

Sabreliner Systems Test

1. With battery power only and the airplane on the ground, the only bus not capable of being powered is the:
 - a. Battery bus
 - b. Essential DC bus
 - c. Secondary DC bus
 - d. Secondary AC bus

2. Which of the following statements is *CORRECT*?
 - a. If both generators fail in flight, the Secondary buses will automatically load shed.
 - b. If both generators fail in flight, all AC & DC buses will remain powered by the battery
 - c. To apply external power to the DC buses, the batteries must be OFF so that GPU power can connect to the battery charging bus.
 - d. The battery will continue to charge with the generators on the line regardless of the battery switch position.

3. Regarding ignition during the start sequence:
 - a. It occurs immediately when the START button is pressed
 - b. It is initiated automatically by the speed sensing switch at 10%
 - c. It occurs when the throttle is brought to idle
 - d. It is terminated by the fuel control step modulator when it senses ITT above 500°C

4. The fuel boost pump(s) are used for ALL of the following functions EXCEPT:
 - a. Engine start
 - b. As a backup for the engine driven pumps.
 - c. Engine crossfeed operations
 - d. fuselage- to- wing transfer of forward fuselage fuel.

5. If the high pressure engine driven pump fails,
 - a. The engine will flame out
 - b. The transfer ejector pumps will fail also, but the boost pumps will be activated ON by low pressure and will sustain the engine
 - c. The boost pumps will be inoperative also
 - d. Crossflow must be selected OPEN in order to get high pressure fuel flow from the opposite boost pump pump.

6. When the engine is shut down with the ENG-FIRE T- Handle (emergency shutdown)
 - a. The associated extinguisher will automatically discharge
 - b. The fuel and bleed air shut off valves close and both extinguishers are armed
 - c. The engine may not be restarted until maintenance is performed to reset

- the T-Handle
- d. The generator will continue to function, as long as the engine is windmilling above 20% N2
- 7 The majority of thrust produced by the TFE731 engine at low altitudes is obtained by
- The fan
 - The LP turbine
 - The compressor which is driven by the fan
 - The HP turbine
- 8 If a thrust reverser should deploy in flight
- The engine would automatically shut down
 - The associated throttle would automatically retard to idle
 - It is impossible for the reverser system to deploy in flight due to the Auto Stow feature
 - The TR switch should be placed to OFF immediately
- 9 Which of the following is **TRUE** regarding oil for the TFE731 engine
- Different types of oils may be mixed
 - Quantity should be checked with 15 minutes after shutdown
 - The maximum oil consumption is 4 qts per flight hour
 - The oil consumption figures will vary depending on brand of oil.
- 10 The aircraft hydraulic system provides pressure to operate the following systems:
- Landing gear, spoilers, Anti-Skid wheel brakes and nose wheel steering
 - Anti-skid wheel brakes, landing gear, flaps
 - Spoilers, landing gear, thrust reversers, wheel brakes, and nose wheel steering
 - Flaps, spoilers, landing gear
- 11 Which of the following is **INCORRECT** regarding the wheel toe brakes?
- May be operative with a HYD PRESS/PWR OFF light illuminated
 - Must be applied with the emergency system if a HYD PRESS/PWR OFF light is illuminated and the normal and aux hydraulic pressures are zero
 - Use the same type of approved fluid from the aircraft system
 - Are totally independent of the open center aircraft hydraulic system
- 12 The landing gear switch is prevented from movement on the ground by
- Nothing

- b. Hydraulic pressure
- c. Locking solenoid
- d. Manual lock

- 13 Which statement is **INCORRECT** regarding the landing gear?
- a. The EMER LG REL handle is operative with a loss of DC electrical power
 - b. The aircraft may need to be yawed to assure positive locking of the actuators following a free- fall gear extension in the event all three green lights are not illuminated
 - c. The LG ELECT RESET button controls the power to the landing gear handle, and, if tripped, will render the landing gear control handle completely inoperative.
 - d. The LDG GEAR circuit breaker controls the power to the landing gear control valve and, if open, the gear cannot be extended or retracted normally or abnormally.
- 14 When the emergency brakes are used
- a. The selector handle should be pumped in order to build up accumulator pressure sufficient to stop the aircraft
 - b. The toe brakes must be applied to allow the emergency accumulator pressure to reach the brakes
 - c. No differential braking is available
 - d. They will not be available if the gear has been extended with the EMER LG REL handle since that process will take all of the emergency accumulator pressure
- 15 The thrust reversers
- a. May be deployed only on the ground when the throttles are in IDLE
 - b. Must have the EMER STOW switch held in EMER for takeoffs to guard against inadvertent deployment during that critical phase of flight
 - c. May be left in FULL REVERSE until the aircraft is brought to a complete stop
 - d. Both A and C
- 16 The pressurization outflow valve(s)
- a. Will fail safe open if electrical power is lost

- b. Will function whether vacuum is available or not
 - c. Are intended for ground use only in the event of a vacuum failure
 - d. Depends upon vacuum to have any effect on pressurization
- 17 Which statement is **INCORRECT** regarding the hydraulic pump protection circuits?
- a. overtime
 - b. overtemperature
 - c. overcurrent
 - d. over/underpressure
- 18 Which statement is **INCORRECT** regarding the windshield?
- a. The forward windshield normally receives power from the No. 2 inverter
 - b. The instrument inverter powers both windshields in the event of a single generator failure.
 - c. The wiper system is designed to be used on the ground only
 - d. The NO 2 INV FAIL light will illuminate in the event of a single generator failure in flight as part of the load shedding feature
- 19 Which statement is **CORRECT** concerning the engine anti-ice system?
- a. The Engine Anti-Ice switches must be in the ON position for 12 seconds to insure that the engine inlets receive sufficient heat
 - b. The engine Anti-Ice switches must be turned on PRIOR to entering icing conditions.
 - c. The system should not be used below -40°C
 - d. With the Engine Anti-Ice ON, stall warning will be inoperative
- 20 Regarding the nosewheel steering system, which of the following is **INCORRECT**?
- a. If the nose steer button will not engage steering, the steering can be engaged by selecting the NOSE GR STEER to standby
 - b. Nosewheel steering should be limited to 60 knots ground speed
 - c. Nosewheel steering will be inoperative with a normal and aux hydraulic failure
 - d. The pneumatic system can be used to control the nosewheel steering in the event of hydraulic failure
- 21 Which of the following is **CORRECT**?
- a. Spoiler extension is authorized with flaps extended while airborne
 - b. Fuselage fuel is not included in max fuel weight (ZFW)
 - c. A tailwind component of 10 knots is not a limitation
 - d. A crosswind component of 25 knots is a limitation

- 22 Regarding the gust lock
- a. The engines may be started with it engaged
 - b. The aircraft should not be towed beyond 60° with it engaged
 - c. It makes no difference if it is engaged for towing
 - d. Both A and C