

Operations

TEST PREP

1

Which V-speed represents maximum flap extended speed?

- a. VLOF.
- b. VFC.
- c. **VFE.**

2

Maximum structural cruising speed is abbreviated as:

- a. VS0
- b. **VNO**
- c. VNE

3

Which V-speed represents maneuvering speed?

- a. VNE.
- b. **VA.**
- c. VLO.

4

Which instrument is affected if the pitot tube is blocked?

- a. Altimeter.
- b. **Airspeed indicator.**
- c. Vertical speed indicator.

5

The airspeed indicator has various color markings. The green arc is:

- a. The full flap operating range of the airplane.
- b. **The normal operating range of the airplane.**
- c. The speeds that should only be flown in smooth air.

6

The common heading indicator requires periodic adjustment. It is important to check its indications frequently against the:

- a. **Magnetic compass.**
- b. Attitude indicator.
- c. Turn and bank indicator.

7

Which V-speed represents maximum landing gear extended speed?

- a. VLE.
- b. VFE.
- c. VLO.

8

VNO is defined as the

- a. normal operating range.
- b. never-exceed speed.
- c. maximum structural cruising speed.

9

An aircraft equipped with advanced avionics and electronic flight instruments (glass cockpit) can:

- a. Perform full takeoffs and landings using the autopilot
- b. Eliminate the need for pilots to learn pilotage and dead reckoning skills
- c. Offer many new capabilities and simplify basic flying tasks

10

What is the action of the airplane if the ball of the inclinometer moves to the left of center during a left turn?

- a. The airplane is slipping.
- b. The airplane is skidding.
- c. The airplane is coordinated.

11

What benefit does a digital attitude indicator provide?

- a. It's driven by the same vacuum system as a mechanical attitude indicator.
- b. It takes up less panel space.
- c. The artificial horizon spans the entire width of the display.

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What is one of the benefits for pilots flying an airplane with electronic flight instruments and moving map navigation (glass cockpit)?

- a. Electronic systems never fail
- b. Eliminates the need to learn conventional radio-based navigation techniques
- c. **Increased situational awareness**

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The only instrument that provides an instantaneous, direct indication of the airplane's pitch and bank attitude is the:

- a. Heading indicator.
- b. Turn and bank indicator.
- c. **Attitude indicator.**

14

What does the red line on an airspeed indicator represent?

- a. Turbulent or rough-air speed.
- b. **Never-exceed speed.**
- c. Maneuvering speed.

15

If it is necessary to set the altimeter from 29.15 to 29.85, what change occurs?

- a. **700-foot increase in indicated altitude.**
- b. 70-foot increase in density altitude.
- c. 70-foot increase in indicated altitude.

16

Using a turn and slip indicator, how do you know that you are in a coordinated turn?

- a. The miniature airplane's wing is pointing to the 15 degree mark
- b. The miniature airplane's wing is pointing to the 30 degree mark.
- c. **Centering the ball results in a coordinated turn.**

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If a pilot changes the altimeter setting from 30.11 to 29.96, what is the approximate change in indication?

- a. **Altimeter will indicate 150 feet lower.**
- b. Altimeter will indicate .15 inches Hg higher.
- c. Altimeter will indicate 150 feet higher.

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If a flight is made from an area of low pressure into an area of high pressure without the altimeter setting being adjusted, the altimeter will indicate

- a. **lower than the actual altitude above sea level.**
- b. higher than the actual altitude above sea level.
- c. the actual altitude above sea level.

19

What is one flight instrument a pilot can adjust in the cockpit?

- a. Airspeed Indicator
- b. **Vertical speed indicator**
- c. Magnetic compass

20

What instrument is affected in a glass cockpit airplane when the Air Data Computer (ADC) fails?

- a. **Airspeed Indicator**
- b. Heading Indicator
- c. Attitude Indicator

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The pitot-static system drives the:

- a. Altimeter, vertical speed indicator, and heading indicator.
- b. Airspeed indicator, attitude indicator and heading indicator.
- c. **Airspeed indicator, altimeter, and vertical speed indicator.**

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What is an important airspeed limitation that is not color coded on airspeed indicators?

- a. **Maneuvering speed.**
- b. Never-exceed speed.
- c. Maximum structural cruising speed.

23

An aircraft cabin should be preheated in cold weather operations to:

- a. Never preheat the airplane cabin before boarding due to accumulation of moisture on the instruments.
- b. Ensure the comfort of the passengers before taxi.
- c. **Ensure the instruments will not stick.**

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What steps must be taken when flying with electronic flight instruments (glass cockpit) to ensure safe flight?

- a. Routine outside scanning techniques are no longer needed since all traffic and terrain information is displayed on the panel
- b. Always rely on backup analog gauges when there is a disagreement of information
- c. **Regularly scan both inside and outside the aircraft, use all appropriate checklists, and cross-check with other forms of information.**

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How do variations in temperature affect the altimeter?

- a. Higher temperatures expand the pressure levels and the indicated altitude is higher than true altitude.
- b. **Pressure levels are raised on warm days and the indicated altitude is lower than true altitude.**
- c. Lower temperatures lower the pressure levels and the indicated altitude is lower than true altitude.

26

What is the action of the airplane if the ball of the inclinometer moves to the right of center during a left turn?

- a. The airplane is coordinated.
- b. **The airplane is skidding.**
- c. The airplane is slipping.