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Name/Employee #	Date
FBO/ASO Location	Score

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This exercise contains completion, matching, multiple choice and true/false questions. These questions are derived from material presented in both the video tape and the corresponding section of the E.C.R.G. Read each question carefully and review your answers before returning the test to your instructor.

**JET AIRCRAFT OPERATION AND SAFETY**

1. A \_\_\_\_\_ engine, through a series of high velocity spinning turbines, compresses air, mixes with fuel and ignites, to form the thrust that propels the aircraft.
2. \_\_\_\_\_ Jet and turboprop engine aircraft refueled in the United States typically use:
  - a. Avgas 100LL
  - b. Jet-A (“AVJET”)
  - c. Avgas 80/87
3. \_\_\_\_\_ Prior to refueling, you must verify that you have the correct fuel. Jet fuel is \_\_\_\_\_ in color.
  - a. blue
  - b. red
  - c. clear to straw
4. \_\_\_\_\_ When refueling near an operating APU, you must remember to:
  - a. keep yourself and all refueling equipment well clear of the APU exhaust
  - b. keep yourself and all refueling equipment in a direct line aft of the APU exhaust
  - c. keep yourself and all refueling equipment to the right of the APU exhaust

**SINGLE-POINT REFUELING**

5. Prior to beginning any refueling operation a \_\_\_\_\_ - \_\_\_\_\_ connecting the refuel unit and the aircraft must be attached.
6. Most business jet aircraft have their single point refueling adapter located on the \_\_\_\_\_ (left/right) side of the fuselage.
7. \_\_\_\_\_ (True or False) An aircraft’s single point refueling system may be controlled within the cockpit, by the pilot, or by you through the use of an exterior refuel panel.
8. Aircraft which receive fuel by the single point method must vent the air that is displaced by the fuel. These vents, which may require a manual check to assure proper venting, are generally located outboard and \_\_\_\_\_ (on top/underneath) each wing.
9. Immediately after removing the single point nozzle from the aircraft, you must replace the aircraft adapter \_\_\_\_\_, and verify that all switches, dials and gauges are in the off or proper position prior to securing the \_\_\_\_\_.

JET AIRCRAFT



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10. The Beechjet/Diamond receives fuel overwing with one filler cap on each wing, and an auxiliary filler located on the \_\_\_\_\_ (right/left) side of the aircraft, above the engine.
  11. The Challenger refuel adapter is located on the leading edge of the \_\_\_\_\_ (right/left) wing, with the refuel control panel located just \_\_\_\_\_ (above/below) the adapter on the fuselage.
  12. \_\_\_\_\_ (True or False) When refueling the Challenger 600 and 601 series, fuel pressure must be applied, the mode selector set to “test”, and the appropriate refuel switches positioned to “fuel”, in order to check for the proper operation of the auto level control (automatic shut off) system.
  13. The Cessna Citation I, II and Citation Jet which all refuel over wing, have \_\_\_\_\_ (1 or 2) filler cap(s) located outboard on each wing.
  14. \_\_\_\_\_ The single point filler access door for the Citation III, VI and VII is located:
    - a. on the left side of the aircraft, below the engine
    - b. on the right side of the aircraft, below the engine
    - c. on the right side of the aircraft, forward of the wing
  15. \_\_\_\_\_ Immediately after fuel begins to flow into the Citation III, VI and VII, you must:
    - a. depress the pre-check levers for each tank to be filled,
    - b. depress the left, right, and fuselage tank, if applicable, pre-check levers.
    - c. lift the left, right, and fuselage tank, if applicable, pre-check levers.
  16. \_\_\_\_\_ (True or False) The newer models of the Citation Ultra, which are refueled via the single-point method, are equipped with two pre-check valves, one for each wing.
  17. The Citation X, the largest of the Cessna jet series, has it's refuel panel located on the right side of the fuselage fairing, just \_\_\_\_\_ (forward/aft) of the wing root.
  18. \_\_\_\_\_ Identify the correct procedure for verifying the proper operation of the aircraft's automatic shut off system when refueling the Citation X:
    - a. open the left, center, right and fuselage pre-check valves and apply fuel pressure,
    - b. apply fuel pressure and open the left, center and right pre-check valves,
    - c. apply fuel pressure and open the left and right pre-check valves.
  19. \_\_\_\_\_ When fueling the Falcon 10 or 100, a pre-check of the automatic shut-off system must be completed immediately after fuel flow begins. This test is achieved by turning the “test valve” knob:
    - a. one-quarter turn clockwise.
    - b. one full turn counter-clockwise
    - c. one-quarter turn counter-clockwise
  20. \_\_\_\_\_ Refueling of the overwing Falcon 20 with pressurized fuel tanks, caution must be exercised caution when removing the filler caps. To assure your personal safety:
    - a. stand to one side, protect your eyes, and pop up the tab slowly,
    - b. stand directly in front, protect your eyes and pop up the tab slowly,
    - c. stand to one side, protect your eyes and pop up the tab quickly,.

