Meadows airport (below) is
A. 118.1 MHz.
B. 118.6 MHz.
C. 122.95 MHz.
ATIS broadcasts are updated when any _____ change occurs at the airport or upon the receipt of any official _____ weather information.

A. insignificant, new
B. significant, hourly or special
C. incredible, weekly

Pilot Control of Airport Lighting

An asterisk (*) next to the lighting symbol (the “L”) on the sectional chart may mean pilot control of airport lighting is ____ at that airport.

A. available, but lighting limitations may exist
B. never available
C. unusable

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

A. one time.
B. three times.
C. five times.

Once activated, pilot controlled lights will stay on for ____ minutes.

A. 20
B. 10
C. 15

At some airports there are two small stroboscopic lights near the runway’s threshold. These are called ____.

A. Jimmy Hendrix lights
B. Runway End Identifier Lights
C. the Approach Lights System

Visual Approach Slope Indicator

If, while on final approach to a runway equipped with a standard 2-bar VASI, you see red over white, then the aircraft is

A. above the glideslope.
B. below the glideslope.
C. on the glideslope.

Precision Approach Path Indicator (PAPI)

A below-glideslope indication from a precision approach path indicator (PAPI) is

A. four red lights.
B. three white lights and one red light.
C. two white lights and two red lights.
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62. [7-23/1/2]
A slightly high glideslope indication from a PAPI is
A. four white lights.
B. three white lights and one red light.
C. two white lights and two red lights.

Tricolor VASI

63. [7-24/1/1]
an on-glideslope indication from a tri-color VASI is
A. a white light signal.
B. a green light signal.
C. an amber light signal.

64. [7-24/1/1]
an above-glideslope indication from a tri-color VASI is
A. a white light signal.
B. a green light signal.
C. an amber light signal.

65. [7-24/1/1]
a below-glideslope indication from a tri-color VASI is
A. red light signal.
B. pink light signal.
C. green light signal.

Pulsating VASI Systems

66. [7-24/2/1]
a below-glideslope indication from a pulsating approach slope indicator is a
A. pulsating white light.
B. steady white light.
C. pulsating red light.

Wake Turbulence

67. [7-24/2/4 & 7-25/1/2]
Wingtip vortices are created only when an aircraft is
A. operating at high airspeeds.
B. heavily loaded.
C. developing lift.

68. [7-24/3/3]
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.

69. [7-25/2/2 & 7-25/See Figure 44]
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.

70. [7-25/2/2 & 7-25/See Figure 44]
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.

71. [7-25/3/2]
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.

72. [7-25/3/2]
Wingtip vortices created by large aircraft tend to
A. sink below the aircraft generating turbulence.
B. rise into the traffic pattern.
C. rise into the takeoff or landing path of a crossing runway.

73. [7-26/1/2]
What wind condition prolongs the hazards of wake turbulence on a landing runway for the longest period of time?
A) Light quartering headwind.
B) Direct tailwind.
C) Light quartering tailwind.

74. [7-26/See Figure 46]
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.
75. [7-27/1/1]
For the purposes of wake turbulence separation min-
ima, ATC classifies aircraft as _____ .
A. small, medium and large
B. heavy, large and small
C. big, bad and ugly

76. [7-27/1/2]
Heavy aircraft are aircraft capable of takeoff weights
of more than _____ pounds regardless of their weight
during any particular phase of flight.
A. 255,000
B. 300,000
C. 12,500

77. [7-27/1/2]
Large aircraft are aircraft of more than _____ pounds
maximum certified takeoff weight up to _____ pounds.
A. 41,000, 255,000
B. 300,000, 500,000
C. 12,500, 14,000

78. [7-27/1/2]
Small aircraft are aircraft of _____ pounds or less
maximum certified takeoff weight.
A. 41,000
B. 300,000
C. 500,000

Taxiing in Crosswind Conditions

79. [7-27/2/3]
Which aileron positions should a pilot generally use
when taxiing in strong quartering headwinds?
A. Aileron up on the side from which the wind is blow-
ing.
B. Aileron down on the side from which the wind is
blowing.
C. Ailerons neutral.

80. [7-27/2/3]
How should the flight controls be held while taxiing a
tricycle-gear airplane into a right quartering headwind?
A. Left aileron up, elevator up.
B. Right aileron down, elevator neutral.
C. Right aileron up, elevator down.

82. [7-28/1/2]
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.

83. [7-28/1/2]
Which wind condition would be most critical when
taxiing a nosewheel equipped high wing airplane?
A. Quartering tailwind.
B. Direct crosswind.
C. Quartering headwind.

84. [7-28/1/2]
How should the flight controls be held while taxiing a
tricycle-gear airplane with a left quartering tailwind?
A. Left aileron up, elevator neutral.
B. Left aileron down, elevator down.
C. Left aileron up, elevator down.

85. [7-28/1/2]
How should the flight controls be held while taxiing a
tailwheel airplane with a left quartering tailwind?
A. Left aileron up, elevator neutral.
B. Left aileron down, elevator neutral.
C. Left aileron down, elevator down.

Postflight Briefing 7-1: Land & Hold Short Opera-
tions

86. [7-28/See Land and Hold Short Operations]
A LAHSO clearance doesn’t preclude a rejected land-
ing (a go-around). If this is necessary, then go
around, but maintain _____ from other traffic and
promptly _____ the controller.
A. eyeball distance, give a thumbs up to
B. safe separation, notify
C. 1/2 mile, notify
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87. [7-28/See Land and Hold Short Operations]
It’s very important that you give the controller a _____ of the LAHSO clearance. This lets the controller know that you know what’s expected of you.
A. partial readback (call sign only)
B. written copy
C. full readback

88. [7-28/See Land and Hold Short Operations]
Who should not participate in the Land and Hold Short Operations (LAHSO) program?
A. Recreational pilots only.
B. Student pilots.
C. Military pilots.

89. [7-28/See Land and Hold Short Operations]
Who has final authority to accept or decline any land and hold short (LAHSO) clearance?
A. Owner/operator.
B. Pilot-in-command.
C. Second-in-command.

90. [7-28/See Land and Hold Short Operations]
When should pilots decline a land and hold short (LAHSO) clearance?
A. When it will compromise safety.
B. Only when the tower operator concurs.
C. Pilots can not decline clearance.

91. [7-28/See Land and Hold Short Operations]
Where is the “Available Landing Distance” (ALD) data published for an airport that utilizes Land and Hold Short Operations (LAHSO) published?
A. Aeronautical Information Manual (AIM).
C. Airport/Facility Directory (A/FD).

92. [7-28/See Land and Hold Short Operations]
What is the minimum visibility for a pilot to receive a land and hold short (LAHSO) clearance?
A. 3 nautical miles.
B. 1 statute mile.
C. 3 statute miles.
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<th>Question</th>
<th>Answer</th>
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