




'22

FEDEX AOPA FOUNDATION HIGH SCHOOL
AVIATION
STEM SYMPOSIUM
presented by Boeing

November 13-15 | Memphis, TN

PROGRAM GUIDE SPONSOR

KANSAS STATE
UNIVERSITY | Salina

Aerospace and Technology Campus



CONTENTS

Welcome Letters	2
Sponsors	4
Sponsor Profiles	5
Agenda	10
Keynote Session Descriptions	15
Breakout Session by Interest Area	17
Breakout Session Descriptions	18
Exhibitor Profiles	25
Experience Lab	29
Speaker Bios	31
About AOPA	46



SCHEDULE YOUR PERSONALIZED VISIT TODAY!

Bachelor’s Degree Options

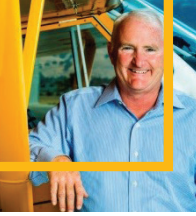
- Aviation Maintenance Management
- Aviation Management
- Professional Pilot
- Professional Aviation - Online
- Unmanned Aircraft Systems

Master’s Degree Option

- Aeronautics

Associate Degree and Certificate Options

- Aviation Maintenance
- Professional Pilot
- A&P Certificate



Welcome to the 2022 FedEx AOPA High School Aviation STEM Symposium Presented by Boeing. We are excited to be together in-person for our biggest and most ambitious Symposium, yet!

There has never been a better time for us to gather, simply because there's never been a better time to introduce young people to career opportunities in aviation and aerospace. We are seeing unprecedented demand for pilots, engineers, technicians, maintenance experts, and other aviation professionals. At the same time, drones, urban air mobility, and government-business spaceflight partnerships are emerging segments that will need a highly trained workforce.

That's why we're focusing on the future during this year's event, with a dynamic and engaging speaker lineup that represents diverse corners of the aviation community.

In our general sessions, you'll hear from airline executives, astronauts, rocket scientists, and media personalities who are shaping aviation's present and future. They'll share their own journeys and provide insight into the opportunities awaiting your students.

Breakout sessions will deliver practical tools and hands-on experiences to help you launch or grow aviation STEM programs, test classroom activities, connect to new resources, and inspire the next generation of aviators.

Our exhibitors will be available to bring you information, products, and services to support your programs and your students' education and career ambitions.

We couldn't ask for a better place to talk about the future of aviation than right here in Memphis at the FedEx Experience Center, the premiere showcase of the world's largest cargo airline. You'll see first-hand how FedEx manages one of the largest aircraft fleets in the world and ships millions of packages to destinations worldwide every day.

And, of course, don't forget to experience Memphis's own highfliers at the March of the Ducks in the lobby of our beautiful venue, The Peabody Memphis.

This is a very special event—not only because of its unique content but also because of the energy, enthusiasm, and ideas each of you brings to our students and future professionals.

Thank you for being here and for being an integral part of creating the next generation of aviation and aerospace leaders.

Blue skies!

A handwritten signature in black ink, which appears to read "Mark Baker". The signature is fluid and stylized, with a long horizontal line extending to the right.

Mark R. Baker
President & CEO, AOPA



Welcome to Memphis, home to FedEx and the 2022 FedEx AOPA Foundation High School Aviation STEM Symposium Presented by Boeing. On behalf of the FedEx team, we're honored to have you here and host the Symposium. Over the next two days, you will share ideas, insights, and best practices for starting and building aviation STEM programs.

There's never been a better time to introduce students to the aviation industry. The past few years have shown that air cargo is the key to connecting the world, and FedEx has been proud to do our part, shipping everything from vaccines and medical supplies to humanitarian aid and baby formula.

Today, there is an unprecedented demand for aviation jobs, including maintenance technicians, engineers, airport operations, and crew members. With your help and the dialog shared during this meeting, you will learn even more to prepare students for successful careers in the aviation and aerospace field.

We are proud to welcome you to the FedEx Experience Center for Monday's session and hear from Senior Vice-President of Flight Operations Don Dillman, learn about our worldwide flight operations, and meet with our pilots.

Breakout sessions will focus on a wide range of topics, from pitching an aviation program to your administration, to partnering with a flight school, college aviation options and bringing AOPA's STEM curriculum to your school.

On behalf of the FedEx team, thank you for joining us. We can't wait to meet you and help create greater opportunities for tomorrow's aviation and aerospace leaders.

Sincerely,

Robin Sebasco
System Chief Pilot
FedEx Express

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AOPA Foundation Sponsors





Aviation Management Consulting Group (AMCG) has been promoting general aviation management excellence through the provision of trusted aviation management consulting services, support, and resources for over 20 years.
aviationmanagement.com



Founded by AOPA member Jim Thompson, the **BlueSky Educational Foundation (BSEF)** provides promising students opportunities to experience aviation firsthand through camp and flight scholarships, internships, university scholarships, and other programs focusing on STEM through aviation. The flagship of the foundation is its Aeronautical STEM Curriculum and Kit. This program provides 6-8 weeks of hands-on project-based learning for upper elementary students. The curriculum is correlated with Next Generation Science Standards and Common Core Educational Standards. To date, BSEF has supported over 2,500 students and teachers.
blueskyfoundation.org



With more than a century of experience, **Boeing's** knowledge in bringing innovative service solutions to business aviation, general aviation, commercial, defense and space customers has united to form Boeing Global Services, including its Jeppesen, Aviall, and ForeFlight brands. With a focus on innovative services in engineering, digital solutions and analytics as well as supply chain logistics and training support, Boeing will deliver agile, cost-competitive solutions, regardless of the original equipment manufacturer, so customers can reduce costs, drive efficiency and optimize operations. We're here, around the clock, around the world, and always ready.
boeing.com



California Aeronautical University (CAU) is a world-class training facility connected to Bakersfield International Airport in beautiful Southern California where students live, eat, and breathe aviation. CAU offers aviation-related degree programs and training for students seeking careers as professional pilots and aviation business professionals. In this immersive environment, CAU students gain valuable experience you just can't get from off-airport instruction. Students also benefit from CAU's relationships with industry partners, which can provide a direct pathway to a professional aviation career. Financial aid and scholarships are available to those who qualify. **calaero.edu**



FedEx Express invented express distribution nearly 50 years ago in 1973 and remains the industry leader, providing rapid, reliable, time-definite delivery of packages and freight to more than 220 countries and territories through an integrated global network. FedEx Express offers a wide range of U.S. domestic and international shipping services for delivery of packages and freight, connecting markets that generate more than 99% of the world's gross domestic product through door-to-door service. FedEx Express is the world's largest express transportation company, employing approximately 289,000 people. **fedex.com**



At **Kansas State University**, our flight operations curriculum does more than train pilots – students receive training above and beyond the Federal Aviation Administration's (FAA) minimum requirements, creating professionals that are confident to fly in all conditions, troubleshoot and solve problems, make ethical decisions, and exceed the expectations of the aviation industry. With the degree option's longstanding history at the university, K-State Aerospace and Technology Campus has turned people passionate about aviation into the best pilots in the skies. polytechnic.k-state.edu



NEXTGEN Aviators by Dynamic Aviation is a three-hour immersive experience designed to broaden the horizons of our nation's youth. At a NEXTGEN Aviators event, students perform hands-on activities based on real-life applications encompassing several aviation careers. Taking place at local airports, the NEXTGEN Aviators program provides the next generation with an intriguing introduction to aviation at a pivotal stage of their lives. We give every young person who attends the opportunity to experience a defining moment, showing them they can pursue a career in an industry they choose. nextgenaviators.aero



Nulton Aviation Services will assist you with the flight support and services you need when traveling to or from the John Murtha Johnstown-Cambria County Airport. Nulton Aviation Services began operating in January 2006. Our experienced professionals will provide needed services in a safe, courteous, and timely manner. Nulton Aviation Services is only a short flight from Pittsburgh, Philadelphia, Baltimore, and Washington, DC. Our FBO provides a variety of services for private, commercial, and military aircraft customers. nultonaviation.com



Redbird Flight Simulations of Austin, TX was established in 2006 with the specific purpose of making aviation more accessible to all by using modern technology and engineering. Redbird has delivered high-quality simulators, software, and aviation education content to K-12 schools, colleges, universities, and flight schools around the world. Dedicated to supporting K-12 STEM programs, Redbird continues to create products for our many primary and secondary education customers. With more than 2,000 devices in service worldwide, Redbird is the fastest growing and most innovative flight training solutions provider. stem.redbirdflight.com



Textron is a \$12.4 billion, multi-industry company employing 33,000 talented makers, thinkers, creators and doers worldwide. We make things that fly, hover, zoom and launch. Things that move people. Protect soldiers. Power industries. We serve customers in industries spanning aerospace and defense, specialized vehicles, turf care, and fuel systems. Visit the sections below to learn more about our six business segments. textron.com



The United States Air Force mission is to fly, fight, and win in air, space, and cyberspace. Our airmen embrace the core values of integrity first, service before self, and excellence in all we do as guiding principles for their every action. The Air Force values diversity, education, technology, innovation, and inclusion. The Air Force offers opportunities for young Americans to get an education, use their talents, achieve their goals, serve their country, and experience a high quality of life in the Air Force. Aim High! **airforce.com**



Williams International is the world leader in the development, manufacture, and support of gas turbine engines. The privately owned company is headquartered in Pontiac, Michigan, and its facility in Ogden, Utah, is the most modern and efficient gas turbine design-to-production facility in the world. Founded in 1955, Williams has expanded its development, test, production, and product support capabilities to create a large, versatile organization with the capacity to meet growth objectives in aviation, industrial, and military markets. The company culture of continuous improvement in all aspects of our business accounts for the success of each person and of the company. **williams-int.com**

FUTURE AVIATORS

Our NEXTGEN Aviators experience is the spark that ignites a future in aviation.

Engage

Each of our stations challenge students to use their minds and hands equally to learn different trades within the aviation industry.

Inspire

We hope to inspire the next generation of aviators by introducing the fields to those who might not otherwise know it exists or think its even possible for them to work in the field.

Explore

Students are given the opportunity to explore and learn about different fields. This allows them to find a trade that aligns with their skillset.

NEXTGEN Aviators' purpose is to help solve the aviation workforce shortage by introducing school aged students and young adults to the different career fields the aviation industry has to offer. Our NEXTGEN experience is mobile and travels the country offering a 3-hour interactive and immersive experience through our carefully designed STEM stations, X-Plane Sim Trailer, and King Air flights.

INTERESTED IN BECOMING A PARTNER?

We are actively seeking partners to join us in supporting this movement to secure the future of aviation and beyond.



LEARN MORE





U.S. AIR FORCE

RISE ABOVE EXPECTATIONS. YOURS INCLUDED.

When you earn your wings in the U.S. Air Force, you'll unlock potential you didn't know you had. Be a part of a variety of missions while flying the most-advanced aircraft in the world. Explore careers such as Pilot, Air Battle Manager, Combat Systems Officer and Remotely Piloted Aircraft Pilot at [airforce.com](https://www.airforce.com).

