



## AGENDA

(Updated 09.24.24)

### SUNDAY, NOVEMBER 17

12:00 P.M. – 5:00 P.M. | REGISTRATION OPEN

1:00 P.M. – 3:45 P.M. | BREAKOUT SESSIONS

#### **Aviation 101 Boot Camp NEW!**

Are you new to teaching aviation? This nearly three-hour seminar will help you jump-start your understanding of aviation fundamentals. The session covers essential concepts such as aerodynamics, aircraft components, and systems. You'll also get an introduction to FAA regulations, the air traffic control system, and the National Airspace System (NAS). Additionally, you'll learn about the steps to becoming a pilot and discover free and low-cost resources to further build your aviation knowledge.

#### **Aviation Advanced Boot Camp NEW!**

This three-hour seminar is designed to equip educators with the essential information and resources to begin their journey toward earning an FAA ground instructor certificate. Participants will learn about the different types of ground instructor certificates, eligibility requirements, and the steps involved in certification. The session will also cover available study resources and strategies for preparing for the FAA Knowledge Tests. Please note that this seminar is an introduction; additional preparation will be required to fully prepare for the FAA Ground Instructor Knowledge Tests.

2:00 P.M. – 5:00 P.M. | EXHIBIT HALL OPEN

3:45 P.M. – 4:00 P.M. | NETWORKING BREAK

4:00 P.M. – 5:00 P.M. | BREAKOUT SESSIONS

#### **Design. Configure. Fly: Introducing the All-New Drone Infinity Kit NEW!**

Discover the Drone Infinity Kit, the newest technology for upper-level drone education by Pitsco Education. Attendees will witness how this configurable drone and its curriculum complement the learning objectives of the AOPA curriculum and reinforce the skills necessary for students to be successful UAS pilots and technicians. **Sponsored by Pitsco Education.**

#### **Introducing the AOPA Foundation High School Aviation STEM Curriculum [Sunday & Monday]**

Transform your classroom with the AOPA Foundation's High School Aviation STEM Curriculum. In this high-level overview, learn about the breadth, rigor, and fun of the FREE curriculum. Discover the engaging activities, comprehensive teaching materials, and extensive teacher support available to curriculum users, and learn how to get started.

5:00 P.M. – 6:00 P.M. | OPENING NIGHT SOCIAL

## MONDAY, NOVEMBER 18

7:30 A.M. – 3:30 P.M. | REGISTRATION OPEN

7:30 A.M. – 9:00 A.M. | BREAKFAST | EXHIBIT HALL OPEN

9:00 A.M. – 10:15 A.M. | OPENING GENERAL SESSION

### KEYNOTE SPEAKER

#### Sean D. Tucker

##### Renowned Aviator, Aerobatic Pilot, Founder/President, Bob Hoover Academy

Known for his jaw-dropping aerobatic performances, Sean has also gained recognition for his impactful work in aviation as the founder of the Bob Hoover Academy, where he uses the AOPA Foundation Curriculum to inspire the next generation to pursue their dreams—both in the classroom and in life. Sean will share how to apply leadership principles, passion, and resilience to your work with students. You'll leave equipped with practical tools to motivate your students, guide them toward success, and help them reach their full potential.

10:15 A.M. – 10:30 A.M. | NETWORKING BREAK

10:15 A.M. – 5:00 P.M. | EXHIBIT HALL OPEN

10:30 A.M. – 11:30 A.M. | BREAKOUT SESSIONS

##### **Before You Buy: Simulator Options, Types, and What's Coming with AI and VR?**

Flight simulators are a great way to enhance your aviation curriculum and motivate your students, but it can be hard to know where to start. Learn about some of the most popular flight simulators on the market today, emerging technologies, and how you can put them to work in your classroom and bring aviation concepts to life.

##### **Beyond the Flight Deck: Non-Pilot Careers in Aviation **NEW!****

The aviation ecosystem needs professionals from all disciplines, including but not limited to maintenance, manufacturing, medical, legal, computer science, engineering, and business. This session will introduce participants to the entire spectrum of aviation-related careers, proving the adage that if you can think of a job, it probably exists in the aviation field.

##### **Elevate Your Classroom: How CAU Can Support Your Dedication to Aviation Awareness **NEW!****

Join California Aeronautical University (CAU) as we explore how CAU can support you and your classroom! Discover the continuing education credits we're offering to K-12 teachers who have completed the AOPA You Can Fly Curriculum Training. Plus, be the first to hear about our new articulation agreement opportunities for eligible schools, which gives your students the opportunity to demonstrate proficiency and apply for college credit – the perfect complement to the AOPA Curriculum. **Sponsored by California Aeronautical University.**

##### **Introducing the AOPA Foundation High School Aviation STEM Curriculum**

Transform your classroom with the AOPA Foundation's High School Aviation STEM Curriculum. In this high-level overview, learn about the breadth, rigor, and fun of the FREE curriculum. Discover the engaging activities, comprehensive teaching materials, and extensive teacher support available to curriculum users, and learn how to get started.

