# **Task XIV.A: Post-flight Procedures**

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## **Lesson Overview**

#### Objective

The student should develop knowledge of the elements related to postflight procedures and be able to perform them as required in the ACS/PTS.

#### Reference

- Aircraft Flight Manual / Pilot's Operating Handbook
- Airplane Flying Handbook (FAA-H-8083-3B, page(s) 2-18)

#### **Key Elements**

- 1. Shutdown Checklist
- 2. Postflight Inspection
- 3. Securing the Airplane

#### Elements

- 1. Parking
- 2. Engine Shutdown and Securing the Cockpit
- 3. Deplaning passengers
- 4. Postflight Inspection
- 5. Securing the Aircraft
- 6. Refueling Procedures
- 7. Common Errors

#### Equipment

- 1. White board and markers
- 2. References
- 3. iPad

#### **Instructor Actions**

- 1. Discuss lesson objectives
- 2. Present Lecture
- 3. Ask and Answer Questions
- 4. Assign homework

#### **Student Actions**

- 1. Participate in discussion
- 2. Take notes
- 3. Ask and respond to questions

#### Schedule

- 1. Discuss Objectives
- 2. Review material
- 3. Development
- 4. Conclusion

#### **Completion Standards**

The student can safely 'postflight' the airplane based on different situations and at different airports.

## **Instructor Notes**

#### Attention

Have you ever forgotten to turn something off after a flight? Leaving certain things running can be dangerous or costly. Properly securing an airplane is not important just to save on the costs though, weather and other situations can cause damage or injuries to others.

#### Overview

• Review Objectives and Elements/Key ideas

#### What

Postflight procedures are completed at the end of the flight when the airplane is parked, shutdown and properly secured.

#### Why

The postflight is just as important as preflight in maintaining the plane and keeping it safe for the next flight.

### **Lesson Details**

The flight isn't over until the plane is safely parked and secured. The postflight phase is an important part of any flight, and careful postflight activities should be considered a critical activity.

Parking Parking the aircraft starts with picking a location to part. Use airport custom, convention,

as well as a consideration of other aircraft and airport personnel when selecting a parking spot. You may get hand signals from a line person guiding you to a parking location, and if so follow those signals and park where indicated.

In the absence of directions from a line person, park so as to facilitate taxiing and parking by other aircraft. If there are ramp markings, park in an indicated space.



Unless parking in a designated area, the pilot should select a location and heading preventing the propeller or jet blast of other airplanes from striking the aircraft broadside or from the rear. Whenever possible park facing into the wind. As the aircraft is pulled into the parking spot plan for a moment of straight non-turning travel to allow the nosewheel to straighten.

Once parked with the engine shut down, chock and/or tie down the aircraft. Please learn and use appropriate knots when using ropes to tie down the aircraft,

#### Engine Shutdown and Securing the Cockpit

Always follow the procedures detailed in the aircraft POH/AFM. Use the provided checklist, if available. Read each item and perform each step (Read and Do). If the aircraft has a parking brake, set it to keep the plane from moving. The following list represents a typical shutdown checklist.

#### Typical Shutdown Checklist

- 1. Throttle Idle
- 2. Fuel Pump Off
- 3. Avionics Master Off
- 4. Electrical Equipment Off
- 5. Mixture Idle Cut-Off
- 6. Magnetos Off

#### 7. Master Switch Off

Another good practice is to, while the engine is still running prior to shutdown, move the ignition switch from BOTH to OFF, and back to BOTH. This will temporarily rob the engine of ignition, and is a way to check that both mags are grounded at every engine shutdown.

Once the engine is shut down secure the cockpit by gathering all personal items and trash. Doublecheck that the master is off, that the magnetos are off, that the key has been removed, that all electrical equipment is off, the trim is set to neutral (or takeoff position), and the mixture and throttle are at idle.

#### **Deplaning Passengers**

Always ensure that passengers remain seated with their belts on until the engine has been shut down. They, too, should gather personal belongings and exit the aircraft in a safe manner. Make sure passengers understand how to safely exit the ramp area, or escort them off the ramp.

#### **Postflight Inspection**

After the aircraft is shut down and deplaned, a quick postflight inspection should be performed. Check the general condition of the aircraft, and note any discrepancies that might be found. Refuel the aircraft, if appropriate, to minimize the chance of water condensation in the tanks.

Ensure that gust locks are installed, and that the aircraft is locked (if possible).

#### Securing the Aircraft

If at all possible, put the airplane in a hangar. This is always the safest option when available. When outside tie the aircraft down with the available ropes or chains, or at a minimum chock the wheels. If ropes are in use, employ a proper knot. If securing the aircraft for an extended period of time, use gust locks.

#### **Refueling Practices**

Ensure that the ramp personnel use the proper type/grade of fuel. If at all possible be present when refueling is happening. Always check the fuel prior to the next flight to ensure the proper fuel was used, and that it is free from contamination.

### **Common Errors**

Hazards resulting from failure to follow recommended procedures

• Poor planning, improper procedure, or faulty judgment in performance of postflight procedures

### Conclusion

When parking and shutting down the airplane it is very important, to follow the manufacturer's

established guidelines to ensure everything is properly shut down and secured.

## **ACS Requirements**

### **CFI PTS Standards**

#### To determine that the applicant

- 1. Exhibits instructional knowledge of the elements of postflight procedures by describing:
  - a. Parking procedure (ASEL).
  - b. Engine shutdown and securing cockpit.
  - c. Deplaning passengers.
  - d. Securing airplane.
  - e. Postflight inspection.
  - f. Refueling.
- 2. Exhibits instructional knowledge of common errors related to postflight procedures by describing:
  - a. Hazards resulting from failure to follow recommended procedures.
  - b. Poor planning, improper procedure, or faulty judgment in performance of postflight procedures.