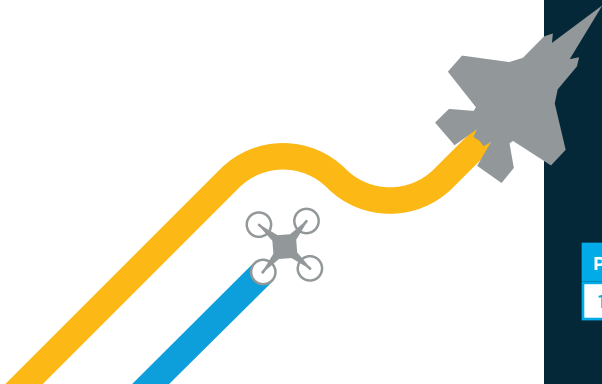


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AGENDA

3:00 - 6:00 p.m.	Registration & Symposium Information Center Ballroom Level, Peabody Memphis Hotel
3:00 - 7:00 p.m.	Exhibit Area Open <i>Sponsored by NEXTGEN Aviators</i> Grand Ballroom, Peabody Memphis Hotel
4:00 - 4:45 p.m. BREAKOUT SESSIONS <i>Sponsored by CAU</i> Ballroom Level, Peabody Memphis Hotel	
Introducing the AOPA Foundation High School Aviation STEM Curriculum Venetian Room	
Lesson Plan Deep Dive: Experience a Classroom Lesson Forest Room	
Join the Club! Aircraft, Drone, and Aviation Interest Clubs Louis XVI Room	
5:00 - 7:00 p.m.	The Experience Lab Pre-Launch Continental Ballroom, Peabody Memphis Hotel
5:00 - ? p.m.	Mix, Mingle, and Network Peabody Corner Bar, Peabody Memphis Hotel <i>Un-hosted reserved area with cash bar</i>

SUNDAY | NOV. 13





MONDAY | NOV. 14

AGENDA

6:30 a.m. - 5:00 p.m.	Registration & Symposium Information Center Ballroom Level, Peabody Memphis Hotel
7:00 - 8:00 a.m.	Breakfast Exhibit Area Open <i>Exhibit Area Sponsored by NEXTGEN Aviators</i> Grand Ballroom, Peabody Memphis Hotel
7:00 - 8:00 a.m. 2:30 - 5:00 p.m.	The Experience Lab Open Continental Ballroom, Peabody Memphis Hotel
8:00 - 8:30 a.m.	Board the Shuttles to the FedEx Experience Center Shuttles to the FedEx Experience Center will pick up attendees by the Union Street entrance in the Peabody lobby by Lansky's Gift Shop and the Memphis Pop-Up Shop. Buses start loading at 8:00 a.m. and depart at 8:30 a.m. Buses will only return to the Peabody at the conclusion of the FedEx Experience Center visit.
9:30 - 10:30 a.m.	Opening General Session FedEx Experience Center KEYNOTE: DON DILLMAN Senior Vice President, FedEx Express Flight Operations
10:30 - 11:30 a.m.	FedEx Virtual Tour FedEx Experience Center
11:40 a.m. - 12:25 p.m. FedEx Experience Center	Group 1: Lunch Group 2: Flight Simulator Tours
12:30 - 1:15 p.m. FedEx Experience Center	Group 1: Flight Simulator Tours Group 2: Lunch
1:30 - 2:30 p.m.	Return Shuttle to Peabody Hotel

AGENDA



MONDAY | NOV. 14

3:00 - 3:45 p.m. | BREAKOUT SESSIONS | *Sponsored by CAU*

Ballroom Level, Peabody Memphis Hotel

Aviators Wanted: The United States Air Force	Grand Ballroom
Professional Pilot Pathways: Ask the Experts	Venetian Room
Simulators in the Classroom: Enhancing the Classroom Experience	Forest Room
FAA Education Resources and Other Networks	Louis XVI Room
Fit to Fly: FAA Medical Certifications	Bert Parker Room

3:45 - 4:00 p.m.	Coffee Break <i>Sponsored by AMCG</i>
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4:00 - 4:45 p.m. | BREAKOUT SESSIONS | *Sponsored by CAU*

Ballroom Level, Peabody Memphis Hotel

Introducing the AOPA Foundation High School Aviation STEM Curriculum	Grand Ballroom
Level Up: Growing Your High School Aviation Program	Venetian Room
From the Ground Up: The Flight Training Process	Forest Room
Preparing for and Taking FAA Knowledge Tests	Louis XVI Room
Building Postsecondary Partnerships: Credit Agreements and Matriculation Pathways	Bert Parker Room
Hands-On with the Curriculum: Activities You Can Try!	Hernando Desoto Room

4:45 - 5:00 p.m.	Coffee Break <i>Sponsored by AMCG</i>
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5:00 - 6:30 p.m.	Exhibit Area Open <i>Sponsored by NEXTGEN Aviators</i> Grand Ballroom, Peabody Memphis Hotel
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5:00 - 6:30 p.m.	Reception Exhibit Area - Grand Ballroom, Peabody Memphis Hotel
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5:00 p.m.	Duck March Lobby, Peabody Memphis Hotel
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TUESDAY | NOV. 15

AGENDA

7:00 a.m. - 2:00 p.m.	Registration & Symposium Information Center Grand Ballroom, Peabody Memphis Hotel
7:00 - 8:30 a.m.	Breakfast Exhibit Area Open <i>Exhibit Area Sponsored by NEXTGEN Aviators</i> Grand Ballroom, Peabody Memphis Hotel The Experience Lab Open Continental Ballroom, Peabody Memphis Hotel
8:30 - 9:30 a.m.	Morning General Session Ballroom Level, Peabody Memphis Hotel KEYNOTE: KELLEED EDWARDS Pilot and Travel Personality, The Travel Channel and Kellee Set Go!
9:45 - 10:00 a.m.	Coffee Break Sponsored by AMCG
10:00 - 10:45 a.m. BREAKOUT SESSIONS Sponsored by CAU Ballroom Level, Peabody Memphis Hotel	
CONNECTING NASA STEM Resources to Your Classroom	Venetian Room
Preflight Planning: How to Start a New High School Aviation Program	Forest Room
Aviation Maintenance: Adding a High School Pathway and Career Opportunities	Louis XVI Room
Practically Speaking: Drone Classroom Management and Industry Outreach	Bert Parker Room
Hands-On with the Curriculum: Activities You Can Try!	Hernando Desoto Room
10:00 - 11:00 a.m.	Exhibit Area Open Sponsored by NEXTGEN Aviators Grand Ballroom, Peabody Memphis Hotel The Experience Lab Open Continental Ballroom, Peabody Memphis Hotel
10:45 - 11:00 a.m.	Coffee Break Sponsored by AMCG
11:00 a.m. - 12:45 p.m.	Lunch and Learn General Session <i>Sponsored by Nulton Aviation Services</i> Grand Ballroom, Peabody Memphis Hotel KEYNOTE: RICHARD R. ARNOLD II Astronaut, NASA FACILITATOR: CINDY L. HASSELBRING K-12 Education Advisor, Next Gen STEM Office of STEM Engagement, NASA Headquarters

AGENDA



12:45 - 1:00 p.m.	Coffee Break <i>Sponsored by AMCG</i>
1:00 - 1:45 p.m. BREAKOUT SESSIONS <i>Sponsored by CAU</i> Ballroom Level, Peabody Memphis Hotel	
Cleared for Takeoff: Flying Opportunities for Your Students	Venetian Room
Ask Me Anything: Q&A with AOPA Curriculum Teachers, Admins, and Students	Forest Room
Building Aviation Foundations: Grades PreK-12	Louis XVI Room
Lesson Plan Deep Dive: Experience a Classroom Lesson	Bert Parker Room
Flying Drones for a Living: Entrepreneurship and the Workforce	Hernando Desoto Room
1:00 - 2:00 p.m.	Exhibit Area Open <i>Sponsored by NEXTGEN Aviators</i> Grand Ballroom, Peabody Memphis Hotel The Experience Lab Open Continental Ballroom, Peabody Memphis Hotel
1:45 - 2:00 p.m.	Coffee Break <i>Sponsored by AMCG</i>
2:00 - 3:00 p.m.	Closing General Session and 2023 Symposium Announcement Grand Ballroom, Peabody Memphis Hotel KEYNOTE: WILL HELTSLEY Former Vice President of Propulsion Engineering at SpaceX, Consultant, Mechanical Engineer

TUESDAY | NOV. 15





MONDAY, NOVEMBER 14

9:30 – 10:30 a.m.

Opening General Session | FedEx Experience Center

KEYNOTE: DON DILLMAN

Senior Vice President, FedEx Express Flight Operations

FedEx Express is the world's largest full-service, all-cargo airline, serving every ZIP code in the U.S. and more than 220 countries and territories. Find out how FedEx Express manages the daily operations of 5,600 pilots and a fleet of more than 680 aircraft serving more than 650 airports worldwide.

TUESDAY, NOVEMBER 15

8:30 – 9:45 a.m.

Morning General Session | Grand Ballroom, Peabody Memphis Hotel

KEYNOTE: KELLE EDWARDS

Pilot and Travel Personality, The Travel Channel and Kellee Set Go!

Kellee Edwards, "One of the Most Powerful Women in Travel" according to Condé Nast, is not only the award-winning host of Travel Channel's Mysterious Islands. She's also an FAA-certificated pilot! Kellee will share tales of her personal, professional, and pilot journeys and discuss how to engage ALL students in realizing their dream of reaching for the skies.

11:00 a.m. – 12:45 p.m.

Lunch and Learn General Session | Grand Ballroom, Peabody Memphis Hotel

KEYNOTE: RICHARD R. ARNOLD II

Astronaut, NASA

FACILITATOR: CINDY L. HASSELBRING

K-12 Education Advisor, Next Gen STEM, Office of STEM Engagement, NASA Headquarters

Former science teacher and current NASA Astronaut Ricky Arnold will share what it's been like to go from teaching in a classroom to working on the International Space Station. Ricky will share NASA's next steps in space exploration.

2:00 – 3:00 p.m.

Closing General Session | Grand Ballroom, Peabody Memphis Hotel

KEYNOTE: WILL HELTSLEY

Former Vice President of Propulsion Engineering at SpaceX, Consultant, Mechanical Engineer

The closing general session of the Symposium focuses on the future of aviation and aerospace. Will Heltsley, former vice president of propulsion at SpaceX, will discuss emerging trends in space travel, skills required in the 21st-century aerospace workforce, and how educators can help students reach the stars!



ACCELERATED PATHWAY TO AVIATION CAREERS

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California Aeronautical University is preparing the next generation of aviation professionals. With locations in California and Arizona, CAU courses are delivered in a fast-paced schedule that enables students to enter the pipeline for aviation careers more quickly. Flight students fly in their first term.

■ PROGRAMS

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BACHELOR OF SCIENCE IN AVIATION BUSINESS
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MASTER OF BUSINESS ADMINISTRATION
MASTER OF AVIATION SCIENCE

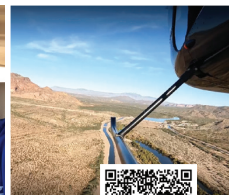
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BREAKOUT SESSIONS BY INTEREST AREA

Looking for a breakout session on a specific topic, such as starting or growing your program? Here are some suggestions for sessions in specific interest areas.

