

# Rod Machado's Private Pilot Workbook

The Ultimate Pilot Workbook

**Programmed Learning to Complement  
Rod Machado's Private Pilot Handbook**

Contains 1,811 FAA exam and general knowledge questions  
Prepares you to pass the FAA Private Pilot Knowledge Exam  
Organized to follow information presentation in the *Handbook*

**FAA APPROVED PART 141 GROUND SCHOOL SYLLABUS AND STAGE EXAMS**

# Chapter Nine

# Airspace!

## The Wild Blue, Green & Red Yonder

### Eye See

1. [I2/1/2]

Any time you are flying, you will be operating under one of two primary sets of rules: \_\_\_\_\_ or \_\_\_\_\_.

- A. instrument flight rules (IFR), Part 121 rules
- B. visual flight rules (VFR), instrument flight rules (IFR)
- C. visual flight rules (VFR), part 141 flight rules

### Controlled and Uncontrolled Airspace

2. [I3/1/1]

Two basic types of airspace exist in the United States: \_\_\_\_\_ and \_\_\_\_\_.

- A. controlled, uncontrolled
- B. Class E, uncontrolled
- C. controlled, special use

### The Big Picture

3. [I3/3/3]

Class A, B, C, D and E is \_\_\_\_\_ airspace. Class G is \_\_\_\_\_ airspace.

- A. uncontrolled, purple
- B. controlled, VFR only
- C. controlled, uncontrolled

### Class A Airspace

4. [I4/1/1]

Class A airspace begins at what altitude?

- A. 14,500 feet MSL.
- B. 18,000 feet MSL.
- C. 29,920 feet MSL.

5. [I4/1/2]

In which type of airspace is VFR flight prohibited?

- A. Class A.
- B. Class B.
- C. Class C.

6. [I4/1/3]

At what altitude shall the altimeter be set to 29.92, when climbing to cruising flight level?

- A. 14,500 feet MSL.
- B. 18,000 feet MSL.
- C. 24,000 feet MSL.

### Class E at and Above 10,000 Feet MSL

7. [I5/1/2]

The airspace lying directly below Class A airspace is Class \_\_\_\_\_ airspace.

- A. E
- B. F
- C. G

8. [I5/1/3]

Class E airspace is \_\_\_\_\_ airspace.

- A. uncontrolled
- B. controlled
- C. IFR only

9. [I5/3/1&2]

Class E airspace generally begins at \_\_\_\_\_ AGL and sometimes begins at a lower altitude of \_\_\_\_\_ AGL.

- A. 700, 200
- B. 14,500, 1,200
- C. 1,200, 700



## Class E at and Above 10,000 Feet MSL

10. [I6/1/1]

For VFR flight operations above 10,000 feet MSL and more than 1,200 feet AGL, the minimum horizontal distance from clouds required is

- A. 1,000 feet.
- B. 2,000 feet.
- C. 1 mile.

11. [I6/1/1]

For VFR flight operations above 10,000 feet MSL and more than 1,200 feet AGL, the minimum required vertical distance above a cloud is

- A. 1,000 feet.
- B. 2,000 feet.
- C. 1 mile.

12. [I6/1/1]

For VFR flight operations above 10,000 feet MSL and more than 1,200 feet AGL, the minimum required vertical distance below a cloud is

- A. 1,000 feet.
- B. 2,000 feet.
- C. 1 mile.

13. [I6/1/1]

For VFR flight operations above 10,000 feet MSL and more than 1,200 feet AGL, the minimum required flight visibility is

- A. 5 miles.
- B. 2,000 feet.
- C. 1 mile.



16. [I7/2/1]

What is the minimum flight visibility and cloud clearance requirement after departing Oceano airport (see above) at 2,000 feet AGL while heading in a northwesterly direction?

- A. 3 miles, and 500 feet below or 1,000 feet above the clouds in controlled airspace.
- B. 5 miles, and 1,000 feet below or 1,000 feet above the clouds at all altitudes.
- C. 5 miles, and 1,000 feet below or 1,000 feet above the clouds only in Class A airspace.

17. [I7/2/1]

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.

18. [I7/2/1]

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.

## Class E Below 10,000 Feet MSL

14. [I7/2/1]

VFR flight in controlled airspace above 1,200 feet AGL and below 10,000 feet MSL requires a minimum visibility and vertical cloud clearance of

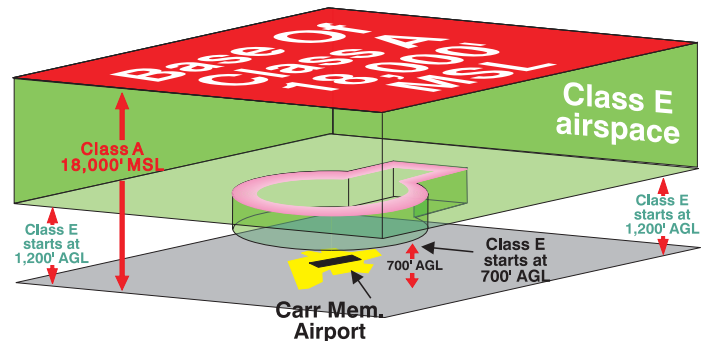
- A. 3 miles, and 500 feet below or 1,000 feet above the clouds in controlled airspace.
- B. 5 miles, and 1,000 feet below or 1,000 feet above the clouds at all altitudes.
- C. 5 miles, and 1,000 feet below or 1,000 feet above the clouds only in Class A airspace.

15. [I7/2/1]

The minimum distance from clouds required for VFR operations on an airway (most airways begin at 1,200 feet AGL) 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.