##### **Military Academies as a Pathway to Aerospace Careers **NEW!****

Military academies represent a viable pathway for students to careers in aviation and college degrees—paid for by the Federal government. In this session, representatives of the United States Military Academy at West Point and the United States Air Force Academy will discuss the benefits and commitments associated with a military academy education, the application process, and tips for maximizing students' chances of receiving a nomination and appointment.

**11:30 A.M. – 1:00 P.M. | LUNCH**

**1:00 P.M. – 2:00 P.M. | BREAKOUT SESSIONS**

**From Great Idea to Day One of Instruction: Guide to Starting a New High School Aviation Program**

You want to start an aviation program that prepares students for STEM career success, but how do you turn that idea into reality? AOPA Foundation team members have helped hundreds of programs get off the ground. We'll answer your questions and share strategies for pitching, planning, and launching high school aviation programs.

**Introducing the ACE Middle School Aviation STEM Curriculum **NEW!****

The Aerospace Center For Excellence (ACE) on the campus of SUN 'n FUN at the Lakeland International Airport has created a free, world-class aviation curriculum designed explicitly for middle-grade-level students. Designed to excite and educate students about aviation, the course is also constructed to integrate seamlessly into AOPA Foundation High School Aviation STEM Curriculum. Here's your chance to meet the curriculum development team and get a look "under the cowling" of this exciting middle school course offering.

**The Aviation Job Outlook: Reading the Tea Leaves **NEW!****

Industry reports continue to indicate an unprecedented demand for pilots, mechanics, and other aerospace STEM professionals. At the same time, recent hiring trends in some market segments have not aligned with these indicators. So, what's the real story? Our panel of aviation industry experts will separate fact from fiction and provide a clearer picture of the future of aviation hiring.

**The Future of Aviation Technologies: Crewed and Autonomous Aircraft **NEW!****

Recent innovations in crewed and autonomous flight are transforming the future of aviation. Peek into the future as we explore emerging technologies such as electric and hydrogen-fueled, supersonic, flight deck automation, industry-specific drones, advanced air mobility, and virtual reality training.

**2:00 P.M. – 2:15 P.M. | NETWORKING BREAK**

**2:15 P.M. – 3:15 P.M. | BREAKOUT SESSIONS**

**Aviation Competitions: Engaging Students and Promoting Networking **NEW!****

Aviation competitions are a great way to engage students, extend learning, help them showcase their aviation knowledge, and build critical teamwork and competitive skills. A panel of experts, including AOPA Foundation teachers who have founded competitions and representatives of organizations that sponsor competitions, will share details of state, regional, and national competitions and discuss how you can prepare your students to participate or to build your own competition.

**Best Practices for Using a Simulator in the Classroom **NEW!****

While perhaps you have the next Sean D. Tucker or Patty Wagstaff in your class, even those legends started by keeping the blue side up and the brown side down. So, how do you get your students to treat the flight simulator like a learning tool rather than a video game? **Sponsored by Redbird Flight Simulations.**

**Deep Dive: Work Through an AOPA Foundation High School Aviation STEM Curriculum Lesson**

You've seen it on paper, but what does a high school aviation lesson look like in practice? Find out by observing an entire lesson from start to finish. We'll highlight the balance of rigor and fun in a typical class session and offer tips for pacing, management, and adapting to the realities of your classroom and students.

**How to Find and Cultivate Financial Support for Your Program: Fundraising and Grants 101 **NEW!****

Need money to start or expand your school's aviation program? Many sources, such as federal and state grants and CTE funding, could be available each year. Learn how to tap into these sources to make your aviation program soar!

### **Medical Update - The Changing Landscape and What It Could Mean for You and Your Students **NEW!****

Recent changes to FAA medical certificate policies and procedures, particularly in the areas of mental health, cardiac, and vision, have made becoming a pilot more accessible. Our FAA medical policy experts will discuss the nature of the changes and outline the implications for anyone, including high school students and teachers, who intend to pursue an FAA pilot certification.

**3:15 P.M. – 3:30 P.M. | NETWORKING BREAK**

**3:30 P.M. – 5:00 P.M. | EXHIBIT HALL RECEPTION**

## **TUESDAY, NOVEMBER 19**

**7:30 A.M. – 12:30 P.M. | REGISTRATION OPEN**

**7:30 A.M. – 9:00 A.M. | BREAKFAST**

**7:30 A.M. – 12:30 P.M. | EXHIBIT HALL OPEN**

**9:00 A.M. – 10:00 A.M. | BREAKOUT SESSIONS**

### **Drones in the Classroom**

Flying drones in class is a lot of fun, but these machines are more tools than toys. Like any tool, the mission should drive which tool to buy. Learn strategies for getting the most from your drones, with a focus on drone selection, maintenance, management, and accessories worth having.