<input type="checkbox"/> Ask Me Anything: Q&A with AOPA Curriculum Teachers, Admins, and Students	★ ★ ★
<input type="checkbox"/> Aviation Maintenance: Adding a High School Pathway and Career Opportunities	★
<input type="checkbox"/> Aviators Wanted: The United States Air Force	★
<input type="checkbox"/> Building Aviation Foundations: Grades PreK-12	★
<input type="checkbox"/> Building Postsecondary Partnerships: Credit Agreements and Matriculation Pathways	★ ★
<input type="checkbox"/> Cleared for Takeoff: Flying Opportunities for Your Students	★ ★
<input type="checkbox"/> CONNECTING NASA STEM Resources to Your Classroom	★ ★
<input type="checkbox"/> FAA Education Resources and Other Networks	★
<input type="checkbox"/> Fit to Fly: FAA Medical Certifications	★ ★ ★
<input type="checkbox"/> Flying Drones for a Living: Entrepreneurship and the Workforce	★ ★
<input type="checkbox"/> From the Ground Up: The Flight Training Process	★ ★
<input type="checkbox"/> Hands-On with the Curriculum: Activities You Can Try!	★
<input type="checkbox"/> Introducing the AOPA Foundation High School Aviation STEM Curriculum	★
<input type="checkbox"/> Join the Club! Aircraft, Drone, and Aviation Interest Clubs	★ ★ ★
<input type="checkbox"/> Lesson Plan Deep Dive: Experience a Classroom Lesson	★
<input type="checkbox"/> Level Up: Growing Your High School Aviation Program	★
<input type="checkbox"/> Practically Speaking: Drone Classroom Management and Industry Outreach	★
<input type="checkbox"/> Preflight Planning: How to Start a New High School Aviation Program	★
<input type="checkbox"/> Preparing for and Taking FAA Knowledge Tests	★ ★
<input type="checkbox"/> Professional Pilot Pathways: Ask the Experts	★
<input type="checkbox"/> Simulators in the Classroom: Enhancing the Classroom Experience	★

KEY

- ★ STARTING OR CONSIDERING AN AVIATION PROGRAM
- ★ GROWING EXISTING AVIATION PROGRAMS
- ★ DRONE PROGRAMS AND CAREERS
- ★ EXTENDING YOUR PROGRAM: BEFORE AND BEYOND HIGH SCHOOL

BREAKOUT SESSIONS DESCRIPTIONS

ASK ME ANYTHING:

Q&A with AOPA Curriculum Teachers, Admins, and Students

MODERATOR

ELIZABETH TENNYSON

Senior Vice President

AOPA Foundation and You Can Fly

PANELISTS

DOUG ADOMATIS

Aviation Educator

Greenville Technical Charter School

RALPH SCHIRLO

East T STEM Academy

STUDENT

East T STEM Academy

KEVIN S. DOYLE

District Supervisor of Science

Morris Hills Regional District

You've had a wonderful time at the Symposium and learned a lot, but you still have questions. This session is your chance to get answers from the experts who live the program every day—AOPA Foundation Curriculum teachers, administrators, and students.

AVIATION MAINTENANCE:

Adding a High School Pathway and Career Opportunities

CRYSTAL MAGUIRE

Executive Director

Aircraft Technician Education Council

JENNIFER RADTKE

Chief Mechanic

Boeing Commercial Airplanes

America needs as many new aviation maintenance technicians as new pilots. In this session, learn about how you can add a maintenance pathway to your program using the Choose Aerospace Curriculum from the Aircraft Technicians Education Council. Also, meet Boeing's chief mechanic, who will discuss the growing aviation maintenance job market.

AVIATORS WANTED:

The United States Air Force

MODERATOR

KATIE PRIBYL

Senior Advisor

AOPA Foundation

SPEAKERS

CAPT. JOSEPH HOUSTON

AC-130 Navigator/Combat Systems Officer

United States Air Force

2ND LT. ASHTON WRIGHT

Gold Bar Diversity Recruiter

United States Air Force

1ST LT. JONATHAN ROTHE

Deputy Chief of Human Capital for the Secretary of the Air

Force International Affairs, United States Air Force

Where can the United States Air Force take your students? In this session, Air Force representatives will discuss how the Air Force can help students discover their skills, earn a degree, and take their careers to new heights.



BUILDING AVIATION FOUNDATIONS: **Grades PreK-12**

MODERATOR

PAULA KEDY
Aerospace and Aviation Education Coordinator
Oklahoma Aeronautics Commission

PANELISTS

ERIC CRUMP
Executive Director
Aerospace Center for Excellence

SUSAN BRODERICK MALLET
Aerospace/STEM Educator
Civil Air Patrol

PAUL MALOY
AeroEducate Program Manager
Experimental Aircraft Association

Looking for resources to engage younger students in aviation and build a pipeline that leads to your high school aviation program? Meet with representatives of aviation organizations with resources and programs that can excite students of all ages.

BUILDING POSTSECONDARY PARTNERSHIPS: **Credit Agreements and Matriculation Pathways**

MODERATOR

J. ANTHONY SHARP
Aviation Educator
Retired

PANELISTS

ERIC CRUMP
Executive Director Aerospace
Center for Excellence

JAMES H. GLASS
Instructor, CFI/II
Eastern Kentucky University

MARK HARRELL
Aviation and Engineering Program
Consultant, Office of Career and
Technical Education Kentucky
Department of Education

Looking for ways to help students accelerate their journey to the aviation workforce? A panel of education experts will discuss how their institutions have built relationships with high schools to offer postsecondary credit options for students.

CLEARED FOR TAKEOFF: **Flying Opportunities for Your Students**

MODERATOR

KATIE PRIBYL
Senior Advisor
AOPA Foundation

PANELISTS

DAVID LEITING
Young Eagles Program Manager
Experimental Aircraft Association

SUSAN BRODERICK MALLET
Aerospace/STEM Educator
Civil Air Patrol

1ST LT. JONATHAN ROTHE
Deputy Chief of Human Capital for the Secretary
of the Air Force International Affairs
United States Air Force

CARLEY WALKER
Director of Development
STEM Flights

Your students have learned about the theories of flight in the classroom, but how can they put them into practice? Meet representatives from aviation organizations that can help your students take to the skies!



CONNECTING NASA STEM RESOURCES TO YOUR CLASSROOM

CINDY L. HASSELBRING

K-12 Education Advisor

Next Gen STEM, Office of STEM Engagement, NASA Headquarters

NASA's STEM resources for aviation and aerospace education are out of this world! Join Cindy Hasselbring of the NASA Office of STEM Engagement to experience the wide range of content, materials, and connections with subject matter experts that NASA has to offer educators and students.

FAA EDUCATION RESOURCES AND OTHER NETWORKS

CHRISTINE SHARP

Manager, Aviation Workforce and Education Division

Federal Aviation Administration

JAMES BROUGH

National Aviation and Space Education (AVSED) Program Manager

Federal Aviation Administration

The FAA has had an education program for many decades, but you may have never heard of it. Join FAA National STEM AVSED Program Manager Chris Sharp and members of her team to learn about the FAA's STEM AVSED program. Chris will share program information, regional connections, and educator resources. It's also your chance to tell the FAA what schools and teachers really need.

FIT TO FLY:

FAA Medical Certifications

DREW MYERS

Manager

Flying Clubs Initiative, AOPA Foundation

Do you need to be in perfect health to be a pilot? What are the medical requirements? Are there different medical challenges facing teens and adults? Help yourself and your students navigate the medical certification process with answers to these questions and more.

FLYING DRONES FOR A LIVING:

Entrepreneurship and the Workforce

MODERATOR

MICHAEL HANGARTNER

Senior Manager

Curriculum Development, AOPA Foundation

PANELISTS

LESLEY AND PETER SCHLESINGER

Owners and Pilots

Flying Coyote Aerial Photography

MICHAEL ULESKI

Lead Unmanned Aircraft Systems Instructor

FlightSafety International

Earning a remote pilot certificate is a milestone achievement that allows those as young as 16 to be paid to fly drones. But what options are available to students who pass the test? What kinds of drone businesses can a young entrepreneur start? What other drone careers exist today? Our experts will answer these questions and more.



FROM THE GROUND UP: The Flight Training Process

SWAYNE MARTIN
First Officer
United Airlines

This session is your one-stop shop for everything you ever wanted to know about the flight training process. United Airlines First Officer and social media aviation educator Swayne Martin will detail the steps on the journey from discovery flight to certificated pilot.

HANDS-ON WITH THE CURRICULUM: Activities You Can Try!

MODERATOR

ERIK YATES
Director
Curriculum Development, AOPA Foundation

LAB TEACHERS

PAUL BEINEKE
River Valley High School

JOSHUA BERGERSON
Frankford High School

CHRIS ECKLER
Ada City Schools

RAYMOND GONZALEZ
Fordham Preparatory School

MIKE GOTTFRIED
Roxbury High School

BRIAN HUGHES
Central Florida Aerospace Academy – Winter Haven

KRISTIAN JOHNSON
Corona-Norco Unified School District

JASON MCMULLEN
Har-Ber High School

ANTHONY MELLENDORF
Piedmont High School

DANA MORISSET
Wyandotte School District I

MICHAEL SMITH
Colonel Zadok Magruder High School

LAURA SWESSEL
Mercy Academy

Engaging activities and problem-based learning are at the core of the AOPA Foundation High School Aviation STEM Curriculum. Try a selection of fun student activities found in our lessons, and meet teachers who are veterans at bringing these hands-on activities to life!

INTRODUCING THE AOPA FOUNDATION HIGH SCHOOL AVIATION STEM CURRICULUM

MICHAEL HANGARTNER
Senior Manager
Curriculum Development
AOPA Foundation

ELIZABETH TENNYSON
Senior Vice President
AOPA Foundation

ERIK YATES
Director
Curriculum Development
AOPA Foundation

Curious to hear more about AOPA's curriculum and how it could transform your classroom? Learn about the breadth, rigor, and fun of the AOPA Foundation High School Aviation STEM Curriculum in this high-level overview of the engaging activities, comprehensive teaching materials, and support included with it.



JOIN THE CLUB!

Aircraft, Drone, and Aviation Interest Clubs

DREW MYERS

Manager

Flying Clubs Initiative, AOPA Foundation

Creating a high school flying club is not only feasible but can also be a great addition to your school's aviation program. High schools around the country have clubs where students build and fly airplanes, design and race drones, and much more. Learn the steps to creating a fun and safe flying club.

LESSON PLAN DEEP DIVE:

Experience a Classroom Lesson

GLENN PONAS

Director

High School Outreach, AOPA Foundation

ERIK YATES

Director

Curriculum Development, AOPA Foundation

Pull back the curtain on the curriculum design process. Join a member of the AOPA Foundation High School Curriculum Team to deconstruct one of its aviation STEM lessons: What is the structure of a typical lesson? What features make each lesson teacher-friendly? How rigorous are the lessons? How is an aviation STEM lesson taught in the classroom? What resources are there for the lesson? This in-depth look at a lesson is perfect for those considering adopting the AOPA Foundation High School Aviation STEM Curriculum.

LEVEL UP:

Growing Your High School Aviation Program

MODERATOR

KATIE PRIBYL

Senior Advisor

AOPA Foundation

PANELISTS

DOUG ADOMATIS

Aviation Educator

Greenville Technical Charter

School

SCOTT BEVAN

Aviation and Drone Instructor

Okmulgee High School

KEVIN S. DOYLE

District Supervisor of Science

Morris Hills Regional District

Veteran teachers and administrators from established aviation programs discuss how they built collaborative partnerships with local aviation community members and organizations. Participants will learn strategies for expanding the classroom to the airport and beyond.



PRACTICALLY SPEAKING: Drone Classroom Management and Industry Outreach

MODERATOR

MICHAEL HANGARTNER
Senior Manager
Curriculum Development, AOPA Foundation

PANELISTS

SCOTT BEVAN
Aviation and Drone Instructor
Okmulgee High School

MICHAEL SMITH
Resource Teacher and Aviation
Program Director Colonel Zadok
Magruder High School

LAURA SWESSEL
STEM Teacher
Mercy Academy

Flying drones in class is a lot of fun, but these machines are more tools than toys. This session will focus on the practical side of bringing drones into the classroom, covering drone selection, accessories worth having on hand, drone maintenance, classroom and materials management, and safety. Our expert panel will also explore strategies for engaging with the drone industry in your community.