## Class E Airspace Starting at 700 Feet AGL



19. [I8/1/2]

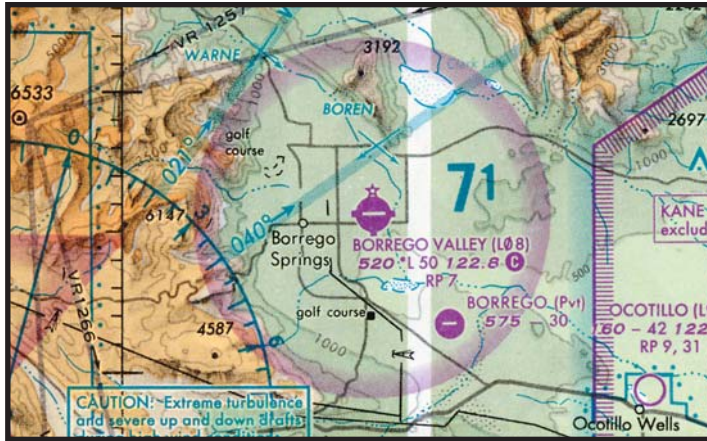
The visibility and cloud clearance requirements to operate VFR during daylight hours in the vicinity of Carr Memorial airport (see the figure above) between 1,200 feet AGL and 10,000 feet MSL are

- 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.

20. [18/1/2]

The visibility and cloud clearance requirements to operate VFR during daylight hours over Carr Memorial airport (see figure bottom right previous page) at more than 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 each cloud.  
 C. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.



21. [18/1/2]

The visibility and cloud clearance requirements to operate VFR during daylight hours over Borrego Valley airport (in the figure above) at more than 1,500 feet AGL are

A. 1 mile and clear of clouds.  
 B. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.  
 C. 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.



22. [19/1/3]

Referring to the figure above, the visibility and cloud clearance requirements to operate VFR during daylight hours in the Class E extension (point Z) of San Luis Obispo's airport at more than 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 each cloud.  
 C. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.

Additional Requirements in Surface-Based Controlled Airspace

23. [19/1/5]

When operating at an airport having any type of surface-based controlled airspace established for it, the reported ground visibility at the airport must be at least \_\_\_\_\_ statute mile(s).

A. five  
 B. one  
 C. three

24. [19/1/5]

If the ground visibility isn't reported in surface-based controlled airspace, then the flight visibility during takeoff, landing or when operating in the traffic pattern must be at least \_\_\_\_\_ statute miles.

A. three  
 B. five  
 C. one

25. [19/1/6]

When operating at an airport having any type of surface-based controlled airspace established for it, the ceiling at the airport can be no lower than \_\_\_\_\_ AGL.

A. 1,000 feet  
 B. 3,000 feet  
 C. 500 feet

26. [19/2/2]

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.

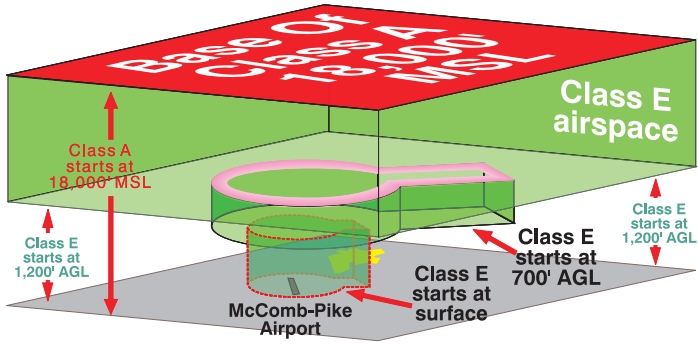


27. [19/3/2]

To depart Desert Resorts airport in the figure shown above, what minimum visibility and ceiling must exist at the airport (assume Class E, surface-based airspace is active)?

A. 500 foot ceiling, 3 miles visibility.  
 B. 1,000 foot ceiling, 3 miles visibility.  
 C. 1,000 foot ceiling, 1 mile visibility.





28. [I9/3/2]

To depart McComb-Pike airport in the figure shown above, what minimum ceiling must exist at the airport? (Assume Class E, surface-based airspace is active.)

- A. 500 foot ceiling.
- B. 1,000 foot ceiling.
- C. 1,500 foot ceiling.

Special VFR Clearance

29. [I11/1/2]

A SVFR clearance allows you to operate below \_\_\_\_\_ feet MSL down to the surface, within the \_\_\_\_\_ boundaries of surface-based controlled airspace

- A. 10,000, lateral
- B. 1,200, lateral
- C. 14,500, 10 mile

30. [I11/1/3]

To fly SVFR, a pilot must have:

- A. a clearance from ATC.
- B. a 1,000 foot ceiling.
- C. five miles of flight visibility.

31. [I11/1/4]

The official weather observer's hours of operation normally coincide with the hours during which the surface-based controlled airspace exists. The actual hours that surface-based controlled airspace exists are depicted in the \_\_\_\_\_.

- A. AIM (Aeronautical Information Manual)
- B. A/FD (Airport/Facility Directory)
- C. Federal Aviation Regulations

32. [I11/1/2, 4 & 5]

A special VFR clearance authorizes the pilot of an aircraft to operate VFR while within Class E (or Class B, C, and 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.

33. [I11/1/5]

What is the minimum weather condition required for airplanes operating under special VFR in Class E (or Class B, C, and D) airspace?

- A. 1 mile flight visibility.
- B. 1 mile flight visibility and 1,000-foot ceiling.
- C. 3 miles flight visibility and 1,000-foot ceiling.

Obtaining a SVFR Clearance

34. [I11/3/4 & I12/1/1]

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.

35. [I12/2/3]

No person may operate an airplane within Class D

- A. airspace at night under special VFR unless the flight can be conducted 500 feet below the clouds.
- B. airplane is equipped for instrument flight.
- C. flight visibility is at least 3 miles.

36. [I12/2/3]

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.

Satellite Airports Lying Within the Primary Airport's Surface-Based Controlled Airspace



37. [I12/2/4]

Assume that you are operating at a satellite airport (Port Angeles in the figure above) located within another airport's surface-based controlled airspace (Fairchild's surface-based, Class E airspace above). In this instance, visibility is determined by pilots on the \_\_\_\_\_ but ceilings are determined by the \_\_\_\_\_ at the primary airport.

- A. honor system, pilot
- B. official weather observer, pilot
- C. honor system, official weather observer

**Class G Airspace**

38. [I14/3/3]

What minimum visibility and clearance from clouds are required for VFR operations in Class G airspace at 700 feet AGL or lower 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.

39. [I14/3/3]

What minimum visibility and clearance from clouds are required in Class G airspace at 1,200 feet AGL or below during daylight hours?