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21. \_\_\_\_\_ When beginning the refueling for the aft single-point Falcon 20, you must depress the test button for the aircraft's automatic shut off system which will cause the:
- a. the amber lights to extinguish, the two green refuel lights to illuminate and fuel flow to slow,
  - b. the amber lights to illuminate and fuel flow to slow to less than 5 gpm,
  - c. the two green lights to extinguish, the amber lights to illuminate and fuel flow to stop.
22. \_\_\_\_\_ (True or False) When refueling of the Falcon 200, 50 and 900 series aircraft, the illumination of the green "fueling OK" light indicates that the tank vent valves have automatically opened and you may precede with refueling of the aircraft.
23. \_\_\_\_\_ When refueling the Falcon 200, 50, and 900 series aircraft, the illumination of the red "stop fueling" light at any time during the operation is instructing you to:
- a. set the rear selector to the lo position,
  - b. stop the flow of fuel immediately,
  - c. return the test valve handle to the closed position.
24. The Falcon 50 has one access door, below the right engine, that houses both the refuel control panel and the nozzle adapter. Opening this access door should automatically activate electrical power and the red \_\_\_\_\_ light should illuminate.
25. \_\_\_\_\_ After fuel begins to flow into the Falcon 900, you must check the aircraft's automatic shut off system by depressing the system "test" button. The result of a successful system test will be indicated by:
- a. the full lights should go out, and the fuel flow should slow to less than 10 gpm,
  - b. the red stop refueling lights and the two full lights to come on,
  - c. the three full lights should come on and fuel flow should stop
26. \_\_\_\_\_ (True or False) When refueling for a full fuel load on both the Falcon 900 and 2000 models, you should set the "full-partial" switch to "full" and set the required quantity of fuel requested by the pilot on the fuel selector.
27. \_\_\_\_\_ (True or False) All Gulfstream II, III, IV and IV aircraft refuel in the same manner and do not require the operation of refuel control panel switches.
28. The Hawker 400 and 600 series which refuel over wing may have a ventral fuel tank, located on the right side, near the aft end of the tail. If refueled, this tank must be refueled to \_\_\_\_\_ capacity.
- a. 50%
  - b. 100%
  - c. 25%
29. \_\_\_\_\_ (True or False) The 700, 800 and 1000 series Hawker aircraft may have the refuel control panel located in the cabin or within the flight deck which requires the pilot to control the delivery of fuel to the appropriate tanks.
30. \_\_\_\_\_ (True or False) Westwind series aircraft, which refuel by the single point method, will have (1 or 2) refuel switches which must be opened prior to refueling.
31. To refuel the Westwind series, you must first open the wing and/or tip tank valves by manually \_\_\_\_\_ (pulling down/pushing up) on each valve stick.
32. To properly test the Astra's automatic fuel shut off system you must:
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- a. wait five seconds, after fuel has begun to flow, hold the refuel switch in the test position, fuel flow should stop within ten seconds.
  - b. immediately after fuel has begun to flow, momentarily place the refuel switch in the test position, fuel flow should stop within twenty seconds.
  - c. immediately after fuel has begun to flow, place the refuel switch into the test position, fuel flow should slow to less than 10 gpm.
33. The early model Learjet aircraft, 20 and 35/36 series, all refuel over wing with a maximum side-to-side fuel differential of \_\_\_\_\_ gallons.
34. \_\_\_\_\_ (True or False) When refueling the Learjet 20 and 35/36 series, you do not need the fuselage tank to fill completely before a final top-off of the aircraft can be completed.
35. The Learjet 55 and 60 series both use the single-point refueling system. The system is located on the \_\_\_\_\_(right/left) side of the fuselage, just above the trailing edge of the wing.
36. In order to refuel the Learjet 55 or 60, the aircraft \_\_\_\_\_ switch, which may be located either in the cockpit or on the refuel panel, must be set to the "on" position.
37. \_\_\_\_\_ (True or False) After opening the wing and fuselage pre-check valves to test the Learjet 31 automatic shut off fuel system the vent light must be on and flow less than five gpm as verification that the system is operating properly.
38. The early model Jet Stars refuel \_\_\_\_\_(over/under) wing.
39. Select the correct tank sequence for refueling the Jet Star:
- a. refuel the auxiliary tank first, the inboard main, followed by the outboard main
  - b. refuel the inboard main first, the outboard main, followed by the auxiliary tank
  - c. refuel the outboard main first, inboard main, followed by the auxiliary tank
40. Immediately after fuel begins to flow into the Sabreliner you must;
- a. check the right and left wing fuel vents to verify air pressure is venting,
  - b. check your secondary automatic shutoff test button,
  - c. verify that the auxiliary "fill" button is in the "up" position.

***Instructor/Student Test Acknowledgment***

I have carefully reviewed each question and answer with the student regarding the material presented in this module. All items were discussed and answered to the satisfaction of the student and instructor.

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Instructor	Date
_____	_____
Student	Date