



**Federal Aviation  
Administration**

# **Initial En Route Qualification Training**

**Lesson 18  
Lateral Separation  
End-of-Lesson Test**

**Course 50148001**

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# Initial En Route Training

## Lesson 18

### Lateral Separation

### End-of-Lesson Test – Variation 1

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#### Lesson Objectives:

On an End-of-Lesson Test and in accordance with FAA Order JO 7110.65, you will identify:

- Airspace to be protected along airways, routes, and holding patterns
  - Minima and procedures for applying lateral separation
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**Directions:** Items 1 through 10 are multiple choice. Indicate your selection by circling the appropriate letter. For items 7 through 10, refer to the DME Divergence Distance Minima Table (FAA Order JO 7110.65, paragraph 6-5-2, Table 6-5-2) and the Aero Center Map.

1. When are aircraft established on radials of the same NAVAID that diverge by at least 15 degrees considered to be laterally separated?
  - A. When aircraft are cleared to hold over different fixes at the same altitude.
  - B. When either aircraft is beyond airspace to be protected for the other.
  - C. When the slant-range is the line-of-sight distance between the aircraft and NAVAID.
  - D. When cleared aircraft on different airways or routes.
2. The size of the protected airspace of a holding pattern varies according to \_\_\_\_\_ and \_\_\_\_\_.
  - A. speed; direction of holding
  - B. altitude; wind speed
  - C. speed; altitude
  - D. altitude; direction of holding

**LATERAL SEPARATION**  
**End-of-Lesson Test – Variation 1 (Continued)**

3. To determine a distance for lateral separation when the degrees divergence falls between two values listed in the divergence table, \_\_\_\_\_.
  - A. Use the lesser distance
  - B. Take the average of the two distances
  - C. Use the greater distance
  - D. Take the sum of the two distances
  
4. The lateral separation provided for an aircraft on an established airway or route and within 51 miles from the NAVAID is \_\_\_\_\_ miles either side of the centerline.
  - A. 10
  - B. 8
  - C. 5
  - D. 4
  
5. The protected airspace of a holding pattern must NOT \_\_\_\_\_ of an airway.
  - A. overlap the protected airspace
  - B. touch the centerline
  - C. overlap the centerline
  - D. touch the protected airspace
  
6. Aircraft may be cleared to hold over different fixes at the same altitude if the \_\_\_\_\_.
  - A. pilot requests it
  - B. holding pattern airspaces do NOT overlap
  - C. fixes are on established airways
  - D. controller desires it

# LATERAL SEPARATION

## End-of-Lesson Test – Variation 1 (Continued)

7. At what point, in miles, southwest of Magnolia VORTAC does lateral separation cease to exist between N76Y and N35Z?

|                        |             |     |     |     |                     |  |
|------------------------|-------------|-----|-----|-----|---------------------|--|
| N76Y<br>PA27/A<br>T160 | MLU<br>1135 | 59  | 130 | MEI | KMLU V18 KMEI /1223 |  |
|                        |             | 11  |     |     |                     |  |
|                        |             |     |     |     |                     |  |
|                        |             | MHZ |     |     |                     |  |

  

|                        |             |     |     |       |                             |  |
|------------------------|-------------|-----|-----|-------|-----------------------------|--|
| N35Z<br>M20P/A<br>T165 | HEZ<br>1121 | 01  | 130 | ZAMMA | KHEZ V245 IGB KSTF<br>/1237 |  |
|                        |             | 12  |     |       |                             |  |
|                        |             |     |     |       |                             |  |
|                        |             | MHZ |     |       |                             |  |

TIME: 11:35:00

- A. 5
- B. 8
- C. 11
- D. 13
- 
8. At what point (in miles) from a VOR will two converging aircraft lose separation if their angle of divergence is 15 degrees?
- A. 15 miles
- B. 17 miles
- C. 19 miles
- D. 21 miles

# LATERAL SEPARATION

## End-of-Lesson Test – Variation 1 (Continued)

9. At what point, in miles, southeast of SQS VORTAC will lateral separation begin between ASA771 and SWA41?

|                         |             |            |      |                |                          |  |
|-------------------------|-------------|------------|------|----------------|--------------------------|--|
| ASA771<br>F27/A<br>T230 | TXK<br>0711 | 35<br>07   | 90 ✓ | IGB            | KTXK V278 IGB KSTF /0800 |  |
|                         |             |            |      |                |                          |  |
|                         |             | SQS        |      |                |                          |  |
| SWA41<br>B733/A<br>T440 |             | ↑          |      | MHZ<br><br>110 | KGWO SQS V555 KMCB /0029 |  |
|                         |             |            |      |                |                          |  |
|                         |             | KGWO P0735 |      |                |                          |  |

- A. 6
- B. 8
- C. 10
- D. 13
10. The degree of divergence (in miles) between V18 and V417, east of MLU VORTAC is \_\_\_\_\_ miles.
- A. 17
- B. 10
- C. 8
- D. 6