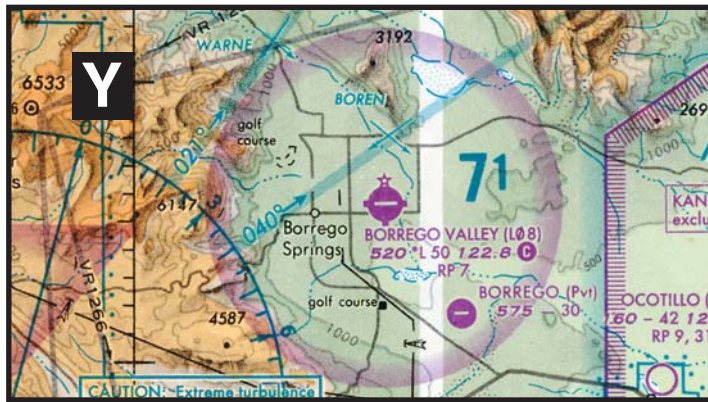
- A. 1 mile visibility and clear of clouds.
- B. 3 miles visibility and clear of clouds.
- C. 3 miles visibility, 500 feet below the clouds.



43. [I15/1/2]

Referring to the figure above, if the flight visibility is only one statute mile, what is the maximum height AGL you can fly when departing Oceano airport to the northwest?

- A. 1,500 feet AGL.
- B. 1,200 feet AGL.
- C. 700 feet AGL.



40. [I14/Figure 16]

Referring to the figure above, the airspace overlying Borrego Valley airport is uncontrolled from the surface to

- A. 700 feet AGL.
- B. 1,700 feet MSL.
- C. 4,000 feet AGL.

41. [I14/Figure 17]

Referring to the figure above, the visibility and cloud clearance requirements to operate VFR during daylight hours directly over Borrego Valley airport at less than 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 each cloud.
- C. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.

42. [I14/Figure 16]

Referring to the figure above, the airspace directly over position "Y" near Borrego Valley airport is uncontrolled from the surface to

- A. 700 feet AGL.
- B. 1,700 feet MSL.
- C. 1,200 feet AGL.

**Night Operations in Class G Airspace at 1,200 Feet AGL and Below**

44. [I15/2/2]

Outside controlled airspace, the minimum flight visibility requirement for VFR flight at and below 1,200 feet AGL at night is

- A. 1 mile.
- B. 3 miles.
- C. 5 miles.

45. [I15/3/2]

One exception to nighttime minimum visibility of three miles for airplanes operating in Class G airspace occurs when operating in the \_\_\_\_\_.

- A. vicinity of the airport
- B. traffic pattern
- C. view of a tower controller

46. [I15/3/2]

At night, in Class G airspace, if the flight visibility is less than three statute miles but not less than one statute mile during night hours, an airplane may be operated clear of clouds if it is flown in the airport traffic pattern within \_\_\_\_\_ of the runway.

- A. two miles
- B. gliding distance
- C. one-half mile

**Operations in Class G Airspace Above 1,200 Feet AGL**

47. [I17/Figure 21]

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.



**48. [I17/Figure 21]**

During operations at altitudes of more than 1,200 feet AGL and at or above 10,000 feet MSL, the minimum distance above clouds requirement for VFR flight is

- A. 500 feet.
- B. 1,000 feet.
- C. 1,500 feet.

**49. [I17/Figure 21]**

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.

**50. [I17/Figure 21]**

During operations within controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum distance above clouds requirement for VFR flight is

- A. 500 feet.
- B. 1,000 feet.
- C. 1,500 feet.

**51. [I17/Figure 21]**

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.

**52. [I17/Figure 21]**

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.

**53. [I17/Figure 21]**

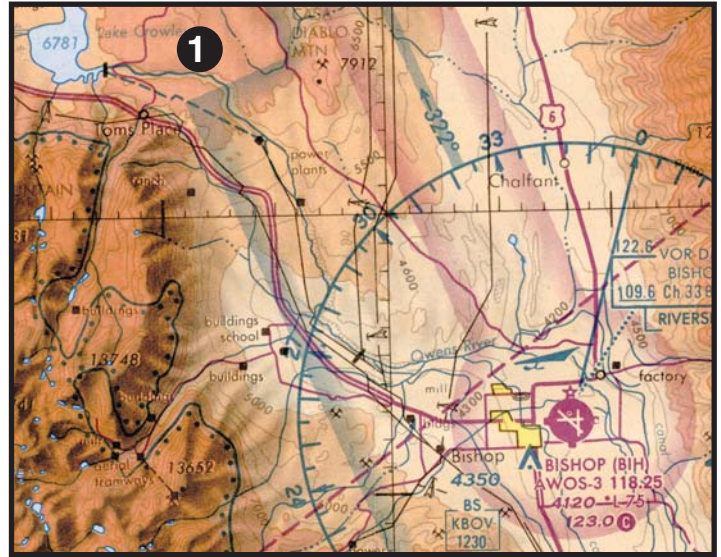
During operations outside controlled airspace at altitudes of more than 1,200 feet AGL, but less than 10,000 feet MSL, the minimum visibility and distance from clouds for VFR flight at night is

- A. 1 mile and clear of clouds.
- B. 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.
- C. 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.

**54. [I17/Figure 21]**

During operations outside controlled airspace at altitudes of more than 1,200 feet AGL and above 10,000 feet MSL, the minimum visibility and distance from clouds for VFR flight at night is

- A. 5 miles and clear of clouds.
- B. 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from each cloud.
- C. 5 miles and 1,000 feet above, 1,000 feet below, and 1 mile horizontally from each cloud.



**55. [I16/All]**

Referring to the figure above, the airspace overlying Bishop 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.

**56. [I16/All]**

Referring to the figure above, identify the airspace to the upper left of Bishop (position 1) that exists from the surface to 14,500 feet MSL.

- A. Class G airspace - surface to 14,500 feet MSL.
- B. Class G airspace - surface to 3,500 feet MSL; Class E airspace - 3,500 feet MSL to 14,500 feet MSL.
- C. Class G airspace - surface to 3,500 feet MSL; Class E airspace - 3,500 feet MSL to 10,000 feet MSL; Class G airspace - 10,000 feet MSL to 14,500 feet MSL.

**Class D Airspace**

**57. [I19/1/2 & I18/2/2]**

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.



