

PREFLIGHTING AN AIRCRAFT

[[YELLOW BAR (DESCRIPTION OF SESSION)]]

This session gives Explorers hands-on practice in conducting the preflight inspection of an aircraft.

CATEGORY

- Higher-order Thinking
- Communication

OBJECTIVES

By the end of this session, participants will be able to:

- Successfully preflight an aircraft.
- Understand safety skills in ensuring safe flight.
- Demonstrate the acquired skills.
- Discuss consequences of an incomplete or inaccurate preflight inspection.

SUPPLIES

- A single-engine aircraft
- Operating manual for the aircraft
- Oil rag
- Fuel tester
- Ladder
- Certified flight instructor or commercial, instrument, or private pilot
- “How to Preflight a Cessna 172”—download from <https://www.youtube.com/watch?v=C-yqLXZtkjA>

ADVISOR NOTE: Text in italics should be read aloud to participants. As you engage your post in activities each week, please include comments, discussions, and feedback to the group relating to **Character**, **Leadership**, and **Ethics**. These are important attributes that make a difference in the success of youth in the workplace and in life.

ACTIVITY

Preflight Inspection

Begin by reviewing the preflight pages of the operating manual for the specific plane on which the preflight inspection will be demonstrated. You may also show Explorers [“How to Preflight a Cessna 172”](#) from GeneralAviationGuru.

In small groups of no more than three, have the certified flight instructor or pilot demonstrate the preflight inspection from beginning to end, allowing the Explorers to perform the hands-on tests.

After participants have had the chance to conduct the inspection, either switch to a different aircraft that has a number of things “wrong” with it or make some changes to the current aircraft that would make it fail a preflight inspection. Then see if participants can point out those items that would not pass an inspection. Running this as a contest is a fun and competitive way for participants to do their best.

Make sure you correct any issues you created to ensure a safe flight for the next pilot.

ADVISOR NOTE

Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own questions that relate to your post or specific focus area.

REFLECTION

Focusing Questions

- *Who is responsible for preflighting an aircraft?*
- *What is one new thing you learned during today's discussion?*

Analysis Questions

- *Now that you know how to complete a preflight, discuss how a successful preflight can prevent in-flight problems.*
- *How can incorrectly preflighting an aircraft adversely affect aircraft performance in flight?*

Generalization Questions

- *What can you do now, during your time as a student, to prepare yourself for this or a similar career in the aviation field?*

RESOURCES

None