PREFLIGHT PLANNING: How to Start a New High School Aviation Program

MODERATOR

GLENN PONAS
Director
High School Outreach, AOPA Foundation

PANELISTS

JASON McMULLEN
Aviation, Career and Technical
Education, and Math Instructor
Har-Ber High School

JESSIE KINSEY
District Career and Technical
Education Director and High
School Assistant Principal
Tulahoma City Schools

DEREK J. ROWE
High School Aviation Technology
and Career and Technical
Education Teacher
Tulahoma High School

Your school wants to start an aviation program that prepares students for STEM career success, but how do you get from a great idea to the first day of classroom instruction? Veteran staff members from AOPA Foundation schools will share strategies for and answer questions about pitching, planning, and initiating high school aviation programs.

PREPARING FOR AND TAKING FAA KNOWLEDGE TESTS

MODERATOR

DREW MYERS
Manager
Flying Clubs Initiative, AOPA Foundation



PANELISTS

CHRIS ECKLER
STEAM Director and Aviation Teacher
Ada City Schools

PAM OLSON
Business Development Leader
King Schools

RYAN JEFF
Part 141 Chief Instructor and Flight Simulation
Specialist
Gleim Aviation

BRET KOEBBE
Senior Vice President
Sporty's

For high school students and teachers, the FAA private pilot, remote pilot, and ground instructor written tests can seem shrouded in mystery. What do the tests look like? What study-aid products are available? How should you manage instructor signoffs for your students? Pull back the curtain on the FAA examination process by learning more about knowledge tests.

PROFESSIONAL PILOT PATHWAYS: Ask the Experts

MODERATOR

SWAYNE MARTIN
First Officer
United Airlines

PANELISTS

KRISTINE NAKUTIS
Executive Director
Austin Peay Center at
Fort Campbell

KELLY REICH
Senior Vice President
Strategic Operations
FlightSafety International

JIMMY SANFORD
MD-11 Captain
FedEx Express

In the face of a deepening pilot shortage, the aviation industry is rapidly creating new and innovative ways for aspiring pilots to begin their careers. Join, airline, cargo, corporate flight training, and university recruiters and executives who will highlight the many pathways to the flight deck.

SIMULATORS IN THE CLASSROOM: Enhancing the Classroom Experience

MODERATOR

GLENN PONAS
Director
High School Outreach, AOPA Foundation

PANELISTS:

DOUG ADOMATIS
Aviation Educator
Greenville Technical Charter School

GREG ROARK
Director of K-12 STEM Education
Redbird Flight Simulations

BRETT WATTS
Co-Owner and Vice President
True Course Simulations

Teachers and aviation industry representatives show how to use flight simulators as a creative way to enhance classroom instruction and motivate students.



Austin Peay State University is a 4-year public university located in Clarksville, TN. APSU offers a Bachelor of Science degree in Aviation Science, with a concentration in Rotor Wing (helicopters) that is unique in the state of Tennessee. Students are taught hands-on and academic skills in a professional setting and receive personal attention from their instructors. apsu.edu

Aviation Resources and Consulting Services ARCS Aviation offers best-in-class interactive training and operations tools designed by subject matter experts to help train pilots, ground personnel, cabin crew, or dispatchers. We specialize in the development of interactive multimedia instruction, virtual reality, augmented reality, and extended reality, as well as elearning content. arcsaviation.com

Aviation Supplies and Academics, Inc. is the leading publisher of aviation books and largest producer of pilot supplies in the United States, providing trusted materials for more than 80 years. Products include the ASA FAR/AIM, ASA Test Preps, software, apps, online courses, videos, maintenance technician materials, logbooks, flight computers, kneeboards, flight bags, remote pilot materials, curriculum, and more. asa2fly.com

Boeing: With more than a century of experience, Boeing's knowledge in bringing innovative service solutions to business aviation, general aviation, commercial, defense and space customers has united to form Boeing Global Services, including its Jeppesen, Aviall, and ForeFlight brands. We're here, around the clock, around the world, and always ready. boeing.com

ByteSpeed has been a leading IT solutions resource for schools since 1999. ByteSpeed provides STEM focused solutions for flight simulation, esports, and virtual reality in addition to enterprise-networking solutions and professional IT services in all 50 states across the nation. bytespeed.com

California Aeronautical University (CAU) is a world-class training facility connected to Bakersfield International Airport in beautiful Southern California where students live, eat, and breathe aviation. CAU offers aviation-related degree programs and training for students seeking careers as professional pilots and aviation business professionals. calaero.edu

Civil Air Patrol: Founded in 1941 to mobilize civilian aviation resources for national defense, Civil Air Patrol (CAP) has evolved into a premier public service organization. As a U.S. Air Force auxiliary, CAP's 56,000 members selflessly devote time, energy, and expertise to their communities, while helping shape future leaders and promoting aviation through aerospace/STEM education. gocivilairpatrol.com

The Experimental Aircraft Association is an international community of passionate aviation enthusiasts that promotes recreational flying in all forms, inspiring new participants and enriching the experience of flying. Young Eagles gives youth ages 8-17 a free flight in a general aviation aircraft. AeroEducate is a free resource hub where K-12 students can learn about aviation and careers. eaa.org

Embry-Riddle Aeronautical University is a private university offering associate's, bachelor's, master's, and PhD degree programs in arts and sciences, aviation, business, engineering, and security and intelligence. It is the world's largest fully accredited university specializing in aviation and aerospace with campuses in Daytona Beach, FL, and Prescott, AZ, and Worldwide online. erau.edu

Endeavor Air, a wholly owned subsidiary of Delta Air Lines, operates regional jets on more than 900 daily flights to over 140 destinations in the United States, Canada, and the Caribbean. At the heart of our operation, over 5,000 employees keep us soaring and help ensure Endeavor sets the standard for excellence in the regional airline industry. endeavorair.com

FedEx Express invented express distribution nearly 50 years ago and remains the industry leader, providing rapid, reliable, time-definite delivery of packages and freight to more than 220 countries and territories through an integrated global network. FedEx Express offers a wide range of U.S. domestic and international shipping services for delivery of packages and freight. fedex.com

Gleim Publications, Inc. In 1980, Dr. Irvin Gleim began self-publishing pilot training books. Dozens of titles, audio reviews, and online courses have helped generations of pilots pass FAA knowledge and practical flight tests. Gleim's flight simulators were designed with the instructor-student relationship in mind. Over 400 Gleim simulators are used by schools and institutions across the nation. gleim.com

Honeycomb Aeronautical offers affordable flight training simulators, ideal for classrooms and home setups. Designed in the U.S. by pilots and aerospace engineers, the products are made of quality components that are backed by a 5-year warranty. flyhoneycomb.com

Jet Access is the first vertically integrated, fully transparent full-service aviation management company in the industry. We are committed to making private jet travel safe, cost-effective, uncomplicated, and comfortable. We create tangible value for each aviation vertical we manage—it's what makes us a genuine full-service provider. flyjetaccess.com

Kansas State University - Salina is centered around the student experience emphasizing innovative learning, real-world experiences, and industry connections. We are a tight-knit family with a small college feel and the resources of a Big 12 university. We don't just believe in making the world a better place through aviation, engineering, technology, and service—we actually do it. salina.k-state.edu

King Schools has played a part in training over a half a million pilots at one point in their career. For over 47 years, John and Martha King, King Schools founders, have engaged aviation students from around the world with their very popular teaching style. King Schools is well known for taking complex subjects and clarifying, simplifying and most of all making them fun to learn. kingschools.com

LIFT Academy is owned and operated by Republic Airways. LIFT was founded in 2018 to fulfill the demand for airline-ready pilots, making it more accessible and attainable with a defined pathway to a job as a Republic pilot. Our 12-month program's flight training curriculum is modeled after Republic standard operating procedures, checklists, and flows. flywithlift.com

Newton America was established in 2021 to bring the experiential STEM learning Newton Concept to the United States. Since 2016, Newton has used high-quality flight simulation in partnership with our custom-designed curriculum to teach math, navigation, meteorology, and science skills through aviation in our Newton Flight Academies. newtonamerica.org



NEXTGEN Aviators by Dynamic Aviation is a three-hour immersive experience. At a NEXTGEN Aviators event, students perform hands-on activities encompassing several aviation careers. Taking place at local airports, the program gives every young person who attends the opportunity to experience a defining moment, showing them they can pursue a career in an industry they choose. nextgenaviators.aero

Redbird Flight Simulations: Established in 2006, Redbird Flight delivers innovative, reliable, and high-quality training devices, applications, and content to flight schools, colleges, universities, K-12 schools, and individual pilots worldwide. With more than 3,000 devices in service, Redbird has quickly become the fastest growing and most innovative provider of flight training technology in the industry. redbirdflight.com

Simbird by Montauk Systems: We are passionate about aviation. Our founder and CEO has been flying for over 35 years. Simbird is a product of Montauk Systems Corporation, a computer design and development business and manufacturing concern founded in 2001. Our ability to vigorously work with the customer through the product life cycle results in a sturdy, well-engineered product that will last for many years. simbird.net

SkyWest Airlines Inc.: The SkyWest Pilot Pathway Program provides a direct path for exceptional pilots with a desire to take control of their aviation careers. Enhanced seniority, guaranteed final interview and access to pilot mentors are just a few of the upgrades students can receive by joining the SkyWest Pilot Pathway program on their way to becoming one of SkyWest's more than 5,000 professional pilots. skywest.com

Southwest Airlines is one of the world's most admired airlines, offering one-of-a-kind hospitality at 121 airports. Southwest provides friendly, reliable, low-cost air travel and carries more travelers flying nonstop within the United States than any other airline. Famous for an employee-first corporate culture, Southwest has a record of no involuntary furloughs or layoffs. southwest.com/careers

Sporty's Pilot Shop: Now in its 61st year, Sporty's has grown from a one-man operation to the world's largest pilot shop and an iconic general aviation brand. Sporty's operations extend to airport management, avionics installation and repair, aircraft maintenance, a residential airport community, charter services and flight training, including for the University of Cincinnati's professional pilot program. sportys.com

STEM Flights is a national nonprofit pairing middle and high school students with pilot mentors in their communities to receive free flight experiences. Providing STEM learning with aviation career pathway exploration, STEM Flights compliments classroom instruction with hands-on experiences at the airport, in the cockpit, and with a pilot. stemflights.org

True Course Simulations provides effective and efficient immersive training through world-class instruction combined with virtual reality (VR). Our optimized VR flight simulators work with intuitive courseware to train and monitor the student with a virtual instructor. At the U.S. Air Force Academy and Embry-Riddle we've shown that anyone can set students up for success and track their graded progress. tcsims.com

UND Aerospace Foundation offers an accelerated path to becoming a commercial airline pilot at its Phoenix campus located at the Phoenix-Mesa Gateway Airport in Mesa, Arizona. This 12-month non-credit program is ideal for college-educated professionals looking to make a career change without the need of an aviation-specific college degree. aero.und.edu

United Aviate Academy provides the best flight training to prepare students for a safe, successful career as a pilot at United. It is designed primarily for applicants with little to no piloting experience and accepts students directly out of high school. UAA is putting diversity at the forefront by committing to 50% of students being women or people of color to reflect the customers United serves. unitedaviate.com