**58. [I19/1/3]**  
Referring to the figure above, which point (1, 2, or 3) represents the borders of Class D surface-based airspace?  
A. Point 3  
B. Point 2  
C. Point 1

**59. [I19/1/3]**  
A blue segmented circle on a sectional chart depicts which class airspace?  
A. Class B.  
B. Class C.  
C. Class D.

**60. [I19/1/2]**  
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.



**61. [I19/1/3 & I19/Figure 26]**  
Referring to the figure above, the airspace directly overlying Santa Maria airport is  
A. Class B airspace to 10,000 feet MSL.  
B. Class C airspace to 5,000 feet MSL.  
C. Class D airspace to 2,800 feet MSL.

**62. [I19/2/2]**  
Unless otherwise authorized, two-way radio communication with Air Traffic Control is 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.

**Weather Minimums for Class D Airspace**

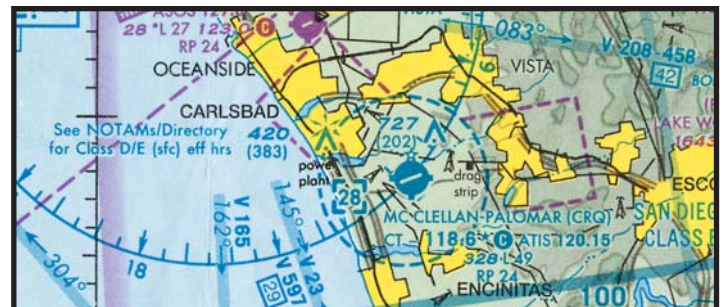
**63. [I20/3/1]**  
The basic VFR weather minimums for operating an aircraft within Class D airspace are  
A. 500 foot ceiling and 1 mile visibility.  
B. 1,000 foot ceiling and 3 miles visibility.  
C. clear of clouds and 2 miles visibility.

**64. [I20/3/1&2]**  
No person may take off or land an aircraft under basic VFR at an airport that lies within Class D airspace unless the  
A. flight visibility at that airport is at least 1 mile.  
B. ground visibility at that airport is at least 1 mile.  
C. ground visibility at that airport is at least 3 miles.

**65. [I20/3/1]**  
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.

**66. [I21/1/1]**  
During the day, you can usually tell if the primary airport is below basic VFR minimums by looking at the airport's \_\_\_\_\_.  
A. anemometer  
B. rotating beacon  
C. tower

**67. [I21/1/1]**  
An airport's rotating beacon operated during daylight hours indicates  
A. there are obstructions on the airport.  
B. that weather at the airport located in Class D airspace is below basic VFR weather minimums.  
C. the Air Traffic Control tower is not in operation.



**68. [I21/1/1]**  
Would a SVFR clearance from McClellan-Palomar airport to the northwest allow you to fly at 2,000 feet AGL with one mile visibility, then descend and land at Oceanside airport?  
A. Yes.  
B. No.  
C. Only if you received a SVFR clearance to land at Oceanside airport.

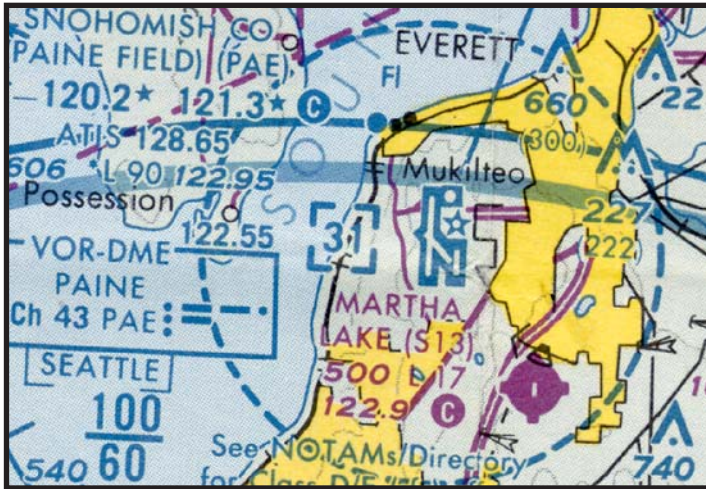


## Satellite Airports Within Class D Airspace

69. [I21/1/3]

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

- A. satellite airport's Unicom.
- B. associated Flight Service Station.
- C. primary airport's control tower.



70. [I21/1/3]

When landing at Martha Lake airport in the figure above, you must establish and maintain communication with ATC on frequency

- A. 122.55 MHz.
- B. 122.9 MHz.
- C. 120.2 MHz.

## Class C Airspace

71. [I22/1/1]

An operating \_\_\_\_\_ (as in Class D airspace) as well as \_\_\_\_\_ approach control services are associated with the existence of Class C airspace.

- A. airplane, radar
- B. control tower, radar
- C. radio, radar

72. [I22/1/2]

Class C airspace is geometrically shaped like two cylinders. Considering the entire structure, the surface-based inner cylinder extends upward to approximately \_\_\_\_\_ AGL and has a five nautical mile radius from the center of the \_\_\_\_\_ airport.

- A. 4,000 feet, primary
- B. 1,200 feet, primary
- C. 1,200 feet, satellite

73. [I22/1/2]

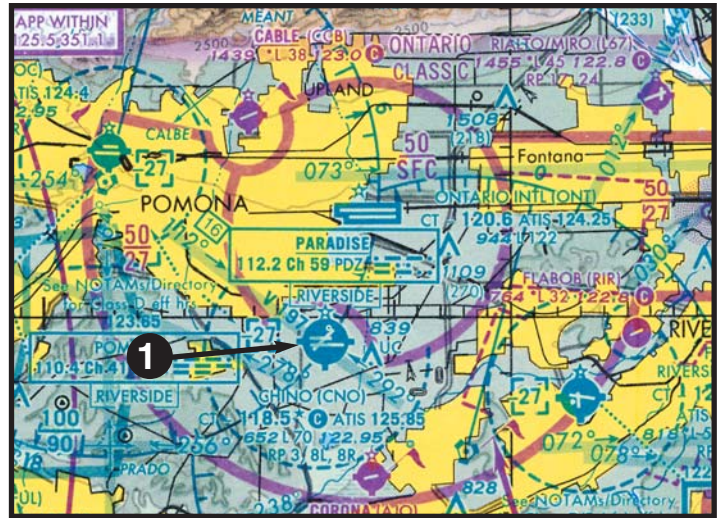
The upper or outer cylinder of Class C airspace normally begins at \_\_\_\_\_ AGL and has a \_\_\_\_\_ nautical mile radius from the center of the primary airport. The upper limit of the top cylinder is generally found at \_\_\_\_\_ feet above the elevation of the primary airport.

