



Fort Mifflin

Fort Mifflin & Hog Island Roads, Philadelphia PA • (215)-685-4167 • www.fortmifflin.us

Incoming (Flight)!

The Fort Mifflin Aviation Program

Overview and Objectives:

This activity is designed to teach students the basic principles of flight through simple lessons and practical demonstrations. Including:

To teach students about the forces that act upon a plane during flight.

To show how planes steer through the air.

Program Length: 45-60 minutes

Education Requirements:

The activities included in this program are designed to partially or completely fulfill the following requirements:

Boy Scouts:

Aviation Merit Badge: 1a-d; 3b; 4c; 5

Why learn about planes at a Revolutionary War fort?

Fort Mifflin is a unique location to teach students about aviation. The Fort is location directly adjacent to Philadelphia International Airport, one of the busiest airports in the country serving over 400,000 flights per year, many of which can be seen flying directly above the Fort!



Pre-visit Activities:

Before your visit to Fort Mifflin, have students go over these informative materials on aviation produced by NASA and the Aircraft Owners and Pilots Association.

Aircraft Owners and Pilots Association, *PATH to Aviation: Airplanes!*,

<http://www.aopa.org/path/airplanes.pdf>.

Aircraft Owners and Pilots Association, *Careers in Aviation*, <http://www.aopa.org/path/careers.pdf>.

National Aeronautics and Space Administration, *How Does a Jet Engine Work?*,

<http://www.grc.nasa.gov/WWW/k-12/UEET/StudentSite/engines.html>.

National Aeronautics and Space Administration, *Dynamics of Flight*,

<http://www.grc.nasa.gov/WWW/k-12/UEET/StudentSite/dynamicsofflight.html>

On-site Activities:

While visiting the Fort, a tour guide will go over the basic principles of flight. Your students will see the concepts they learned in action through simple demonstrations. They will then get the chance to apply their knowledge by building and flying their own FPG-9 glider.



Image Source: Academy of Model Aeronautics