United States Air Force: The U.S. Air Force mission is to fly, fight, and win in air, space, and cyberspace. We embrace the core values of integrity first, service before self, and excellence in all we do as guiding principles. The Air Force offers opportunities for young Americans to get an education, use their talents, achieve their goals, serve their country, and experience a high quality of life. Aim High! airforce.com

University Aviation Association (UAA) is the voice of collegiate aviation to our members, the industry, government, and the general public. UAA plays a pivotal role in the advancement of degree-granting aviation programs that represent all segments of aviation. Today, UAA is comprised of over 1,200 members from more than 220 colleges and universities in the U.S., Canada, Australia, Europe, and Asia. uaa.aero

Unmanned Safety Institute (USI) is the ultimate source for workforce development, remote pilot sourcing, organizational safety solutions, and standards-based education, training, and professional safety-oriented certifications. USI empowers your program with industry relevant curriculum and creates career pathways for student employment. unmannedsafetyinstitute.org

The College of Aviation at Western Michigan University offers the only comprehensive aviation program at a public university in Michigan, and with just over 1,100 undergraduate students, is one of the largest aviation programs in the nation. Backed by 80 years of aviation experience and our excellent industry reputation, the college is a powerful force in the future of aviation training. wmich.edu



FEDERAL AVIATION ADMINISTRATION

The FAA Aviation Career Education (ACE) Academy provides unique summer aviation education programs for elementary, middle, and high school students who are interested in aviation and aerospace. The program provides students with a wide range of aviation career exploration experiences and also focuses on science, technology, engineering and mathematics (STEM).

faa.gov/education/ace_academy

FLIGHTSAFETY INTERNATIONAL

Drone training courses designed for individuals interested in becoming a professional drone pilot, experience scenario-based training, designed by the aviation training leader. From test prep to flight training, we've got you covered. flightsafety.com

GLEIM PUBLICATIONS, INC.

In 1980, Dr. Irvin Gleim began self-publishing pilot training books. Dozens of titles, audio reviews, and online courses have helped generations of pilots pass FAA knowledge and practical flight tests. Gleim's flight simulators were designed with the instructor-student relationship in mind. Over 400 Gleim simulators are used by schools and institutions across the nation. gleim.com

PITSCO

The rate of change in our global society is unprecedented, and students and teachers require the mind-set, skill set, and tool set to thrive in it. Our scalable resources enable students to practice the future-ready skills they'll need no matter their path after school – all while integrating STEM disciplines in real-life, practical scenarios. pitsco.com

REDBIRD FLIGHT SIMULATIONS

Established in 2006, Redbird Flight delivers innovative, reliable, and high-quality training devices, applications, and content to flight schools, colleges, universities, K-12 schools, and individual pilots worldwide. With more than 3,000 devices in service, Redbird has quickly become the fastest growing and most innovative provider of flight training technology in the industry.

redbirdflight.com



SKYDIO

We take our responsibility as America's leading drone manufacturer seriously. We design, assemble, and support our products in the U.S. We develop our software in-house and source our processors from U.S. companies. That enables us to provide a high level of supply chain security and serve as a trusted partner to government customers. The result is a homegrown aircraft that reflects the best of American innovation, trustworthiness, and craftsmanship. skydio.com

TRUE COURSE SIMULATIONS

TCS provides effective and efficient immersive training through world-class instruction combined with virtual reality (VR). Our optimized VR flight simulators work with intuitive courseware to train and monitor the student with a virtual instructor. At the U.S. Air Force Academy and Embry-Riddle we've shown that anyone can set students up for success and track their graded progress. tcsims.com

UNITED STATES DRONE SOCCER

Students ages 12-18 can grow through classroom lessons and after school leagues. Our comprehensive program is designed by educators to fit inside any school classroom or gymnasium. The programs combine modern aviation career and technical skills training with the benefits of team athletics. Students can progress to competitive gameplay and advanced engineering applications. dronesoccer.us

U.S. SPACE & ROCKET CENTER

From schools to college students or adult tour groups, an out-of-this-world daily experience at the U.S. Space and Rocket Center (USSRC) is waiting for you! The USSRC is a Smithsonian Affiliate and the Official Visitor Center for NASA's Marshall Space Flight Center. We have one of the largest collections of rockets and space memorabilia on display anywhere in the world.

rocketcenter.com





Doug Adomatis

Aviation Educator

Greenville Technical Charter School

Doug Adomatis teaches courses in science aviation at Greenville Technical Charter High School (GTCHS) using the AOPA Foundation High School Aviation STEM Curriculum. GTCHS was the first school in South Carolina to adopt the Foundation's program in 2018. Graduates of the four-year program have gone on to become pilots, aerospace engineers, and aircraft mechanics. Doug worked with other high schools and the South Carolina Aeronautics Commission to host the state's first simulated flight competition. He is also an AOPA Foundation High School Teacher Flight Training Scholarship recipient.



Richard R. Arnold II

Astronaut

NASA

Astronaut Richard R. Arnold II was selected by NASA in May 2004. Before his NASA career, the Maryland native worked in the marine sciences and as a teacher in Morocco, Saudi Arabia, and Indonesia. During STS-119, he accumulated more than 12 days in space. The mission's objective was to deliver the final pair of power-generating solar array wings and a truss element for the International Space Station. While onboard, he conducted more than 12 hours of spacewalks. Arnold most recently served as flight engineer on the International Space Station for Expedition 55 and 56.

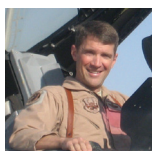


Mark Baker

President & CEO

AOPA, AOPA Foundation

Mark Baker is a longtime pilot and aircraft owner who flies everything from a Super Cub on floats to jets. He is also an accomplished business leader. He has served as chief operating officer at Scotts Miracle-Gro Company, chief executive officer of outdoor outfitter Gander Mountain Company, and chief merchandising officer for The Home Depot. In all those roles, airplanes were an important part of his personal and professional life. Now, he is using his decades of flying experience to guide the world's largest civil aviation organization as it celebrates 83 years of protecting the freedom to fly.



Paul Beineke

Faculty Member

River Valley High School

Paul Beineke graduated from the United States Air Force Academy with a degree in astronautical engineering. During his 29-year Air Force career, he accumulated 4,450 hours of flight time, primarily in the F-16, T-38, and T-6, retiring as a colonel. His major responsibilities included NORAD inspector general, Air Force safety issues division chief at the Pentagon, and command of an expeditionary air wing in the Middle East. Today, he manages his family farm, is an active flight instructor, operates a drone agricultural spraying operation, and teaches aviation careers at the local high school in Caledonia, Ohio using the AOPA Foundation High School Aviation STEM Curriculum.



Joshua Bergerson

Teacher

Frankford High School

Joshua Bergerson is the aviation teacher at Frankford High School, a public neighborhood high school in Philadelphia. The Aviation Academy at the high school offers students the opportunity to earn a private pilot certificate before they graduate through an innovative partnership with Tailwinds, a local flight school. To date, five students have started flight training, and one has earned a Part 107 commercial drone certificate in this new program. Joshua has 13 years' experience in STEM education and has taught the AOPA Foundation High School Aviation STEM curriculum for four years. He holds an M.Ed. in curriculum and instruction and is working on his Ed.D. in K-12 educational leadership, focusing on increasing positive STEM outcomes for students from historically underrepresented groups.



Scott Bevan

Aviation and Drone Instructor

Okmulgee High School

Scott Bevan teaches the AOPA Foundation High School Aviation STEM Curriculum at Okmulgee High School where the focus is on teaching students to fly drones, airplanes, and 3D modeling in the aviation industry. A 14-year classroom veteran, Scott is certified in careertech, special education, physical education, and science. In addition to his classroom responsibilities, Scott coaches football and runs the TSA organization at Okmulgee.



James Brough

*National Aviation and Space Education (AVSED) Program Manager
Federal Aviation Administration*

James (Jim) Brough was an educator for 21 years before joining the FAA in 2008. Jim provides national leadership to prepare students to enter the aerospace industry workforce. Jim is also a private pilot and aircraft owner, which brings a unique perspective to his work. He has received recognition and numerous awards for his aerospace education initiatives, including the Christa McAuliffe Sabbatical Award and an Excellence in Education Award from the state of New Hampshire. In 2001, Jim was inducted into the New Hampshire Teacher's Hall of Fame.

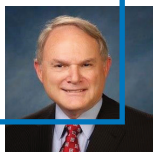


Eric Crump

Executive Director

Aerospace Center for Excellence

Eric Crump is the executive director for the Aerospace Center for Excellence in Lakeland, Florida. Eric previously served as aerospace program director for the Polk State College aerospace program, which he helped start in 2012. He has been flying since the age of 13 and has previously worked as a corporate pilot, flight training program curriculum developer, technical publications content editor, and chief instructor for various training organizations. Today, Eric focuses his efforts on building and developing education and career pathways for young people in the aviation and aerospace industries.



Don Dillman

*Senior Vice President
FedEx Express Flight Operations*

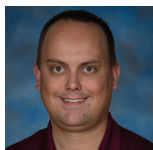
Don Dillman oversees the company's global Flight Operations organization, including a crew force of more than 5,600 pilots operating a fleet of 680 aircraft, serving 650 airports worldwide. Previously the vice president of air operations training, he was responsible for planning the flight training elements of FedEx Express air operations. Additionally, Don was responsible for developing and evaluating compliance to standards pertaining to the operation of all FedEx Express aircraft fleets to ensure compliance with federal aviation regulations. He is currently the co-chair of the Airlines for America Carrier Training Aviation Rulemaking Committee.



Kevin S. Doyle

*District Supervisor of Science
Morris Hills Regional District*

Kevin Doyle, Ed.D., is the district science supervisor for the Morris Hills Regional District. He also serves as the Math and Science Magnet Program coordinator and the Aviation and Aerospace Program coordinator. He has 29 years' experience in high school education. His school district is the first in New Jersey to offer a four-year aviation program using the AOPA Foundation High School Aviation STEM Curriculum. He is the chairperson of the Safety Advisory Committee for the National Science Teachers Association, a science safety presenter, and an author.



Chris Eckler

*STEAM Director and Aviation Teacher
Ada City Schools*

Chris Eckler is the STEAM director and aviation teacher in the Ada City Schools in Ada, Oklahoma. Ada City Schools is one of the few schools with the distinction of having field-tested all six courses in the AOPA Foundation High School Aviation STEM Curriculum beginning in 2016. Ada has since had alumni attend all state aviation colleges and the United States Air Force Academy. Under Chris' leadership, Ada was recently named one of five Oklahoma Aviation Centers of Excellence by the Oklahoma Aeronautics Commission. While teaching the AOPA Foundation Curriculum, Chris earned his private pilot certificate and Part 107 commercial drone certification.



Kellee Edwards

*Pilot and Travel Personality
The Travel Channel and KelleeSetGo!*

Kellee Edwards, "One of the Most Powerful Women in Travel," according to Condé Nast, is an award-winning travel expert, journalist, and television host by land, air, and sea. She is a licensed pilot, advanced open-water scuba diver, and explorer. A pioneer in her approach to adventure travel made her brand Kellee Set Go! become recognized by some of the biggest brands in travel. Kellee is the host of Travel Channel's Mysterious Islands, a series exploring some of the most remote islands in the world. She recently launched a new podcast with *Travel + Leisure* magazine, "Let's Go Together," amplifying diversity and inclusion in the travel and adventure space. An avid adventurer, Kellee has explored more than 50 countries.