- A. 1,200 feet, 10, 4,000
- B. 4,000 feet, 5, 10,000
- C. 4,000 feet, 10, 10,000

74. [I22/1/2]

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.



75. [I22/1/3]

Referring to the figure above, where does Class C airspace begin above Chino airport (Position 1)?

- A. 2,700 feet MSL.
- B. At the surface.
- C. 5,000 feet MSL.

76. [I22/1/3]

Referring to the figure above, where does Class C airspace end above Chino airport?

- A. 2,700 feet MSL.
- B. At the surface.
- C. 5,000 feet MSL.

## Equipment Requirements to Operate Within Class C Airspace

77. [I23/1/2]

Two-way radio communication must be established with the Air Traffic Control facility having jurisdiction over the area prior to entering which class airspace?

- A. Class C.
- B. Class E.
- C. Class G.

78. [I23/1/3]

- All operations within Class C airspace must be in
- accordance with instrument flight rules.
  - compliance with ATC clearances and instructions.
  - an aircraft equipped with a 4096-code transponder with Mode C encoding capability.

79. [I23/1/2 & I23/2/3]

- Which initial action should a pilot take prior to entering Class C airspace?
- Contact Approach Control on the appropriate frequency.
  - Contact the tower and request permission to enter.
  - Contact the FSS for traffic advisories.



80. [I23/1/3]

- Referring to the figure above, what minimum equipment is required to land and take off at Santa Barbara airport?
- Mode C transponder and VOR receiver.
  - Mode C transponder and two-way radio.
  - Mode C transponder, VOR receiver, and DME.

81. [I23/1/2&3]

- What minimum radio equipment is required for operation within Class C airspace?
- Two-way radio communication equipment and a 4096-code transponder.
  - Two-way radio communication equipment, a 4096-code transponder, and DME.
  - Two-way radio communication equipment, a 4096-code transponder, and an encoding altimeter.

### Class C Service

82. [I23/2/3]

- The normal radius of the outer area of Class C airspace is
- 5 nautical miles.
  - 15 nautical miles.
  - 20 nautical miles.

### Satellite Airports Within Class C Airspace

83. [I23/3/2]

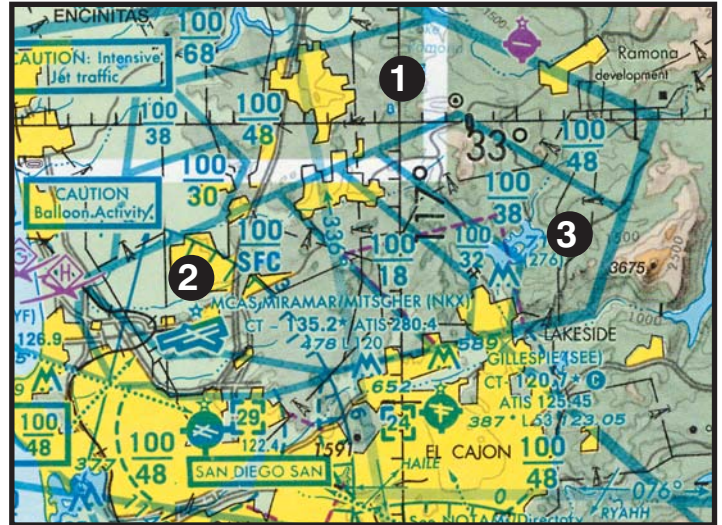
- Under what condition may an aircraft operate from a satellite airport within Class C airspace?
- The pilot must file a flight plan prior to departure.
  - The pilot must monitor ATC until clear of the Class C airspace.
  - The pilot must contact ATC as soon as practicable after takeoff.

### Weather Minimums for Class C Airspace

84. [I24/1/3]

- The weather minimums for Class C airspace are exactly the same as they are for Class \_\_\_\_\_ airspace and Class \_\_\_\_\_ airspace below \_\_\_\_\_ MSL.
- B, A, 10,000 feet
  - D, E, 10,000 feet
  - D, E, 1,200 feet

### Class B Airspace



85. [I25/2/3]

- Referring to the figure above, the floor of Class B airspace at position 1 is
- at the surface.
  - 4,800 feet MSL.
  - 3,800 feet MSL.

86. [I25/2/3]

- Referring to the figure above, the floor of Class B airspace at position 2 is
- at the surface.
  - 4,800 feet MSL.
  - 3,800 feet MSL.

87. [I25/2/3]

- Referring to the figure above, the floor of Class B airspace at position 3 is
- at the surface.
  - 4,800 feet MSL.
  - 3,800 feet MSL.

88. [I25/2/3]

- Referring to the figure above, the top of Class B airspace at position 1 is
- 10,000 feet MSL.
  - 4,800 feet MSL.
  - 3,800 feet MSL.



89. [I25/2/2]

Typically, Class B airspace has a radius of 15 to 30 miles from the primary airport and it extends vertically from the surface to \_\_\_\_\_ MSL.

- A. 12,000 feet
- B. 5,000 feet
- C. 10,000 feet

## Requirements to Enter Class B Airspace

90. [I26/1/3]

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

- A. Airline transport pilot certificate.
- B. Private pilot certificate or student pilot certificate with appropriate logbook endorsements.
- C. Private pilot certificate with an instrument rating.

91. [I26/1/3]

The minimum pilot certification required for operation within Class B airspace?

- A. Private pilot certificate or, student or recreational pilot certificate with appropriate logbook endorsements.
- B. Commercial pilot certificate.
- C. Flight instructor certificate only.

92. [I26/1/4]

While you need only establish and maintain radio communication for Class C or D airspace, you need to obtain a \_\_\_\_\_ to enter Class B airspace.

