



Aviation Resources for Educators

How to start or level up!

Academic Innovation Conference

Asheville, NC • June 10, 2026

Overview

Session Highlights

Explore key aviation and aerospace resources for the K-12 classroom:

- Civil Air Patrol
- AeroEducate
- AOPA You Can Fly
- Choose Aerospace
- Air Force Association

Engage in integrative STEM activities and more!



Presenter

Kevin Sutton, Ed.D, DTE

Assistant professor at Appalachian State University, specializing in career and technical education.

Education

- B.S. & Ed.D. in Tech Ed, NC State
- M.A.Ed. in Curriculum, Virginia Tech

Research Focus

Addressing aviation workforce shortages and developing engaging STEM education activities for teachers.



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Read the room

Welcome!

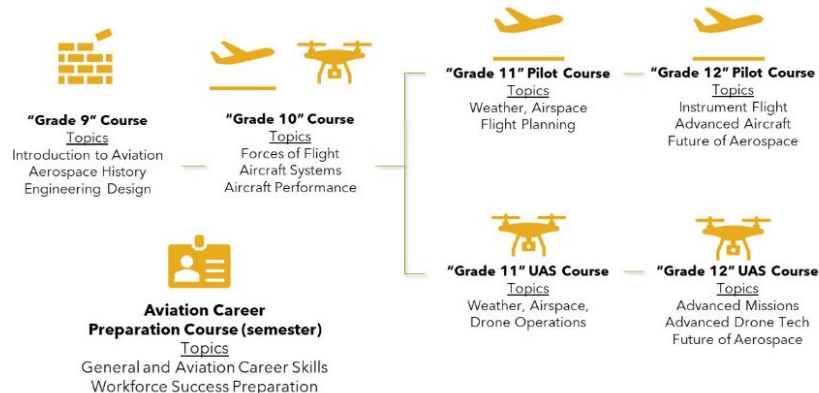
Please share your **role in education**, resources you might be interested in, and anything else you'd like to learn today!



AOPA

A menu of seven courses in two high school aviation STEM career and technical education (CTE) pathways: Pilot and Unmanned Aircraft Systems (drones). You can offer one, some, or all courses in any school year to match your program goals and students' needs.

<https://youcanfly.aopa.org/high-school/high-school-curriculum>



STEM AVSED (FAA Educational Outreach)



Federal Aviation
Administration

STEM AVSED - FAA Educational Outreach: The FAA conducts outreach through the Science, Technology, Engineering, and Math Aviation and Space Education Program (STEM AVSED), to empower the youth of today to explore and connect to the aerospace careers of tomorrow.

Aviation and space career exploration offers exciting opportunities for the next generation of leaders to use their imaginations and technical skills to shape the future of flight. From drones and gliders to airplanes and rockets, the FAA STEM AVSED Program introduces K-12 students to a new world of possibilities.

<https://www.faa.gov/education>



Tango Flight



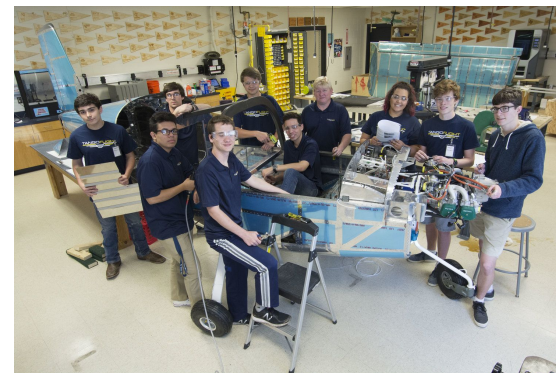
Tango Flight Incorporated is a 501c3 educational non-profit corporation created to inspire the next generation of engineers, pilots, aviation mechanics and technicians. Our proprietary curriculum provides meaningful classroom learning with real hands-on training. Students apply classroom knowledge to building an actual, FAA certified airplane.