### **Hands-On Learning: Curriculum Activities Lab**

Engaging activities and problem-based learning are at the core of the AOPA Foundation High School Aviation STEM Curriculum. Try a selection of the fun and informative student activities found in our lessons with experienced teachers who can share their tips for classroom success.

### **Implementing Career & Technical Education Programs of Study: A Regulatory and Practical Guide **NEW!****

Creating an approved aviation Career and Technical Education program is a great way to formalize career preparation programs and tap into extensive state and Federal CTE funding. However, the pathway to program approval can be daunting, and approval processes vary widely by state. This session will introduce the aviation CTE landscape, attempt to de-mystify the process, and discuss how the AOPA Foundation can support schools on their journey to CTE program approval.

### **Let's Build an Airplane: How to Engage Students in Aircraft Construction **NEW!****

Building an airplane is a time-honored tradition in the US and a great way to learn airplane components and design and important aircraft manufacturing skills. In this session, we'll explore the many options for engaging students in aircraft builds, from volunteering on existing builds at the local airport to building an airplane as part of a formal aircraft manufacturing curriculum.

### **The Role Sims Can Play in Your Teaching Methods **NEW!****

Ray Bédard, founder of True Course Simulations (TCS), is a pioneer in flight simulation and training solutions. Recognizing the limitations of traditional teaching methods, he embarked on a mission to revolutionize pilot training through immersive simulation experiences. Ray will describe the process of implementing the TCS Learning System in a Career Technical and Education Center in South Carolina. **Sponsored by True Course Simulations.**

## 10:00 A.M. – 10:15 A.M. | NETWORKING BREAK

## 10:15 A.M. – 11:15 A.M. | BREAKOUT SESSIONS

### **Aerospace Careers: The Impact of Drones and Emerging Aviation Technology **NEW!****

In the next 50 years, drone technology and emerging aviation advancements will be hailed as the driving force behind the growth of aviation careers. With nearly 800,000 registered drones operating in our national airspace, there has never been a more opportune time for students to engage with the aerospace industry. **Sponsored by Unmanned Safety Institute.**

### **Aviation Maintenance: Adding a High School Pathway and Career Opportunities**

America needs as many new aviation maintenance technicians as new pilots. Learn how to add a maintenance pathway to your high school aviation program and discover career and training opportunities for graduates.

### **Beyond the Classroom: How Do You Convince Your District to Engage in Crewed & Unmanned Flight? **NEW!****

Districts cite cost, risk, liability, and regulatory concerns as the most common obstacles to considering options for students flying airplanes and drones. This session will explore the facts and myths surrounding high school flight and drone training and discuss strategies for overcoming concerns and getting students in the air.

### **Soft Skills for Aviation Students—The NEW Career Preparation Course **NEW!****

Here's your chance to delve deep into the AOPA Foundation's newest course offering: The Career Preparation Course (CPC). The one-semester CPC gives students the knowledge and skills they need to succeed in today's aviation workforce. Including "soft" and technical skills will make them competitive in the job market. Learn how to add the grade 12 capstone semester to create a full-year course where students prepare for and document their internships, externships, and apprenticeship experiences.

## 11:15 A.M. – 11:30 A.M. | NETWORKING BREAK

## 11:30 A.M. – 12:30 P.M. | BREAKOUT SESSIONS

### **Ask Me Anything: Q&A with AOPA Curriculum Teachers **NEW!****

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 staff and veteran AOPA Foundation Curriculum teachers and administrators.

### **Aviators Wanted: The United States Air Force**

Where can the United States Air Force take your students? Air Force representatives will discuss how the Air Force can help students discover their strengths, learn new skills, earn a degree, and make their aviation careers take flight.

### **Join the Club! Aviation Interest, Drone, Aircraft Maintenance, and Flying Clubs**

Creating a high school aviation club is not only feasible but can also be a great way to drive student engagement and achievement. The size and purpose of aviation clubs can be as diverse as your student population—with the sky truly being the limit! We will provide examples of different types of aviation clubs and steps you can take to get your club off the ground.

### **Something for Everyone: Free and Low-cost PK-12 Resources to Help Your Program Soar**

Round out your aviation program with free, low-cost materials and flight opportunities from prestigious aerospace organizations. Discover the wealth of content available to you and your students.

## 12:30 P.M. – 2:30 P.M. | LUNCH | CLOSING GENERAL SESSION | ANNOUNCEMENTS (Keynote to be announced)

*Note: Breakout topics and descriptions are subject to change.*