- A. clearance
- B. permission slip
- C. transponder code

93. [I26/3/2]

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

- A. Two-way radio communication equipment and a 4096-code transponder.
- B. Two-way radio communication equipment, a 4096-code transponder, and an encoding altimeter.
- C. Two-way radio communication equipment, a 4096-code transponder, an encoding altimeter, and a VOR or TACAN receiver.

94. [I26/3/2]

If for any reason the Class B airspace doesn't extend to 10,000 feet MSL, a transponder with Mode C capability is required when operating above the \_\_\_\_\_ and within the \_\_\_\_\_ of Class B airspace.

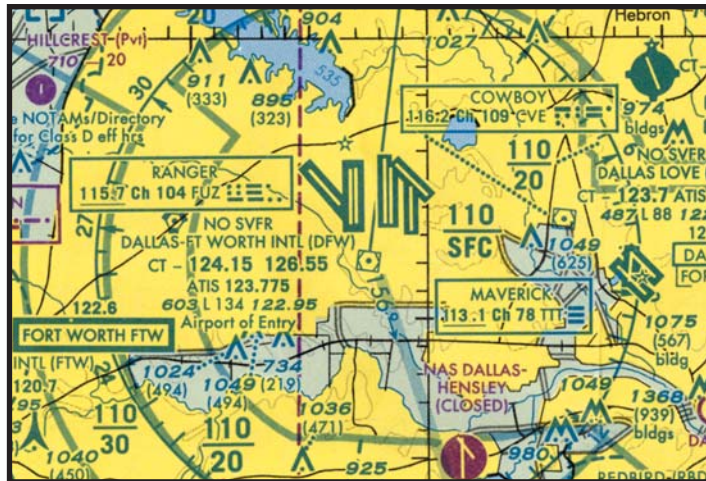
- A. lateral boundaries, periphery
- B. ceiling, lateral boundaries
- C. ceiling, transmission range

95. [I27/1/1]

To operate within Class B airspace, \_\_\_\_\_ mile(s) visibility is required. However, you only need to remain \_\_\_\_\_ clouds instead of the typical 1,000'/500'/2,000' distance minimums.

- A. three, clear of
- B. five, clear of
- C. one, 1 mile from all

## Special VFR Within Class B Airspace



96. [I27/1/3]

Referring to the figure above, is fixed-wing Special VFR authorized at Dallas-Ft. Worth authorized?

- A. Yes. SVFR is authorized at all airports.
- B. Yes. SVFR is authorized as long as the pilot has a clearance.
- C. No. SVFR is not authorized for fixed-wing aircraft at this airport.

## Corridors and Circumnavigating Class B Airspace

97. [I27/2/2]

A speed limit of \_\_\_\_\_ knots exists underneath the lateral limits of Class B airspace or VFR corridors through Class B.

- A. 250
- B. 200
- C. 180

## Transponder and Mode C Within 30 NM of Certain airports

98. [I28/1/1]

With certain exceptions, all aircraft within 30 miles of a Class B primary airport from the surface upward to 10,000 feet MSL must be equipped with

- A. an operable VOR or TACAN receiver and an ADF receiver.
- B. instruments and equipment required for IFR operations.
- C. an operable transponder having either Mode S or 4096-code capability with Mode C automatic altitude reporting capability.

**99. [I28/1/1]**

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).

**100. [I28/1/1]**

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.

**Transponders and Mode C Above 10,000 Feet MSL**

**101. [I28/1/2]**

A transponder with Mode C is also required in all the airspace of the 48 contiguous United States and the District of Columbia when operating at and above \_\_\_\_\_ feet MSL, excluding the airspace at and below \_\_\_\_\_ feet AGL.

- A. 10,000, 2,500
- B. 10,000, 4,000
- C. 2,500, 1,200

**Transponders in Controlled Airspace**

**102. [I28/2/2]**

If your airplane has a transponder, the rules require that it be turned on (including the Mode C capability) any time you are operating in \_\_\_\_\_ airspace.

- A. special use
- B. uncontrolled
- C. controlled

**Transponder and Mode C Deviations**

**103. [I28/2/4]**

If you have a transponder lacking Mode C capability, you can request a \_\_\_\_\_ to operate within airspace requiring Mode C at any time.

- A. deviation
- B. scout plane
- C. clearance

**Speed Restriction in Class C and D Airspace**

**104. [I28/3/3]**

When any aircraft is within four nautical miles of the primary airport in Class C and D airspace and at or below 2,500 feet AGL, a \_\_\_\_\_ knot speed restriction applies.

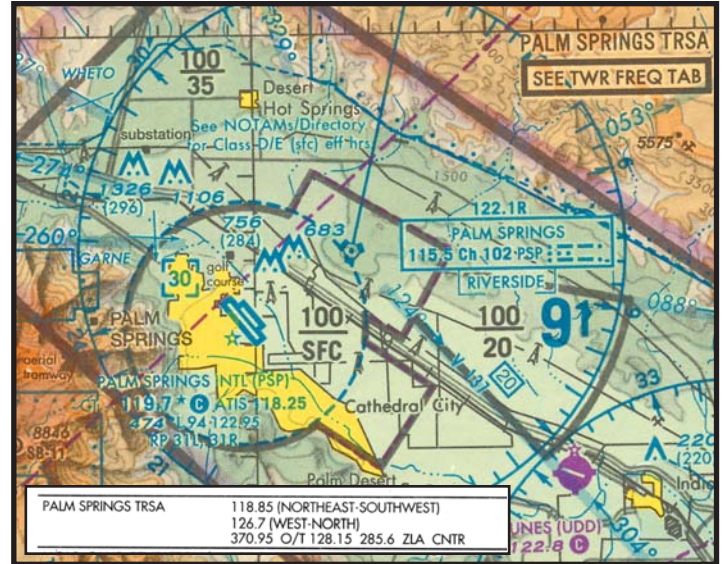
- A. 180
- B. 200
- C. 250

**Terminal Radar Service Area**

**105. [I29/1/2]**

Recall that in a TRSA, ATC provides \_\_\_\_\_ between all participating VFR aircraft and all IFR aircraft.

- A. separation
- B. sequencing and separation
- C. 1,000 feet separation



**106. [I29/2/1]**

Referring to the figure above, if you're approaching Palm Springs anywhere from west to north from the airport, you can contact Approach Control on \_\_\_\_\_.