Since 2016, TFI has worked with educators and aviation experts across the country to construct an innovative and exciting STEM-focused educational program.

Partnering with Wichita State University and the Airbus Foundation, we have created a cutting-edge curriculum that provides students;

- A strong mechanical, electrical and aerospace engineering foundation and
- Fundamental technical and mechanical skills to build an FAA certified airplane

<https://tangoflight.com/>



NASA

NASA: The NASA Jet Propulsion Laboratory (JPL) Education website offers a wealth of K-12 educational resources focused on space science, engineering, and technology. It includes lesson plans, student projects, videos, and interactive activities designed to inspire and engage students in STEM learning. The site also provides resources for educators to enhance their teaching and connect with NASA missions and science.

<https://www.jpl.nasa.gov/edu/resources/>



AMA



The Academy of Model Aeronautics (AMA) focuses on model aviation education, providing resources and support for clubs, schools, and community groups. Their programs include hands-on projects, lesson plans, and partnerships with organizations like NASA and the FAA to promote STEM learning through model aviation.

<https://www.amaflightschool.org/programs>



AFA Grants for Educators

Educator Grants

Membership is free. Every year, AFA awards \$20,000 in grants to 40 educators poised to make a lasting difference. The grant process is competitive. A committee of aerospace education experts reviews all qualified applications and scores them based on their detailed grant proposals. AFA selects projects that best serve our nation's students and support our mission.

Thompson-Mallett National Teacher of the Year

The Thompson-Mallett National Teacher of the Year award is presented to a dedicated K-12 educator and AFA State Teacher of the Year winner. This honor recognizes STEM educators for their outstanding classroom performance, collaborative initiatives, educational outreach, leadership, and significant impact in the school and community.

<https://www.afa.org/grants-for-education/>



Flight Test

Flite Test STEM is an educational program that uses DIY RC aircraft projects to teach students about STEM concepts. The program offers lesson plans, instructional videos, and project guides to help educators incorporate hands-on aviation activities into their curriculum.

<https://ftstem.com/>



CAP Resources for Educators



CIVIL AIR PATROL
U.S. AIR FORCE AUXILIARY

One time \$35 membership fee, renewals are free. Access to all the CAP Educational materials

Activity units: posters, coloring booklets and information on a variety of topics in aerospace, aviation and aviation history.

STEM Kits! These are FREE kits that you keep after doing the activity.

Apply between Sept and April application is simple and brief. Administer a pre-test, facilitate the activity with students (take lots of pictures!), submit your report on the activity, then apply for a new one!

TOP Flights - 1 flight per year in a CAP plane with a CAP Pilot!

Awards: each year CAP honors Wing, Region and a National Aerospace Educator of the Year. Other awards are also available.

<https://www.gocivilairpatrol.com/programs/aerospace-education/join-as-a-n-aem>



Students in Aviation



Students in Aviation: Students in Aviation (SIA) is a non-profit organization dedicated to motivating and supporting high school students towards building a career in aviation. They provide free flight simulators, online learning materials, and aviation scholarships to schools and students across the United States. SIA also offers ground school classes and helps establish local aviation clubs to foster interest and skills in aviation among young students.

<https://studentsinaviation.org/>



EAA AeroEducate

Free membership!

Created by the Experimental Aircraft Association (EAA), AeroEducate offers free, age-based activities and pathways to aviation careers for K-12 students. It provides engaging STEM activities and a unique badging system to inspire and track students' progress in aviation.

<http://AeroEducate.org>



AirCamp

Open to K-12 educators; there is an application process, if accepted \$100 registration fee and pay travel expenses to and from Dayton, OH; hotel and meals all covered.

Activities included field trips to Museum of the Air Force and Huffman prairie - among many others! Also, lesson development in support of aerospace education.

<https://aircampusa.org/>



Other input

We cannot ever capture them all!

Hovercrafts - (the little ones ;)

