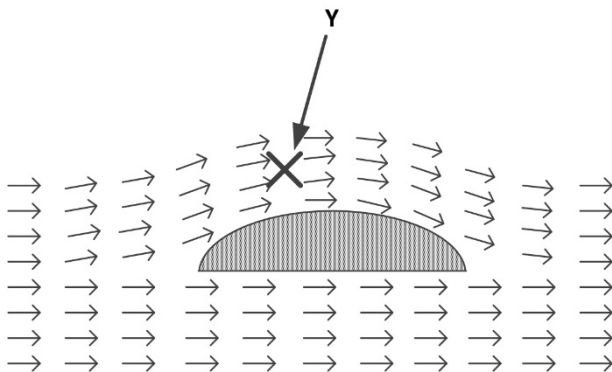


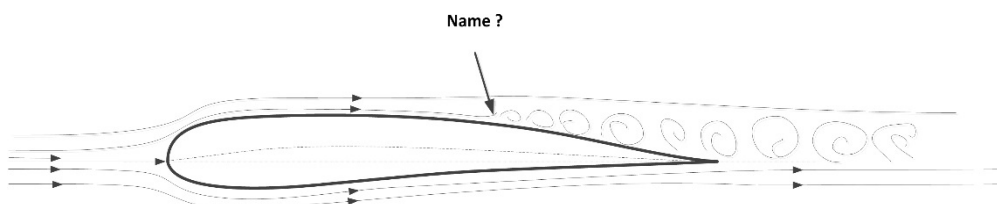
Question block created by wizard

This exam contains 20 questions

1. In which atmospheric layer occurs the majority of all of the common weather conditions, like rain snow and clouds?
 - a. Ionosphere
 - b. Inside the transition layer.
 - c. Troposphere
2. Pilots use the current area mean sea level barometric pressure (QNH)....
 - a. to regulate the temperature in the cabin.
 - b. to indicate speed.
 - c. when approaching an airfield.
3. This is an object placed in a sub-sonic air-flow. At the location of ' Y ' the pressure is higher, lower or the same in reference to the atmospheric pressure?



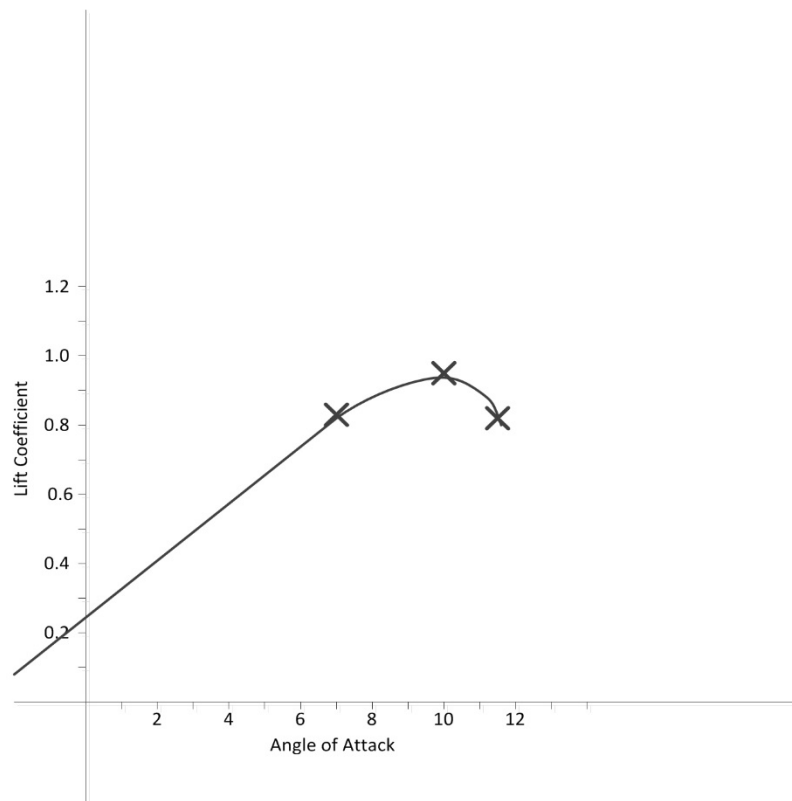
- a. Same
 - b. Higher
 - c. Lower
4. Which point is indicated by the arrow in this figure?



- a. Centre of Pressure
- b. Stagnation Point

- c. Transition Point
5. The layer of air over the surface of an aerofoil which is slower moving, in relation to the rest of the airflow, is known as?
- Camber Layer
 - Boundary Layer
 - Chord
6. If the speed of an aircraft is increased, the induced drag will....
- increase.
 - decrease.
 - remain the same.
7. If the aerodynamic angle of attack is increased, resulting in a stall, the centre of pressure of the wing will....
- move forward.
 - move backward.
 - will not change.
8. What happens to the lift if the airflow velocity over an upper cambered surface of an aerofoil decreases?
- Lift decreases.
 - Lift increases.
 - Lift remains the same.
9. What force tends to pull an aircraft downwards to the earth?
- Thrust
 - Weight
 - Drag

