

## ACTIVITIES 3.2 & 3.3

# PREFLIGHT ACTIVITY & ORIENTATION FLIGHT

Thanks to CAP, thousands of young people have enjoyed their first flight in an airplane. At Great Start, the goal is not simply to fly cadets, but to provide them with a mini ground school to make their flight more meaningful and introduce them to the world of aviation. Many cadets are not only new to flying, they will be visiting a general aviation airport for the first time, so this activity includes time for the cadets to explore the anatomy of an airport. Further, this activity presents a good opportunity to explain why a drug-free ethic is so important in CAP. Most importantly, this activity's overall goal is to get cadets excited about flying and motivate them to continue in the Cadet Program. This activity is a lead-in to the cadets' first orientation flight (Activity 4.3), which is flown according to CAPP 52-7, *Cadet Orientation Flight Syllabus*.

### Suggested Instructors

**PIC.** A qualified orientation pilot flies the aircraft, following the orientation flight syllabus.

**Ground Instructor.** Another pilot, aerospace officer, or similar individual should draw upon their knowledge to conduct the ground activities listed below.

**Cadet Officers and NCOs** could assist in leading the ground activities below, if they are knowledgeable about flying.

### Duration of Preflight Activities

Approximately 50 min

### Objectives

1. Identify key features of a general aviation airport and describe their function
2. Identify key features of an aeronautical sectional chart
3. Assist the instructor in observing the weather conditions and obtaining a forecast
4. Defend the idea that aviators need to be healthy, drug-free, and alert
5. Actively observe an aircraft preflight

### Best Practices to Consider

- Create a sortie schedule in advance to make efficient use of the aircraft and to limit the cadets' down-time on the ground.
- Divide the cadets into groups of 2-4 cadets so that they may all have a good view of the aircraft preflight.
- Fly 2 cadets at a time (if the aircraft allows). Fly to a neighboring field, land, have the front seat cadet move to the back seat and vice versa, then return to the home field.
- Start the day by having the first group of cadets complete this Preflight Activity, which should take about an hour. Then send them off to fly. Shortly after the first group launches, the second group should arrive and begin this Preflight Activity. Repeat the cycle as many times as needed.

- Make the most of the pilot's and the aircraft's time. Have another senior member manage the cadets on the ground, prepare them for their flight, take care of paperwork, and debrief them.

## LESSON OUTLINE

### 1. Examine the Airport's Anatomy (10 min)

This might be the cadets' first trip to a small airfield. Find a safe location with a good view of the field to point out and explain the function of the following features (where applicable):

- Windsock
- Active runways
- Taxiways
- Runway markers
- FBOs (fixed base operator)
- Tower
- ILS (instrument landing system)

### 2. Review the Aeronautical Chart (10 min)

Have the cadets locate their airport on a sectional chart. Point out important features in the area, such as mountains, restricted airspace, VORs, etc. If flying to another airport, have the cadets locate it on the chart and determine the heading they'll be flying each way.

### 3. Observe the Weather (10 min)

Have the cadets assist the pilot in command (PIC) or ground instructor in checking the weather conditions, winds aloft, radar, etc.

### 4. Drug Free Ethic (2 min)

The PIC should pause to mention the importance of following a drug-free ethic. Drugs and alcohol don't mix with flying. On a similar note, crew rest is important, too. Pilots need to be healthy and fully alert.

### 5. Restroom Break (10 min)

Last chance for the fliers to use the facilities.

## 6. Preflight. (20 min)

The Pilot-in-Command (or anyone knowledgeable about flying) should lead the cadets through a basic preflight and safety briefing.\* Explain what is being checked and why. Conduct the standard passenger briefing. Encourage the cadets to ask questions.

*\* Of course, the PIC maintains responsibility for pre-flying the aircraft. But to save time, each group of 2-4 cadets might "preflight" one aircraft on the ground, while another aircraft, pre-flighted once by the PIC, is used for the actual flying.*

## 7. Go Fly. (3 hrs)

Conduct the flight using CAPP 52-7, *Cadet Orientation Flight Syllabus*.

*Note: Be sure to take pictures!*