ALC
Pilot Experience
Thank you for choosing to bring your students to the Lone Star Flight Museum Aviation Learning Center. This packet contains basic instructions to prepare your students for the activity. Please refer to the ALC Pilot Experience Pre/Post Activity Packets available online at lonestarflight.org under the Education/Teacher Resources tab for extension lessons on vocabulary and knowledge presentations.

The LSFM Education Department staff is here to help you. If you would like to walk through the center, staff is available on the second Saturday of every month for tours and to help prepare. Questions can also be emailed to education@lonestarflight.org.

OVERVIEW

Students will learn about the science of flight and experience what it takes to be a pilot. They will perform a pre-flight safety inspection on a real airplane, create a flight plan, and fly the route in flight simulators.

BIG IDEAS

- Forces of Flight
- Navigation and Map Reading
- Parts of a Plane
- Flight Controls

OUTCOMES – What will students know or be able to do by the end of the lesson?

- Identify the preparations a pilot must undertake before flying.
- Appreciate the skill required to fly a plane.

VOCABULARY

- Force
- Aileron
- Elevator
- Rudder
- Nautical Mile
- Knots
- Latitude & Longitude
- Simulator
PRIOR TO ARRIVING AT LONE STAR FLIGHT MUSEUM

- Use the Pilot Experience Roster to divide your class evenly into two groups, Alpha Crew and Bravo Crew.
- Assign partner teams within the groups; students will work in these pairs throughout the entire program.
- If your class has an odd number of students, a student will work with others during the flight preparation part of the program, but will fly the simulator without a partner.

  - Bring two copies of the roster to The Lone Stone Flight Museum.
  - Give a copy to the Educator at the beginning of the program.

Alpha and Bravo Flights will rotate through two different areas of the ALC: the **Mooney Hangar**, and the **Flight Simulator Bay**.

Assigning Teams
### ALPHA Crew

1. 
2. 

1. 
2. 

1. 
2. 

1. 
2. 

### BRAVO Crew

1. 
2. 

1. 
2. 

1. 
2. 

1. 
2. 

Pilot Experience Roster
Overview Mooney Hangar:

- Common Core State Standards- English Language Arts
  
  Reading Informational Texts: RI.6.7
  Speaking and Listening: SL.6.1, SL.7.1, SL.8.1
  Reading Science and Technical Subjects: RST.6-8.4, RST.6-8.7

- Common Core State Standards- Math
  
  Number Systems: 6.NS.B.3, 7.NS.A.3
Simulators:

- 21st Century Skills
  - Work Creatively with Others: 1.B.4
  - Collaborate with Others: 3.B.1
  - Apply Technology Effectively: 6.A.1
  - Adapt to Change: 7.A.1, 7.A.2
  - Be Flexible: 7.B.2
  - Interact Effectively with Others: 9.A.2
  - Work Effectively in Diverse Teams: 9.B.2
  - Guide and Lead Others: 11.A.1
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Overview Mooney Hangar:

- Common Core State Standards- English Language Arts
  Reading Informational Texts: RI.11-12.7
  Reading Science and Technical Subjects: RST.9-10.4, RST.11-12.4, RST.11-12.7
  Speaking and Listening: SL.9-10.1, SL.11-12.1

- Common Core State Standards- Math
  Number and Quantity: Quantities: HSN.Q.A.1, HSN.Q.A.3

Simulators:

21st Century Skills

Work Creatively with Others: 1.B.4
Collaborate with Others: 3.B.1
Apply Technology Effectively: 6.A.1
Adapt to Change: 7.A.1, 7.A.2
Be Flexible: 7.B.2
Interact Effectively with Others: 9.A.2
Work Effectively in Diverse Teams: 9.B.2

Guide and Lead Others: 11.A.1