10. Refer to the picture. At which angle of attack will this aircraft start to stall?



- a. At 10 degrees
- b. At 11,5 degrees.
- c. At 7 degrees



11. The stalling of an aerofoil is affected by the...

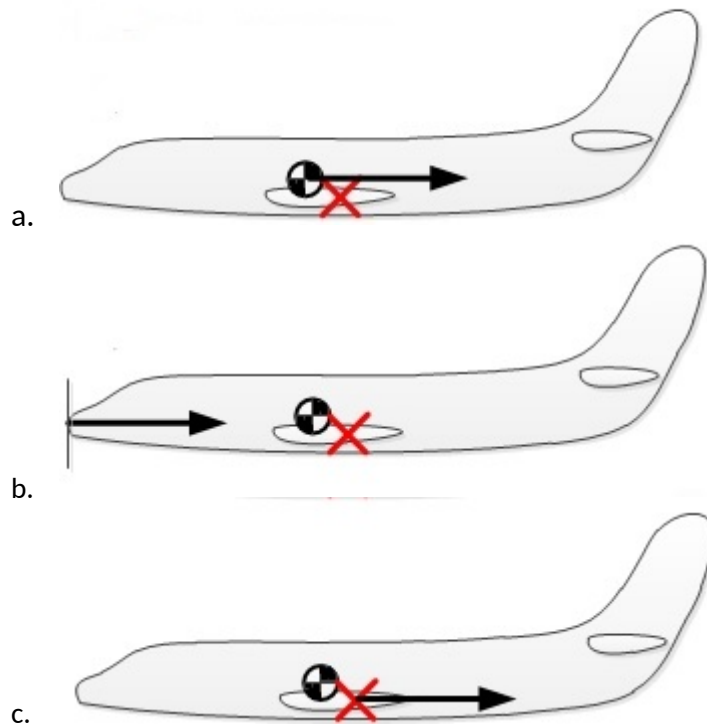
- a. angle of attack.
- b. transition speed.
- c. drag.

12. The removal of fresh snow from an aircraft, which has been on the ground for a couple of hours is called?

- a. Anti-Icing.
- b. Snow Shovel
- c. De-Icing

13. Which of the pictures provides the intervention point of the drag force in a horizontal flight?

-  Centre of Gravity
-  Centre of Pressure



14. During a glide, the pilot tries to maximize the gliding distance. Which ratio is very important?

- a. L/D (Lift drag ratio)
- b. W/L (Weight lift ratio)
- c. W/D (Weight drag ratio)

15. When the speed of an aeroplane decreases the...

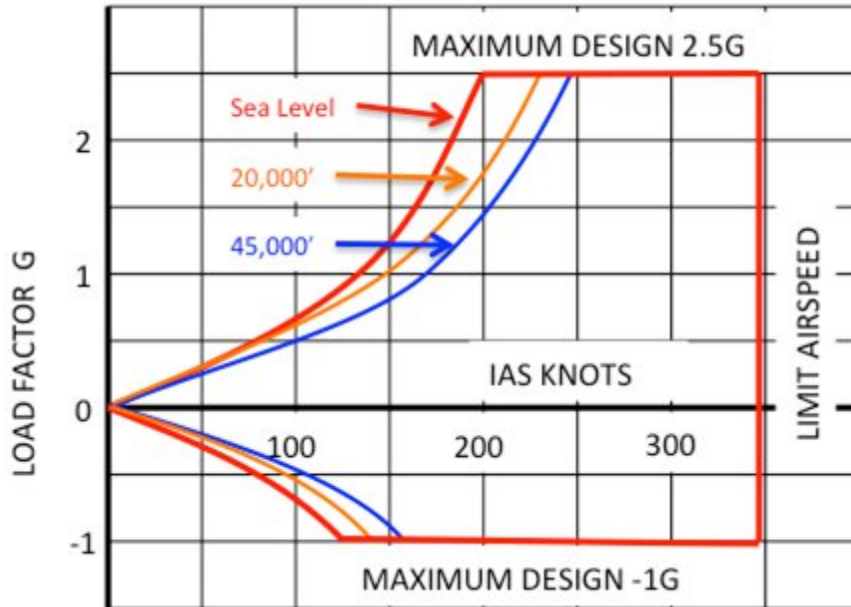
- a. drag decreases.
- b. drag increases.
- c. drag stays the same.

16. The load-factor (or 'g' force) on an aircraft in a banked turn is related to the....

- a. mass.
- b. altitude of speed.

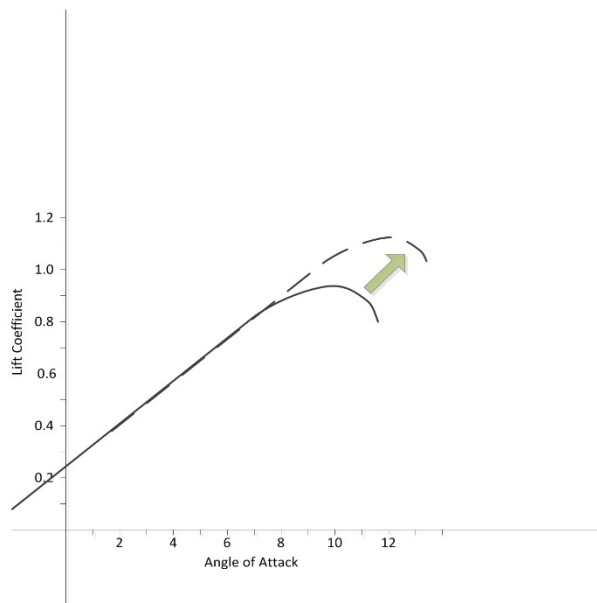
c. angle of bank.

17. What could happen if the aircraft flies (during a horizontal flight) faster than 350 knots?



- The pilot has past the structural limits, a structural failure could occur.
- This cannot happen, this aircraft cannot fly faster than 300 knots.
- A stall could occur.

18. The improved Lift Coefficient at a higher Angle of Attack is the result of using....



- flaps.

- b. leading edge slats.
- c. spoilers.

19. An aircraft in a steady state flight is disturbed. If after this disturbance the aircraft returns to steady state flight again. How is this called?

- a. Neutral Static Stability
- b. Positive Dynamic Stability
- c. Trimming

20. Lateral stability is assisted by....

- a. deflection of spoilers.
- b. anhedral.
- c. dihedral.