- A. 118.85 MHz
- B. 126.7 MHz
- C. 128.15 MHz

**107. [I29/2/3]**

If you happen to be talking to approach control (when approaching) or ground control (before departure) and don't want TRSA service, you should state,

- A. "Not going to happen, man."
- B. "Negative TRSA service."
- C. "Negative radar service."

**Special Use Airspace**

**108. [I30/2/3]**

Prohibited areas are defined by \_\_\_\_\_ lines.

- A. red dashed
- B. red hatched
- C. blue hatched

**109. [I30/3/2]**

Restricted areas restrict flights due to the unusual activities conducted within them. These areas often contain invisible hazards to aircraft such as the firing of \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

- A. artillery, aerial gunnery, guided missiles
- B. artillery, lasers, rocks
- C. bullets, rockets, gum wads

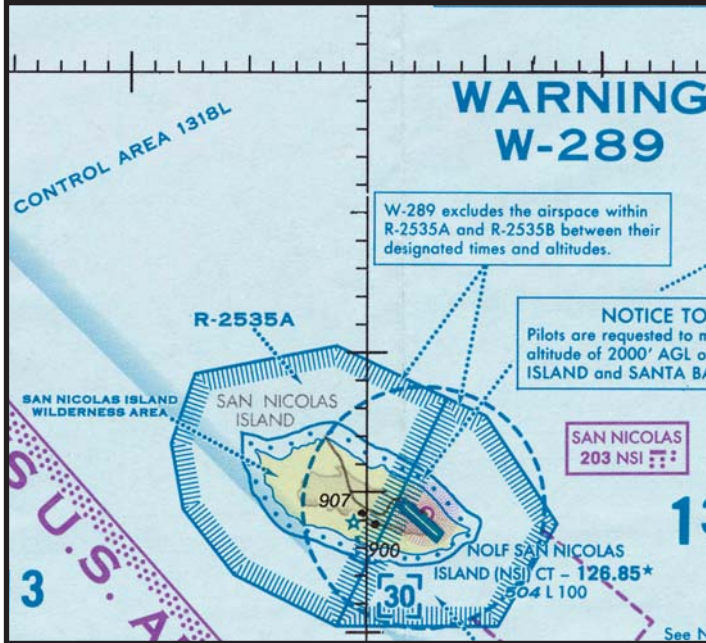


## 110. [I30/3/4]

Before you can enter or fly through a restricted area, you need permission from the \_\_\_\_.

- A. administrator
- B. FAA
- C. controlling agency

### Warning Areas



## 111. [I31/2/2 & I30/3/2]

Referring to the figure above, what hazards to aircraft may exist in warning areas such as Warning W-289?

- A. Unusual, often invisible, hazards such as aerial gunnery or guided missiles over international waters.
- B. High volume of pilot training or unusual type of aerial activity.
- C. Heavy military aircraft traffic in the approach and departure area of the North Atlantic Control Area.

### Alert Areas

## 112. [I32/1/1]

Responsibility for collision avoidance in an alert area rests with

- A. the controlling agency.
- B. all pilots.
- C. Air Traffic Control.

### Military Operations Areas

## 113. [I32/1/2 & I32/2/3]

What hazards to aircraft may exist in a MOA?

- A. Unusual, often invisible, hazards to aircraft such as artillery firing.
- B. High density military training activities.
- C. Parachute jump operations.

## 114. [I32/3/3]

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.

### Military Training Routes



## 115. [I32/3/4]

Referring to the figure above, what type of military flight operations should a pilot expect along IR 200?

- 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.

### Variable Floors of Class E Airspace

## 116. [I34/1/1]

The width of a federal airway from either side of the centerline is

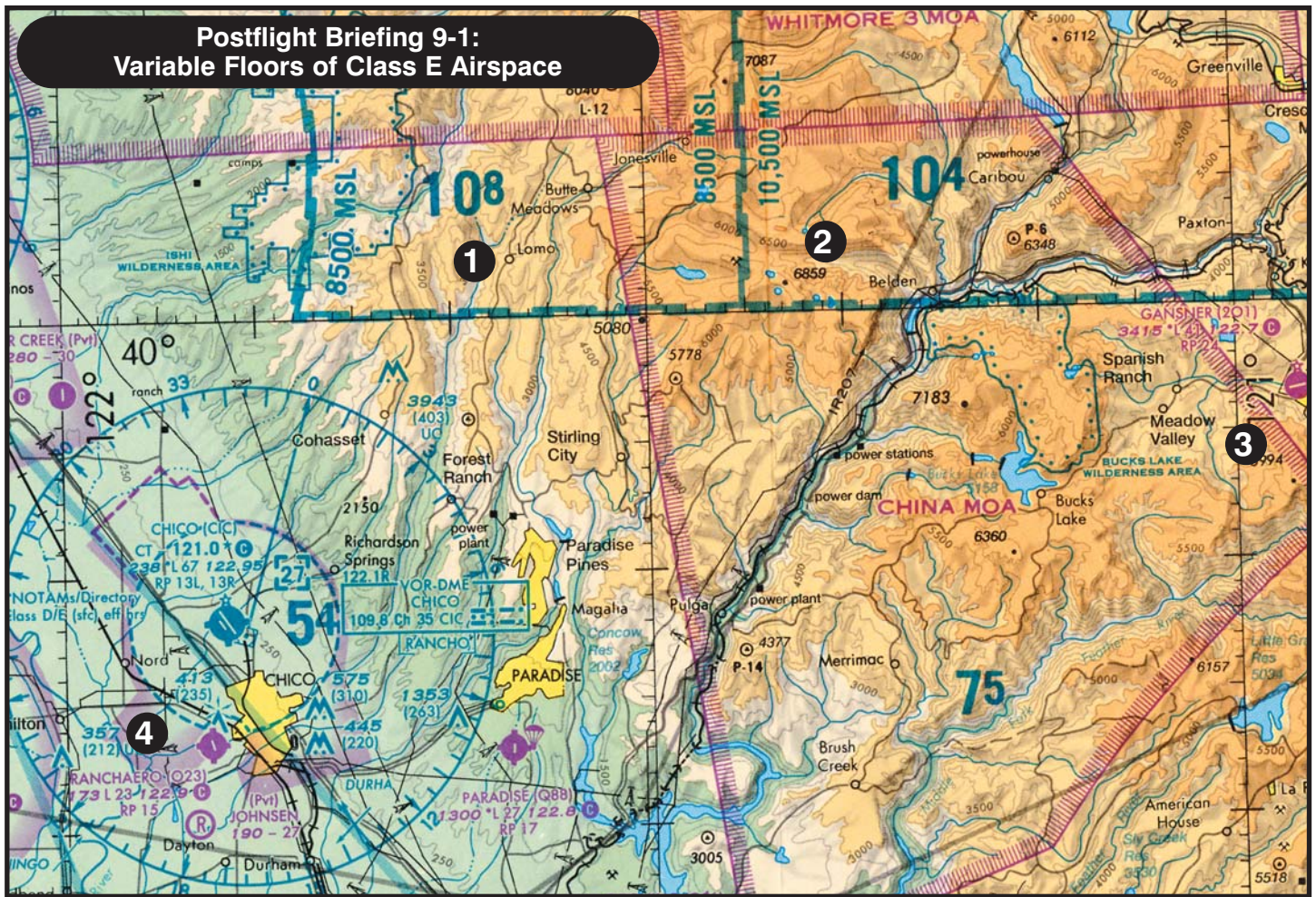
- A. 4 nautical miles.
- B. 6 nautical miles.
- C. 8 nautical miles.