James H. Glass

Instructor, CFI/II

Eastern Kentucky University

James Glass began flying at 17 and earned his private pilot certificate at 18. He served in the U.S. Marine Corps for 12 years as an air traffic controller and instructor. After receiving a bachelor's degree in professional aeronautics from Embry-Riddle Aeronautical University, James was an aviation weather observer and forecaster and later a meteorologist. He served as a gunnery sergeant, chief warrant officer, and retired in 2013 as a major. He now teaches aviation at Eastern Kentucky University (EKU). James led a joint EKU and Appalachian Regional Commission initiative to place virtual reality flight simulators in Kentucky high schools and community colleges.



Raymond Gonzalez

iSTEAM Coordinator

Fordham Preparatory School

Dr. Raymond Gonzalez is a recipient of the AOPA Foundation High School Teacher Flight Training Scholarship. He is currently the coordinator of the iSTEAM (Science, Technology, Engineering, Arts, and Mathematics through an Ignatian perspective) program at the Fordham Preparatory School in The Bronx, New York. He teaches the AOPA Foundation High School Aviation STEM Curriculum and runs a successful aviation club. Raymond is preparing for his first solo.

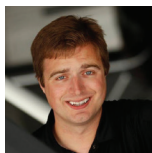


Mike Gottfried

Aviation Teacher

Roxbury High School

Mike Gottfried is an Earth science, physics, and aviation teacher at Roxbury High School in Succasunna, New Jersey. Having just completed his Ed.D. in Educational Leadership, he is now pursuing his private pilot certificate. Mike currently leads Roxbury's aviation program where he teaches the AOPA Foundation High School Aviation STEM Curriculum and is the co-advisor of the new aviation club. During his free time, he leads Rox-THON, an organization committed to fighting pediatric cancer by hosting an overnight dance marathon. Mike also enjoys traveling, with plans to visit all seven continents.



Michael Hangartner

Senior Manager, Curriculum Development

AOPA Foundation

Michael Hangartner is part of the team that develops the AOPA Foundation High School Aviation STEM Curriculum. Michael holds a bachelor's degree in business economics and master's degrees in business administration and integrated marketing communications. Since joining AOPA in 2014, he has served in various roles, including financial analyst, research analyst, and manager of the flying clubs Initiative. Michael has been flying since 2011 and is an instrument-rated commercial pilot who enjoys flying both airplanes and helicopters and is a certified remote pilot and advanced ground instructor.



Mark Harrell

*Aviation & Engineering Program Consultant
Office of Career and Technical Education
Kentucky Department of Education*

Mark Harrell is the aviation and engineering consultant with the Office of Career and Technical Education at the Kentucky Department of Education. Mark graduated from Purdue University with a bachelor's degree in technology education, and his mission is to prepare K-12 students for the STEM workforce. Mark started his career teaching STEM students at Bryan Station High School in Lexington, Kentucky. The opportunity arose to teach at Franklin County Career and Tech Center, and he built one of the top engineering pathways in the state. Mark has a master's degree in career and technical education administration from Eastern Kentucky University.



Cindy L. Hasselbring

*K-12 Education Advisor, Next Gen STEM
Office of STEM Engagement, NASA Headquarters*

Cindy Hasselbring serves as K-12 education advisor for next gen STEM in NASA's Office of STEM Engagement (OSTEM). Previously, she served as assistant director for STEM education at the White House Office of Science and Technology Policy. While working at AOPA, Cindy led efforts to build a four-year high school aviation STEM curriculum. Cindy led STEM initiatives at the Maryland State Department of Education and was an Albert Einstein Distinguished Educator Fellow at the National Science Foundation. Cindy was awarded the Presidential Award for Excellence in Mathematics and Science Teaching at Milan High School in Michigan.



Will Heltsley

Consultant, Mechanical Engineer

As vice president of propulsion engineering for SpaceX, Will Heltsley was responsible for the Merlin engine family, the Raptor engine family, all additive manufacturing for the company, and components engineering and manufacturing for all vehicles. He oversaw the development of the most reliable orbital class rocket engine in history, the most flown engine in U.S. history, and the first reusable orbital liquid booster, while personally being on console for more than 125 Falcon launches. After leaving SpaceX in May 2022, Will started an engineering consulting firm specializing in solving engineering and organizational challenges for propulsion, rocket engineering, and other tough technical fields.



Capt. Joseph Houston

*AC-130 Navigator/Combat Systems Officer
United States Air Force*

Capt. Joseph (Joe) Houston is a graduate of the United States Air Force Academy where he was a member of the Formula SAE Collegiate Design Series Racecar team. He graduated with a degree in general engineering and served as a combat systems officer on AC-130U and AC-130W gunships for six years. He is currently awaiting pilot training at Columbus AFB. Joe earned his private pilot certificate through Civil Air Patrol at the age of 16.



Brian Hughes

Director

Central Florida Aerospace Academy – Winter Haven

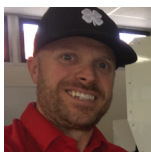
Brian Hughes has been the director of the Central Florida Aerospace Academy-Winter Haven since its inception in 2019. During this time, the academy has used the AOPA Foundation High School Aviation STEM Curriculum and now offers all four grade-level courses. Brian earned his private pilot certificate in 2020 as a demonstration of commitment to his students. He knew that in order to teach them correctly, he had to have the experience of the left seat.



Ryan Jeff

*Part 141 Chief Instructor and Flight Simulation Specialist
Gleim Aviation*

Ryan Jeff, a flight instructor, advanced ground instructor, instrument instructor, and remote pilot, graduated summa cum laude from Embry-Riddle Aeronautical University with a bachelor's degree in aeronautics and a minor in applied meteorology. He began as an aviation research assistant at Gleim, and through his experience working with the Federal Aviation Administration, industry experts, and flight schools, he eventually became Gleim's Part 141 chief instructor and flight simulation specialist. Originally from Singapore, Ryan has lived in seven different countries while pursuing his passion for aviation and is eager to share this passion with future pilots.



Kristian T. Johnson

Aviation Pathway Lead

Corona High School STEM Academy

Kristian (Kris) Johnson is the pathway lead for the aviation program at the Corona High School STEM Academy in Corona, California. He has loved aviation since attending his first air show as a kid. After high school, he enlisted in the U.S. Air Force and began his career in aviation as an aircraft maintainer for RC-135s and the AWACS. After eight years working on airplanes, Kris changed careers, earning a B.A. in Mathematics in 2004 and beginning his new career as a teacher. By 2009, Kris had branched out to teach engineering and aerospace courses. In 2018, Corona High School STEM academy added the aviation pathway using the AOPA Foundation High School Aviation STEM Curriculum.



Paula Kedy

*Aerospace and Aviation Education Coordinator
Oklahoma Aeronautics Commission*

Paula Kedy currently serves as the aerospace and aviation education coordinator for the Oklahoma Aeronautics Commission. Paula works to promote aviation education across Oklahoma using the AOPA Foundation High School Aviation STEM Curriculum. The Commission received the Most Innovative State Program Award from the National Association of State Aviation Officials for implementing aviation education in more than 50 Oklahoma high schools. Paula serves on the AOPA Foundation High School Steering Committee. She has helped develop five Oklahoma Aviation High Schools of Excellence through the implementation of an FAA Workforce Development Grant and is committed to ensuring equitable aviation STEM opportunities for Oklahoma students.



Jessie Kinsey

District Career and Technical Education Director and High School Assistant Principal, Tullahoma City Schools

Jessie Kinsey joined the field of education as a school counselor, where she served students for more than 10 years in grades PreK-12. For three years, she served as director of schools in Grundy County, Tennessee. In 2021, Jessie was selected as the assistant principal of Tullahoma High School and the Tullahoma City Schools director for career and technical education. She holds a bachelor's degree in psychology from Maryville College and a master's degree in social work from the University of Tennessee at Knoxville. Driven by her passion for students, Jessie's current focus is on preparing students not only for college but for career readiness as well.



Bret Koebbe

*Senior Vice President
Sporty's*

As Sporty's lead aviation course and video producer, Bret is usually flying an interesting airplane, and often with a camera rolling. He oversees the development, production, and distribution of more than 30 aviation courses from Sporty's, including the Private Pilot Learn to Fly Course. He is a check airman at the Sporty's Academy flight school and flies professionally as a captain on a Cessna Citation.



David Leiting

*Young Eagles Program Manager
Experimental Aircraft Association*

David Leiting has been on staff with the Experimental Aircraft Association (EAA) for seven years and is the manager of the Young Eagles and Eagle Flights programs. Previously, he led the development of the Ray Aviation Scholarship program, which awards \$1.5 million in flight training annually. David has attended AirVenture Oshkosh since he was six months old. He has held various EAA chapter leadership roles, including president and Young Eagles coordinator of EAA 1342, comprised entirely of University of North Dakota students. He is an active private pilot in his local flying club.



Crystal Maguire

*Executive Director
Aircraft Technician Education Council*

Crystal Maguire oversees strategic initiatives for the Aircraft Technician Education Council (ATEC), the trade association representing FAA-certified aviation maintenance technician schools. She also serves as executive director of Choose Aerospace, a charitable organization that promotes careers in aviation maintenance through the development of high school aviation maintenance programs. Crystal also serves as the vice president of operations for the Aerospace Maintenance Council, a nonprofit that puts on the annual Aerospace Maintenance Competition and serves as Of Counsel for Denver-based firm Davis Graham & Stubbs. She received a bachelor's degree from the University of Tulsa and a law degree from American University, Washington College of Law.



Susan Broderick Mallett

*Aerospace/STEM Educator
Civil Air Patrol*

Susan Mallett is a retired teacher, administrator, and university instructor of 31 years. Since 2006 she has served as the educational outreach programs coordinator at the Civil Air Patrol's (CAP's) national headquarters in Montgomery, Alabama. She works across the country with schools, museums, youth programs, and national aviation organizations to connect youth with aviation-related STEM products, programs, mentors, and career opportunities. Susan created CAP's K-12 STEM Kit program, which includes more than 20 free kits provided to over 2 million youth. She also created CAP's K-6 Aerospace Connections in Education (ACE) program.



Paul Maloy

*AeroEducate Program Manager
Experimental Aircraft Association*

Paul Maloy is the Experimental Aircraft Association's (EAA's) program manager of the newly launched AeroEducate youth education initiative. With a master's degree in secondary education, he joined EAA this year after 16 years as a middle school U.S. history and speech and debate teacher. He also ran an after-school aviation club and was the youth education leader with EAA Chapter 23 in Salt Lake City. Paul loves working with kids of all ages. After 35 years of putting it on the back burner, Paul finally earned his private pilot certificate this year and currently owns a sweet 1960 Comanche 250.



Swayne Martin

*First Officer
United Airlines*

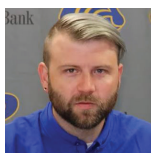
Swayne Martin is a first officer for United Airlines on the Boeing 757/767. With more than 280,000 subscribers and 40 million views, his YouTube channel is a go-to source for aspiring pilots learning about career opportunities. As a teenager from a family with no aviation background, Swayne's mission became to fill the knowledge gap and help inspire people who had not been exposed to aviation in person. By documenting his own training on YouTube and in writing, Swayne began to teach other aspiring pilots what to expect from each stage of flight training. He started writing for Boldmethod pilot training in 2014, where he is now a co-owner and editor. Swayne attended the University of North Dakota and flew for Mokulele Airlines.



