

XIV.A. Postflight Procedures

References: [Airplane Flying Handbook](#) (FAA-H-8083-3), POH/AFM

Objectives	The student should develop knowledge of the elements related to postflight procedures and be able to perform them as required in the ACS/PTS.
Key Elements	<ol style="list-style-type: none">1. Shutdown Checklist2. Postflight Inspection3. Securing the Airplane
Elements	<ol style="list-style-type: none">1. Parking2. Engine Shutdown and Securing the Cockpit3. Deplaning passengers4. Postflight Inspection5. Securing the Aircraft6. Common Error
Schedule	<ol style="list-style-type: none">1. Discuss Objectives2. Review material3. Development4. Conclusion
Equipment	<ol style="list-style-type: none">1. White board and markers2. References
IP's Actions	<ol style="list-style-type: none">1. Discuss lesson objectives2. Present Lecture3. Ask and Answer Questions4. Assign homework
SP's Actions	<ol style="list-style-type: none">1. Participate in discussion2. Take notes3. Ask and respond to questions
Completion Standards	The student can safely 'postflight' the airplane based on different situations and at different airports.

Instructor Notes:

Introduction:

Attention

Interesting fact or attention-grabbing story

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

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.

How:

1. Parking

- A. Select a parking location and heading that avoids the propeller/jet blast of other planes
 - i. Also ensure you are not parked in a way that will blast other aircraft
 - ii. Be considerate of others
- B. Whenever possible, park heading into the wind
 - i. Often, your choice is limited to designated parking spots and tie downs - work with what you have
- C. Hand signals may be used if ramp personnel are available – be familiar
- D. After stopping, allow the airplane to roll forward to straighten the nosewheel



2. Engine Shutdown

- A. Follow the procedures outlined on the manufacturer's checklist for shutting down and securing
 - i. Read each item aloud and perform the task (Read and Do)
 - ii. **Common Error** - Hazards resulting from failure to follow recommended procedures
 - a. Like always, it is very important to follow the manufacturer's checklist
 - b. Follow the published procedures to avoid missing important steps/creating an unsafe situation
- B. Set the parking brake to keep the plane from moving
- C. *Checklist:

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- i. Throttle Idle
 - ii. Fuel Pump Off
 - iii. Avionics Master Off
 - iv. Electrical Equipment Off
 - v. Mixture Idle Cut-Off
 - vi. Magnetos Off
 - vii. Master Switch Off
- D. *While the engine is running, move the ignition switch from BOTH to OFF and back to BOTH
- i. This ensures the magnetos are properly grounded at every engine shutdown
- E. Once the engine is shutdown, secure the cockpit
- i. Gather belongings and complete any securing checklist items (control lock, windows, shades, etc.)
- F. *Double check that the master is off, the magnetos are off and the key has been removed, electrical equipment is off, the trim is neutral, flaps are up, and the mixture and throttle are idle

3. Deplaning Passengers

- A. Ensure passengers understand the safe procedures for exiting the airplane (after engine shutdown)
- i. Inform them when it is safe to unbuckle and exit
- B. Be aware of potential hazards nearby – other aircraft starting, taxiing in/out, etc.
- i. Ensure the passengers know where to go to prevent wandering into an unsafe situation

4. Postflight Inspection

- A. After shutdown and deplaning, a postflight inspection should be accomplished
- i. Check the general condition of the aircraft
 - a. Inspect the outside for any damage that may have occurred
 - b. Look for leaks, streaks, stains
 - c. Check oil, and other required fluids and replenish as necessary
 - d. Note any discrepancies
- B. Fuel should be added based on the immediate use of the airplane
- i. If another flight is planned, the tanks should be filled based on that flight's fuel requirements
 - ii. If the aircraft is going to be inactive, fill the tanks to prevent water condensation from forming
 - iii. Refueling Procedures
 - a. Ensure the ramp personnel use the proper type/grade of fuel
 - If possible, be there when the fueling takes place to ensure the proper grade
 - b. Always check/drain the fuel prior to the next flight to be sure the proper fuel was used and water/sediment hasn't accumulated since the last flight

5. Securing the Aircraft

- A. A flight is never complete until the engine is shut down and the airplane is secured
- i. Securing involves shutdown, removing personal belongings, postflight inspection, tiedown/chocked, flight controls secured/gust locks, covered as necessary (shades, pitot covers, aircraft covers, etc.), hangered, and any other requirements for your aircraft
 - ii. This should be considered an essential part of every flight
- B. The aircraft should be hangered or tied down and chocked, flight controls secured, locked as required
- i. Verify the nosewheel is straight
 - ii. Tie downs may vary significantly between chains and well-worn ropes
 - a. Chains are not flexible and therefore should not be made taught to prevent structural damage
 - b. Ropes are flexible and may be reasonably cinched to the tie down rings
 - iii. Brakes should be set based on local procedures – some request the brakes set, some don't

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- C. Cover the airplane as required (airframe, propeller, shades, cowling inlet covers, etc.)
- D. Close the windows, ensure you have everything, and lock the airplane
- 6. **Common Error - Poor planning, improper procedure, or faulty judgment in performance of postflight procedures**
 - A. Be aware of the parking areas (ramps space, FBOs, etc.) at the destination
 - i. If necessary, contact the FBO or parking management to verify the location and any procedures
 - B. Follow all checklist(s) step by step, and ensure the airplane is left in a safe condition for the next flight
 - i. Do not skip the postflight inspection, assuming the next pilot will catch any issues in their preflight
 - a. They might not catch the issue which could be very hazardous
 - b. The issue could have been found and possibly fixed prior to them showing up (be considerate)
 - ii. If a discrepancy is noted, attempt to have the issue inspected/fixed prior to the next flight
 - C. Leaving the airplane in an unsafe place, condition, or situation can result in damage and/or injuries

Common Errors:

- Hazards resulting from failure to follow recommended procedures
- Poor planning, improper procedure, or faulty judgment in performance of postflight procedures

Conclusion:

Brief review of the main points

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.

PTS Requirements:

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 judgement in performance of postflight procedures.