## 117. [I34/1/2]

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.





**118. [All of page I34]**

Referring to the figure above, the vertical limits of that portion of Class E airspace over position 1 are

- A. 1,200 feet AGL to 8,500 feet MSL.
- B. 8,500 feet MSL to 12,500 feet MSL.
- C. 8,500 feet MSL to 17,999 feet MSL.

**119. [All of page I34]**

Referring to the figure above, the vertical limits of that portion of Class E airspace over position 2 are

- A. 1,200 feet AGL to 8,500 feet MSL.
- B. 10,500 feet MSL to 17,999 feet MSL.
- C. 10,400 feet MSL to 17,999 feet MSL.

**120. [All of page I34]**

Referring to the figure above, the vertical limits of that portion of Class E airspace directly over Ganser airport (position 3) are

- A. 1,200 feet AGL to 17,999 feet MSL.
- B. 7,500 feet MSL to 12,500 feet MSL.
- C. 7,500 feet MSL to 17,999 feet MSL.

**121. [All of page I34]**

Referring to the figure above, the vertical limits of that portion of Class E airspace over position 4 are

- A. 700 feet AGL to 8,500 feet MSL.
- B. 1,200 feet MSL to 14,500 feet MSL.
- C. 700 feet AGL to 17,999 feet MSL.





Chapter Nine Answers

- |       |       |        |
|-------|-------|--------|
| 1. B  | 42. C | 83. C  |
| 2. A  | 43. B | 84. B  |
| 3. C  | 44. B | 85. B  |
| 4. B  | 45. B | 86. A  |
| 5. A  | 46. C | 87. C  |
| 6. B  | 47. A | 88. A  |
| 7. A  | 48. B | 89. C  |
| 8. B  | 49. A | 90. B  |
| 9. C  | 50. B | 91. A  |
| 10. C | 51. A | 92. A  |
| 11. A | 52. B | 93. B  |
| 12. A | 53. C | 94. B  |
| 13. A | 54. C | 95. A  |
| 14. A | 55. C | 96. C  |
| 15. B | 56. A | 97. B  |
| 16. A | 57. B | 98. C  |
| 17. B | 58. C | 99. A  |
| 18. C | 59. C | 100. A |
| 19. C | 60. C | 101. A |
| 20. C | 61. C | 102. C |
| 21. B | 62. A | 103. A |
| 22. C | 63. B | 104. B |
| 23. C | 64. C | 105. B |
| 24. A | 65. B | 106. B |
| 25. A | 66. B | 107. B |
| 26. B | 67. B | 108. C |
| 27. B | 68. B | 109. A |
| 28. B | 69. C | 110. C |
| 29. A | 70. C | 111. A |
| 30. A | 71. B | 112. B |
| 31. B | 72. A | 113. B |
| 32. B | 73. A | 114. C |
| 33. A | 74. C | 115. A |
| 34. B | 75. A | 116. A |
| 35. B | 76. C | 117. B |
| 36. C | 77. A | 118. C |
| 37. C | 78. C | 119. B |
| 38. A | 79. A | 120. A |
| 39. A | 80. B | 121. C |
| 40. A | 81. C |        |
| 41. A | 82. C |        |

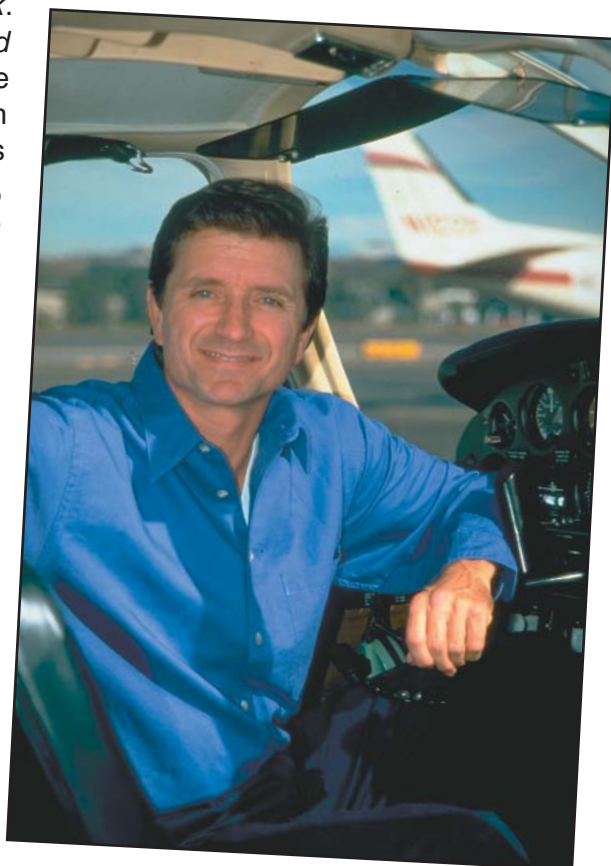
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