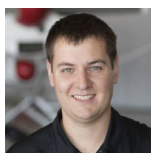
Jason McMullen

*Aviation, Career and Technical Education, and Math Instructor
Har-Ber High School*

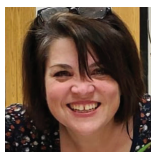
Jason McMullen is an award-winning aviation and mathematics Instructor. He started the Har-Ber Aviation Club in 2017, which has grown in membership each year. Jason, who holds an M.Ed., helped Har-Ber High School become the first school in Arkansas to adopt the AOPA Foundation High School Aviation STEM Curriculum in 2020. Har-Ber High School, located in Springdale, became the first school outside of Washington, DC, to host the Smithsonian National Air and Space Museum S.H.E. Can STEAM Camp in 2022. Jason served as a camp counselor.

**Anthony Mellendorf***Technology Teacher**Piedmont High School*

Anthony Mellendorf is a second-year teacher at Piedmont High School in Piedmont, Oklahoma. Anthony has always had a passion for the aviation industry. He vividly remembers growing up watching the Blue Angels at air shows and wanting to be a military pilot. Unfortunately, that dream never came true. Anthony started flying drones about five years ago because, as a journalist and filmmaker, he wanted to take his filmmaking to another level. Because of his background, Anthony's high school asked him to teach the AOPA Foundation High School Aviation STEM Curriculum, and that dream of becoming a pilot is alive again.

**Drew Myers***Manager, Flying Clubs Initiative**AOPA Foundation*

Drew Myers is the manager of the flying clubs initiative at the AOPA Foundation, where he helps newly forming and existing flying clubs succeed all over the United States. Drew is an active member of the Free State Flying Club in College Park, Maryland. Aviation has been Drew's passion ever since he got a ride in a small airplane to earn his aviation merit badge with the Boy Scouts during his first year in high school. Drew is an active instrument-rated commercial pilot and advanced ground instructor.

**Dana Morisset***Aviation Director**Wyandotte School District 1*

Dana Morisset has taught high school and middle school math for 18 years. She was a special education director for two years, and this is her first year as aviation director at Wyandotte School District 1 in Wyandotte, Oklahoma. Dana is a passionate, fun, energetic teacher—with high expectations—who loves what she does.

**Kristine Nakutis***Executive Director**Austin Peay State University*

Dr. Kristine Nakutis is a retired Army officer with more than 20 years of logistics experience and multiple combat tours. She currently serves as the executive director for Austin Peay State University's Fort Campbell campus. She also provides operational and logistics support to Austin Peay's aviation science program that offers a B.S. degree in Aviation Science with a concentration in Rotor Wing.



Pamela Olson

*Business Development Leader
King Schools*

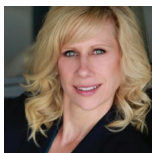
Pamela Olson has experience in multiple aspects of the aviation industry, from hiring pilots for the airlines to dispatching at a flight school. For the past 20 years, Pamela has been a member of the King Schools' team. Over the past 47 years, King Schools has trained more than 1.5 million aviators worldwide. The clear, simple, and fun teaching style has King Schools' customers raving about their experience for years! Pamela spearheaded a collaboration with the AOPA Foundation's You Can Fly program, developing a program that schools can use to take students to the next level by obtaining a private or commercial drone pilot certificate.



Glenn Ponas

*Director, High School Outreach
AOPA Foundation*

Glenn Ponas is responsible for leading outreach efforts for the AOPA Foundation's high school initiative, focusing on expanding the adoption and implementation of the AOPA Foundation High School Aviation STEM Curriculum. Glenn has 31 years' experience as a secondary teacher, aviation program founder, building and district-level administrator, and curriculum development specialist with the Pittsburgh Public Schools. He is an FAA-certificated private pilot and remote pilot. Glenn co-founded a Pittsburgh-based data visualization and geographic information system analysis company. He was also an educational data systems consultant at the state and federal levels.



Katie Pribyl

*Senior Advisor
Aircraft Owners and Pilots Association*

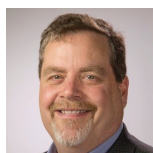
A graduate of Embry-Riddle Aeronautical University in Arizona, Katie became an airline pilot at the age of 21, flying the CRJ-200 for a regional carrier. When the airline went out of business, Katie was named director of communications for the General Aviation Manufacturers Association. In 2012, Katie joined AOPA as the vice president of communications. She was later promoted to senior vice president for aviation strategy and programs, responsible for its You Can Fly program and the Air Safety Institute. Katie retired from AOPA in 2019, moving back to Montana to take over her family's 130-year-old cattle ranch. She continues in an advisory role to AOPA and operates her own consulting business, advising electric and hybrid electric aviation start-ups.



Jennifer Radtke

*Chief Mechanic
Boeing Commercial Airplanes*

Jennifer Radtke is the first woman to serve as a chief mechanic for Boeing Commercial Airplanes. She helps engineers design products that prioritize mechanics' safety, work environment, and workload. Jennifer has 27 years of aviation industry experience, including as deputy program manager and lead of the 777X maintenance engineering team, and maintenance programs engineering lead for 737, 747, 767, KC-46, and 777X. Jennifer earned two bachelor's degrees in engineering technology and aeronautics and an associate's degree in aircraft maintenance from Embry-Riddle Aeronautical University. She earned her aviation maintenance technology degree and airframe and powerplant certificate from the Michigan Institute of Aviation and Technology, and certification in model-based systems engineering from the Massachusetts Institute of Technology.



Kelly Reich

*Senior Vice President, Strategic Operations
FlightSafety International*

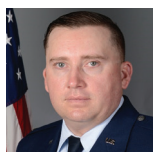
Kelly Reich's aviation experience started when he earned his private pilot certificate while in high school at the age of 17. He continued to work on his ratings while attending Wichita State University, where he graduated with a B.A. in Aviation Management. Kelly has worked in various senior leadership positions for Cessna Aircraft, Honda Aircraft, and is currently at FlightSafety International. He leads the development of courseware strategy and associated technologies, including 3D and virtual reality. Kelly's passion for aviation led him to become a multi-engine and instrument flight instructor and commercial glider pilot. He is also type-rated in the CitationJet.



Greg Roark

*Director of K-12 STEM Education
Redbird Flight Simulations*

Greg Roark has developed aeronautics programming in private and public schools nationwide for more than 13 years. As a classroom teacher, he introduced some of the methodologies used in modern aeronautics programs, including integrating flight simulation into the classroom. At Redbird, Greg creates training and professional development courses and consults school districts on starting and expanding aeronautics programs. He has degrees in K-12 education and has been flying for more than 20 years. In his spare time, he is building a Velocity XL airplane.



1st Lt. Jonathan Rothe

*Deputy Chief of Human Capital for the Secretary of the Air Force
International Affairs, United States Air Force*

1st Lt. Jonathan Rothe currently serves as the deputy chief of human capital for the secretary of the Air Force international affairs at the Pentagon. Previously, he served as the director of operations for the Aim High Flight Academy at Randolph AFB. In this position, he was responsible for training students and staff during each academy. In addition, he served as the officer in charge of student flight for the 184th Wing at McConnell AFB in Kansas. In this role, he oversaw more than 75 members regarding preparation for basic military training.



Derek J. Rowe

High School Aviation Technology and Career and Technical Education Teacher, Tullahoma High School

Derek Rowe is a public high school aviation teacher and president of the High School Aviation Association, which he formed to support high school aviation programs nationwide. His recent specialty is the impact on the aviation industry post 9/11 and COVID, the changes, improvements, and challenges since then, and how high schools are placed to assist in recruiting and training highly skilled aviation STEM professionals. Derek turned around a failing aviation program at Metro Nashville Public Schools, turning it into one of the top 10 aviation programs in the United States. He now teaches Aviation Technology at Tullahoma High School in Tennessee, taking its students to even greater altitudes!



Jimmy Sanford

*MD-11 Captain
FedEx Express*

Jimmy Sanford is an MD-11 captain, basic indoctrination facilitator, and a pilot hiring team member for FedEx Express. He is responsible for the safe operation of his aircraft, shepherding new-hire pilots through their initial two weeks of training, and vetting future FedEx crew members in the pilot interview process. Jimmy joined FedEx in 1998, working on the Memphis ramp while attending Embry-Riddle Aeronautical University's Worldwide Campus and flying for a local corporation. Upon graduation, he flew with Chautauqua Airlines. He returned to FedEx in 2004 as a line pilot. Jimmy has also worked in the FedEx AirNav department supporting FedEx Charters by securing overflight and landing rights necessary in support of the U.S. military and deliveries of personal protective equipment back to the United States during COVID.



Ralph Schirlo

*Aviation Teacher
East T STEM Academy, Memphis, TN*

Ralph Schirlo has spent the past 18 years teaching in Memphis public schools. Prior to that, he completed a professional pilot course and served as a flight instructor at Bolivar Aviation International School of Aeronautics. With more than 7,000 flight hours in a range of aircraft and time spent flying for FedEx, he is a knowledgeable and passionate aviation instructor who has been teaching the AOPA Foundation High School Aviation STEM Curriculum for the past five years. He takes great pleasure from seeing students excel in the field of aviation.



Peter and Lesley Schlesinger

*Owners and Pilots
Flying Coyote Aerial Photography*

Peter and Lesley Schlesinger are Part 107 drone pilots, owners, and operators of Flying Coyote Aerial Photography. Peter has been interested in remote control aircraft since the 1980s and holds an associate of applied science degree in aviation electronics. He also flies a drone for the city of Memphis engineering department in addition to other duties in the traffic engineering department. Lesley is new to the drone community and recently received her Part 107 certificate. Lesley holds a B.A. in Political Science from Pacific Lutheran University and currently works at International Paper as the North America sales manager for global cellulose fibers.



Christine (Chris) Sharp

*Manager, Aviation Workforce and Education Division
Federal Aviation Administration*

Christine (Chris) Sharp oversees the Federal Aviation Administration (FAA) efforts to introduce students of all backgrounds to aerospace careers and provide them with pathways to ensure a diverse and robust aerospace workforce of the future. During her 30-year career at the FAA, Chris served as the staff director in the Office of Aviation Workforce Outreach, as the manager for social collaboration and engagement in the Office of Communications, and in various positions within the Office of International Affairs. Chris has a degree from Colgate University in international relations and a master's degree in organizational communication from George Mason University.



J. Anthony Sharp

*Aviation Educator
Retired*

J. Anthony Sharp, Ed.D., also referred to as the dean of Black aviation education, is a consultant and retired college professor. From the start of his career, he has been interested in increasing diversity in aviation. During his career, Anthony established flight training programs at three historically black colleges and universities, an achievement that has no comparison. Those flight programs are located at Hampton University, Florida Memorial University, and Elizabeth City State University. He is a founding board director of a STEM school with an aviation emphasis and a board of trustee for a community college with an aviation program.



Michael Smith

*Resource Teacher and Aviation Program Director
Colonel Zadok Magruder High School*

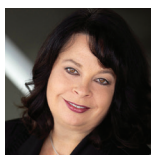
Michael Smith has taught middle and high school for the past 22 years. For the first 18 years of his career, he taught Project Lead The Way engineering classes. Most recently, Michael taught the AOPA Foundation High School Aviation STEM Curriculum at Magruder High School in Rockville, Maryland. He is a sponsor of multiple school clubs and honor societies. Outside of school, Michael is a coach for two of his children's sports teams and their taxi driver for other sports. His family loves to travel and spend time at the beach.



