

## Questions

1. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the landing chart for the single-engine aeroplane determine the landing distance from a height of 50 ft.

Given:

OAT: 27°C

Pressure altitude: 3000 ft

Aeroplane mass: 2900 lb

Tailwind component: 5 kt

Flaps: landing position (down)

Runway: tarred and dry

- a. approximately : 1120 ft
- b. approximately : 1700 ft
- c. approximately : 1370 ft
- d. approximately : 1850 ft

2. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the landing chart for the single-engine aeroplane determine the landing distance from a height of 50 ft.

Given:

OAT: ISA +15°C

Pressure altitude: 0 ft

Aeroplane mass: 2940 lb

Headwind component: 10 kt

Flaps: landing position (down)

Runway: short and wet grass with firm soil base

Correction factor (wet grass): 1.38

- a. approximately : 1300 ft
- b. approximately : 2000 ft
- c. approximately : 1450 ft
- d. approximately : 1794 ft

3. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the landing chart for the single-engine aeroplane determine the landing distance from a height of 50 ft.

Given:

OAT: ISA +15°C

Pressure altitude: 0 ft

Aeroplane mass: 2940 lb

Tailwind component: 10 kt

Flaps: landing position (down)

Runway: tarred and dry

- a. approximately : 950 ft
- b. approximately : 1900 ft
- c. approximately : 750 ft
- d. approximately : 1400 ft

4. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the graph for landing performance, what is the minimum headwind component required?

Given:

Actual landing distance: 1300 ft

Runway elevation: MSL

Weather: assume ISA conditions

Mass: 3200 lb

- a. no wind
  - b. 5 kt
  - c. 15 kt
  - d. 10 kt
5. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the landing chart for the single-engine aeroplane determine the landing distance from a height of 50 ft.

Given:

OAT: 0°C

Pressure altitude: 1000 ft

Aeroplane mass: 3500 lb

Tailwind component: 5 kt

Flaps: landing position (down)

Runway: tarred and dry

- a. approximately : 1480 ft
  - b. approximately : 940 ft
  - c. approximately : 1770 ft
  - d. approximately : 1150 ft
6. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

Using the Landing Diagram, for single-engine aeroplane, determine the landing distance (from a screen height of 50 ft) required, in the following conditions:

Given:

Pressure altitude: 4000 ft

OAT: 5°C

Aeroplane mass: 3530 lb

Headwind component: 15 kt

Flaps: approach setting

Runway: tarred and dry

Landing gear: down

- a. 1550 ft
- b. 1020 ft
- c. 1400 ft
- d. 880 ft

7. For this question use Performance Manual CAP 698 SEP1 Figure 2.4.

With regard to the landing chart for the single-engine aeroplane determine the landing distance from a height of 50 ft.

Given:

OAT: ISA

Pressure altitude: 1000 ft

Aeroplane mass: 3500 lb

Tailwind component: 5 kt

Flaps: landing position (down)

Runway: tarred and dry

- a. approximately : 1800 ft
  - b. approximately : 1150 ft
  - c. approximately : 1500 ft
  - d. approximately : 920 ft
8. The landing distance available at an aerodrome is 2000 ft. For a Class B aircraft, what distance should be used in the landing distance graph to obtain the maximum permissible landing weight, if the runway has a paved wet surface with a 1% uphill slope?
- a. 1398 ft
  - b. 1216 ft
  - c. 1850 ft
  - d. 2000 ft
9. At an aerodrome, the landing distance available is 1700 ft. For a single-engine Class B aircraft, what must be the actual landing distance in order to comply with the landing regulations?
- a. 1033 ft
  - b. 1478 ft
  - c. 2431 ft
  - d. 1189 ft
10. By what factor must the landing distance available for a single-engine Class B aeroplane be multiplied in order to find the maximum allowable landing distance?
- a. 0.70
  - b. 1.67
  - c. 1.43
  - d. 0.60
11. The landing field length required for single-engine Class B aeroplanes at the alternate aerodrome is the demonstrated landing distance plus:
- a. 92%
  - b. 43%
  - c. 70%
  - d. 67%

12. The calculated dry landing distance of a single-engine Class B aeroplane is 1300 ft. What is the minimum landing distance available to comply with the landing regulations? (runway is wet at the estimated time of arrival.)
- a. 1495 ft
  - b. 2138 ft
  - c. 1859 ft
  - d. 1130 ft