



FUTURE U.

Topic Series: Flight Path

Objectives

Students will be able to:

- **Explore** some of the many different careers that contribute to aviation
- **Research** one career in further detail and develop an award that explains its contribution to the aviation development process

Episode 5

Services and Topic Series Wrap up—Maintaining the fleet to optimize operations

Materials

- Service & Support video to project
- Careers handout, one per student
- Employee of the Month handout, one per student
- Devices with Internet access for research, at least enough for half the class

Timing

45 minutes

National Standards

ITEA Standards for Technological Literacy

Standard 3: The Relationships Among Technologies and the Connections between Technology and Other Fields

In order to appreciate the relationships among technologies and other fields of study, students should learn that:

- F. knowledge gained from other fields of study has a direct effect on the development of technological products and systems.

English Language Arts Common Core State Standards

Reading:

To comprehend engineering design, students should learn that:

- CCSS.ELA-LITERACY.CCRA.R.7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Writing:

- CCSS.ELA-LITERACY.CCRA.W.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Engage

- Prepare for a 4 Corners Activity by placing a sign with the following in the four corners of the classroom “Agree, Disagree, Strongly Agree, and Strongly Disagree”
- Then guide students through the activity by performing the following:
 - Read aloud the 4 Corners Statements (below) one at a time. They each prompt students to reflect on what they have learned and experienced during this Boeing Topic Series.
 - After reading each statement, encourage students to independently think about their answer and then walk to the corner of the classroom that aligns with their response.
 - Instruct each group in each corner to have a discussion around their answers, and then appoint one person to be the 'voice' of their corner's opinion. This person should share their group's point of view.
 - Before reading the next statement and beginning again, give students a moment to move to a new corner if they changed their mind after hearing their peers' thoughts.

Statements:

- Airplane development is a linear process; it has a clear beginning and end, and the process always moves forward in a straight line.
- Testing is important during all phases of airplane development.
- Safe and innovative airplanes can be built without collaboration.
- People with diverse backgrounds and diverse careers are needed to contribute to airplane

Investigate & View

- Tell the class that they are about to watch a video that demonstrates the ongoing process of airplane development and highlights just some of the many careers that work to make this process possible.
- Pass out the Careers handout, and explain that students should listen carefully for different careers that are mentioned as they watch the video. As they hear about these careers, they should write the career title or role in the first blank and fill the second blank with its responsibilities.
- Play the Service & Support video. When the video ends, give students a couple minutes to finish recording their notes.
- Then call on a few students to share the responsibilities that they have recorded for one career, and encourage the rest of the class to guess the job title.
- Wrap up by summarizing that there are many different careers and many different backgrounds (in terms of skills, interests, education, and more) needed to create safe, efficient, and innovative planes!

Apply

- Explain that students will now put themselves in the shoes of one of these careers and imagine they have been awarded Employee of the Month for their hard work and contribution to Boeing's newest low-drag airplane.
- Encourage students to review their Career handout notes and select one career that interests them.
Note: You may also consider encouraging students to search for additional careers that contribute to airplane development using <https://jobs.boeing.com/>.
- Then distribute an Employee of the Month handout to each student.
- Review the sections that students will fill out, and encourage them to do Internet research to learn more about their selected career before they begin. (Websites like the [U.S. Bureau of Labor Statistics](#) or [Career Explorer](#) may be good starting points.)
- Also be sure students understand that they should use what they have learned about the career to *infer* answers to some of the award's questions, including the role this career may have played in the development of their low-drag plane. They should be creative and have fun as they fill out the award information!
- When students have finished their awards, wrap up the session by inviting students to share the career they have selected and how they envisioned this career could have contributed to the development of their low-drag plane.
- Conclude by reminding students of the diverse range of people and careers that are needed in every aspect of aviation, and encourage them to keep this field in mind as they consider career options in the future!

HELLO
my name is _____

(Career Title)

I am responsible for _____

HELLO
my name is _____

(Career Title)

I am responsible for _____

HELLO
my name is _____

(Career Title)

I am responsible for _____

HELLO
my name is _____

(Career Title)

I am responsible for _____

HELLO
my name is _____

(Career Title)

I am responsible for _____

HELLO
my name is _____

(Career Title)

I am responsible for _____

Employee of the Month

(your name)

is recognized for their contribution to Boeing's newest low-drag airplane

Career Title

Length of Time at Boeing

Job Responsibilities

Favorite Part of Your Job

How did you contribute to the development of Boeing's low-drag airplane?

What aerospace innovation would you like to work on next?