Laura Swessel

*STEM Teacher
Mercy Academy*

Laura Swessel has a BSE in Aerospace Engineering from the Massachusetts Institute of Technology and an MSE in Mechanical Engineering from the New Jersey Institute of Technology. She is also a certified Lean Sigma Master Black Belt. Laura spent 10 years working in the aerospace industry before starting a Lean Sigma consulting business with clients in various industries. Her career in education began in 2003 as a physics professor at the local Purdue University campus. In 2012, Laura transitioned to teaching high school. She has taught physics, engineering, multiple math courses, computer science, Earth science, space science, and aviation over the past 10 years. She and her husband, John, have four children, Ryan, Adam, Patrick, and Amanda.

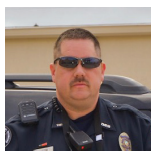


Elizabeth Tennyson

Senior Vice President

AOPA Foundation and You Can Fly

As Senior Vice President of the AOPA Foundation and You Can Fly, Elizabeth Tennyson is responsible for the philanthropic arm of AOPA as well as programs designed to get people flying and keep them flying, including initiatives aimed at introducing high school students to aviation careers. Elizabeth joined AOPA in 1998 and has held positions that included executive editor of *Pilot* magazine, vice president of publications, and vice president of aviation program operations. She is an instrument-rated private pilot and co-owns a Bonanza.

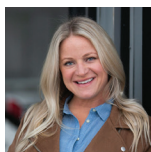


Michael Uleski

Lead UAS Instructor

FlightSafety International

Michael Uleski has had a passion for aviation since flying balsa wood gliders as a child. He began flying crewed aircraft at 17 and attended Embry-Riddle Aeronautical University, earning a degree in aeronautical sciences and a commercial pilot certificate. He started his own unmanned aircraft systems (UAS) services company in 2014, cross-trained as a law enforcement officer, firefighter, and EMT, and developed his agency's UAS unit that began operations in 2015. In 2016, he began working as the chief public safety instructor for UAS and joined FlightSafety International in 2019 to develop and instruct courses related to UAS operations.

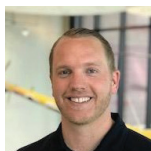


Carley Walker

Director of Development

STEM Flights

Carley Walker is passionate about helping young people discover STEM and aviation career pathways. As the director of development for STEM Flights, a national nonprofit providing flight experiences to middle and high schoolers, Carley connects educators and students with volunteer pilot mentors in communities throughout the United States. She believes that getting students onto the flight deck can be life-changing, and her goal is to have a pilot mentor at every airport in the country.

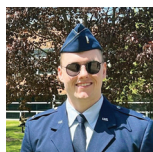


Brett Watts

Co-Owner and Vice President

True Course Simulations

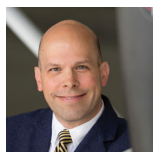
Brett Watts is the co-owner and vice president of True Course Simulations, a virtual reality courseware and hardware provider to some of the largest flight training organizations in the world. His experience includes more than 10 years in commercial aircraft program marketing and as a space operations officer for the U.S. Air Force. Brett is also a Ph.D. candidate and faculty member at Embry-Riddle Aeronautical University.



2nd Lt. Ashton Wright

*Gold Bar Diversity Recruiter
United States Air Force*

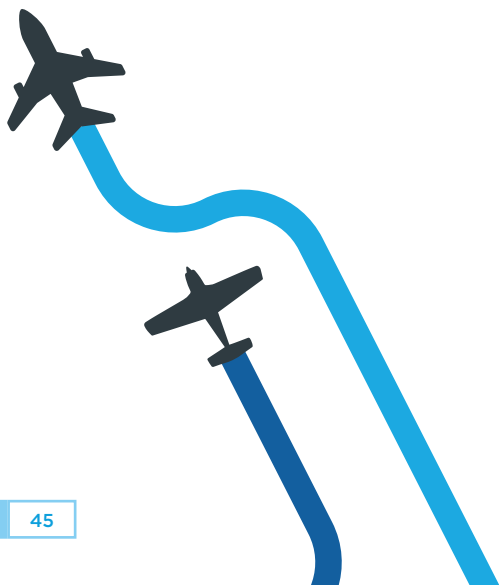
2nd Lt. Ashton Wright is a recruiter who went to school at Kent State University and graduated with a Bachelor of Science degree in aeronautics. He was an active member of AOPA and an avid user of its student pilot resources during his training classes. As a gold bar diversity recruiter for the Air Force Reserve Officer Training Corps (AFROTC) at the 347th Recruiting Squadron, he is responsible for the recruitment of qualified, motivated, and diverse students for the AFROTC High School Scholarship Program, as well as performing general outreach at various schools and public events. His area of responsibility spans 89,000 square miles and includes the states of Illinois, Wisconsin, and Iowa.



Erik Yates

*Director, Curriculum Development
AOPA Foundation*

Erik Yates has 25 years of education experience as a STEM supervisor, technology curriculum coordinator, teacher trainer, and classroom teacher from elementary school through high school physics. As the program director for the Global Learning nonprofit organization in New Jersey, Erik designed and delivered STEAM training for teachers. He has inspired his students with aviation-themed lessons while teaching in places as diverse as Tianjin, China; Dubai, United Arab Emirates; and Chatham, New Jersey. A 3,500-hour airline transport pilot, Erik earned his private pilot, flight instructor and multi-engine instructor credentials in high school and college before flight instructing full time and completing his master's degree in education.





About AOPA

The Aircraft Owners and Pilots Association (AOPA) is the largest community of pilots and aviation enthusiasts in the world. AOPA members take to the skies for many reasons, and are driven by motivations as varied as they are. Some relish the exhilaration and beauty that come with experiencing the world from a different perspective, others fly for the convenience and flexibility they need to meet their business travel demands. Operating out of offices in Frederick, MD, and Washington, DC, AOPA exists to protect and grow general aviation. We educate the public about the fun and utility that aircraft provide, offer resources and training material to enhance the skills of pilots, and advocate for aviation within government agencies. AOPA's job is to maintain the strength and vitality of the flying community. The AOPA Foundation is the philanthropic arm of AOPA. Contributions to the Foundation fund programs that membership dues don't cover, including the AOPA Air Safety Institute and You Can Fly program. Our goal is to fund opportunities of growth for every AOPA member and the entire general aviation community.

Learn more at aopa.org.

About the AOPA Foundation

As the philanthropic arm of the Aircraft Owners & Pilots Association, the AOPA Foundation, Inc. raises funds for two vital programs—the You Can Fly program and the AOPA Air Safety Institute. Generous donors fund these lifesaving, life-changing programs through charitable gifts above and beyond their AOPA membership dues. Together, we are building a stronger, safer pilot community.

The AOPA Foundation is a tax-exempt charitable, educational, and scientific organization—educating the general public on the value of general aviation. They work to improve aviation safety, preserve and improve community airports, and encourage learning to fly for career and personal benefit—all in the interest of ensuring the future of general aviation in America.

Learn more at aopafoundation.org.

About You Can Fly

You Can Fly is a collection of practical, rigorous, and engaging initiatives designed to help build a bigger, stronger, and more vibrant pilot community. Through extensive research and real-world experience, AOPA has developed initiatives to help high school students discover and prepare for careers in aviation and aerospace, encourage best practices in flight training, support flying clubs, and get lapsed pilots back in the air. What makes You Can Fly so special is not just the variety of initiatives it encompasses, but also the rigor with which they're managed and evaluated. You Can Fly is tangibly moving the needle with tens of thousands of students enrolled in its High School Aviation STEM Curriculum, thousands of flight schools and instructors evaluated, hundreds of new flying clubs launched, and more than 11,000 formerly rusty pilots back in the air.

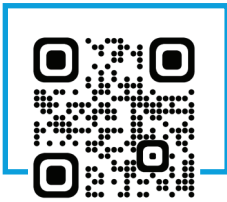
Learn more at youcanfly.aopa.org.

About AOPA's High School Aviation Initiative

The High School Aviation Initiative was created to support and expand aviation STEM education in high schools nationwide. Through the initiative, AOPA hosts an annual high school aviation STEM symposium where educators and industry leaders share best practices, network, and exchange ideas. AOPA's high school aviation STEM curriculum provides a complete four-year curriculum that fits within two career and technical education pathways—pilot and unmanned aircraft systems (UAS). All grade levels are made available free of charge to high schools nationwide. To help motivated students pursue their aviation career aspirations, AOPA also offers high school students and teachers flight training scholarships to pursue their primary FAA pilot certification. In 2022, AOPA awarded more than \$1,000,000 in scholarships to high school students and teachers.

Learn more at youcanfly.aopa.org/high-school.

Quick Links: High School Initiative Resources



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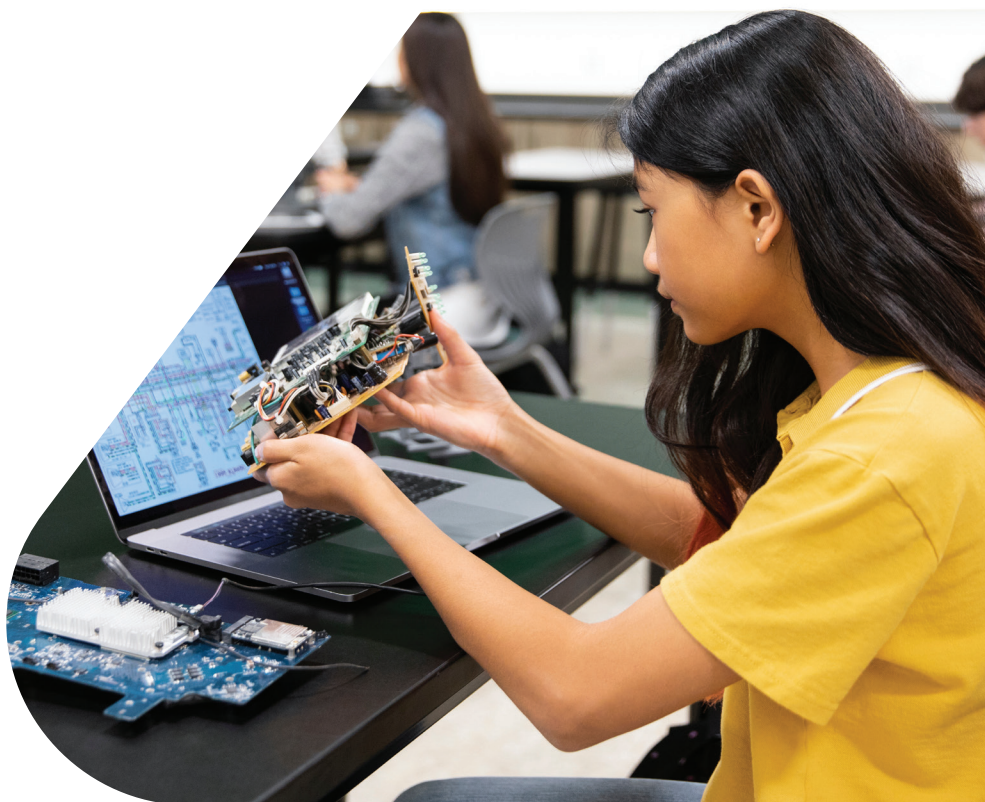


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Soaring to new heights.

We celebrate those who always strive: to rise higher, push through every boundary, and overcome every obstacle. We're proud to show our support for the Aircraft Owners and Pilot Association (AOPA), honoring the attendees of this 2022 Aviation Stem Symposium and the educators and administrators of tomorrow's pilots. Congratulations.

