References: Airplane Flying Handbook (FAA-H-8083-3), Risk Management Handbook (FAA-H-8083-2), POH/AFM

KNOWLEDGE

The applicant demonstrates understanding of:

1. Aircraft Shutdown, Securing, and Postflight Inspection

- A. Engine Shutdown
 - i. Always use the procedures in the manufacturer's checklist for shutting down the engine and securing the aircraft
 - ii. Some of the important items include:
 - a. Set the parking brakes
 - b. Set the throttle to idle or 1000 rpm
 - If turbocharged, observe the spool down procedure
 - c. Turn the ignition switch off then on at idle to check for proper operation of switch in the off position
 - d. Set the propeller control (if equipped) to full increase
 - e. Turn electrical units and radios off
 - f. Set mixture control to idle cutoff
 - g. Turn the ignition switch to off when the engine stops
 - h. Turn the master electrical switch to off
 - i. Install the control lock

B. Securing

i. When the flying is complete for the day, the aircraft should be hangared or tied down and the flight controls secured

C. Postflight Inspection

- i. After engine shutdown and passenger deplaning, the pilot should perform a postflight inspection
 - a. This includes checking the general condition of the aircraft
 - b. If departing again, the oil should be checked and fuel added, if required
 - c. If the aircraft is going to be inactive, it is a good operating practice to fill the tanks to the top to prevent water condensation from forming

2. Documenting In-Flight/Postflight Discrepancies

- A. Get the Issues fixed
 - i. Don't leave problems for the next pilot
 - a. Safety is #1, if you don't report an issue, the next person may not be aware of the issue and has to deal with it
 - Treat it as though it's your aircraft
 - Don't put another pilot in a dangerous situation
 - The longer it takes for the problem to get reported, the longer it takes for someone to start working on the problem to get the aircraft back in service
 - a If you see or experience an issue, report it as soon as you can
- B. Documenting Issues allows others to see a history of problems the aircraft has experienced
 - i. Pilots can note trends before taking the aircraft
 - a. For example, If the aircraft tends to have a problem with a specific piece of equipment needed for a trip, the pilot can take a different aircraft or get the issue fixed

RISK MANAGEMENT

The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:

1. Inappropriate Activities and Distractions

- A. Distractions lead to ground incursions
 - i. Distractions can include updating the GPS, changing navaids, phone calls/texts (just because you have cell phone service doesn't mean you should pull out your phone), etc.
 - ii. Avoid these entirely while taxiing; wait until the aircraft is safely stopped with the parking brake set before you go 'heads down'
- B. Any activities other than those associated with taxiing, parking, and shutting down the aircraft are inappropriate and should be reserved until after all checklists are complete

2. Confirmation or Expectation Bias as Related to Taxi Instructions

- A. Often times pilots get complacent with taxi instructions you hear and repeat and taxi the same route consistently
 - i. This can turn into confirmation or expectation bias the pilot hears what he or she expects to hear, even though the instructions may have changed

B. Listen

- i. Always listen to the instruction, and repeat what you hear even if you expect to hear the same thing you always have
 - a. Clarify the instructions with ATC if you're ever unsure
- ii. Sooner or later the instructions will change (construction, hazard, another aircraft, etc.). Recognize the change and avoid an incursion

3. Airport Specific Security Procedures

- A. This is more of an issue now than it has ever been
 - i. If you see someone who doesn't look like they should be there, tell someone, do something
 - ii. Wait for gates to close behind you, don't let anyone who isn't authorized into the airport area
- B. Certain airports have specific procedures, follow those procedures for everyone's safety
 - i. Don't disclose gate codes, security information, etc. with those who are not authorized or required to know

4. Disembarking Passengers

- A. Ensure the passengers safety is of the highest importance when disembarking
 - i. The aircraft should be shutdown, or configured in a manner which allows for safe movement as required, and chocked to prevent movement
- B. Do not let the passengers disembark until all required checklists are completed and safety precautions are met

SKILLS

The applicant demonstrates the ability to:

- 1. Demonstrate runway incursion avoidance procedures.
- 2. Park in an appropriate area, considering the safety of nearby persons and property.
- 3. Complete the appropriate checklist.
- 4. Conduct a postflight inspection and document discrepancies and servicing requirements, if any.
- 5. Secure the aircraft.