

Aerospace Education Membership (AEM) Program

Presentation Guide:

Prior to start, handout flyer “1,2, and 3” pack, and ensure powerpoint show loaded with slide 1 ready. If projector/laptop unavailable or fails, handout powerpoint student guide as well which contains the slides in print format.

Slide 1 – Greeting

Good morning/afternoon! (Introduce yourself to audience)

Today, I'd like to familiarize you with Civil Air Patrol's Aerospace Education Membership (AEM) Program and the great, free, benefits available for members and their students!

Slide 2 – CAP History

First, a little about Civil Air Patrol (CAP).

Formed on December 1st, 1941, CAP is a nonprofit, humanitarian organization chartered by Congress and is the official Auxiliary of the United States Air Force.

- 1942-Started Cadet Program
- 1946-Incorporated by Congress
- 1948-Became USAF Auxiliary
- 1953-Aerospace Education in schools.
- Today-CAP is the leading K-12 youth and STEM organization in the nation.
- CAP is one of few early organizations that has always had women at the forefront!
- CAP has 3 primary missions for America; Emergency Services, Cadet Programs, and Public Aerospace Education.

Slide 3 – Aerospace and STEM Education

Our AEM Program supports CAP's AE mission by promoting aerospace and STEM by providing you, or your STEM-based organization, with access to dozens of free educational materials, products, and programs.

Slide 4 – AE Membership

What are the AEM requirements?

- One-time \$35 membership free with free annual renewal.
- AEMs are not official members of CAP squadrons, so they do not attend meetings or wear uniforms. You simply inspire youth with STEM education.
- Membership is open to K-12 formal and informal educators from schools, home-schools, museums, libraries, youth organizations, and other STEM based organizations.
- AEMs gain access to all of the FREE benefits we will discuss next.
- Why? To help inspire youth interest in aerospace and STEM careers.

Slide 5 – TOP Flights

AEMs are eligible for a free Teacher Orientation Program (TOP) flight.

- Fly with a specially trained pilot in a CAP Cessna airplane.
- Receive a pre-flight briefing and fly over your local area, or even your school.
- Handle the controls and feel what it is like to operate an airplane and have a fun educational experience to share with your students!

Slide 6 – Curricula Products

AEMs gain access to free curricula products.

- Over 40 free products aligned with National Academic Standards for pre K through grade 12.
- New for 2018 is a volume on the Tuskegee Airman and two volumes on Women In Aviation.
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Slide 7 – STEM Kit Program

AEMs also gain access to the K-12 STEM kit program.

- 15 free kits are available to use, evaluate, and keep.
- Note: As with all of the AEM products and benefits, “free” means, no cost after the one-time \$35 application fee.
- The STEM kits have shown an 87% increase in STEM career interest.

Slide 8 – STEM Kit Examples

The kits include Quadcopters, Weather Station, Robotics, RC Aircraft, Model Rocketry, Hydraulic Engineering, Flight Simulator, and...

Slide 9 – More STEM Kit Examples

Electronics Snaptricity, Raspberry Pi Computer Coding, Sphero and BeeBot, Kinex Math and Geometry, Astronomy, and Renewable Energy kits.

Slide 10 – ACE/AEX Programs

AEMs can also participate in the free K-6 Aerospace Connections in Education (ACE) program.

- The ACE program uses aerospace themes to promote academics, character development, and physical fitness.
- The curriculum guide provides 21 lessons per grade level.
- There is also a free Aerospace Education Excellence (AEX) awards program for K-12 which provides 6 lessons per grade level culminating in an award plaque presented by CAP.

Slide 11 – 2017 ACE Stats

ACE statistics for 2017 show 27,369 students and 598 teachers in 187 schools participating across 38 states! No slide on this, but AEMs can apply for \$250 grants too!

Slide 12 – CAP Squadron Support to AEMs

Local CAP squadrons are available to support AEMs.

- CAP members can assist with program implementation, provide presentations, and help with events like rocket launches, etc...
- CAP pilots provide TOP flights for AEMs.
- CAP cadets can visit classrooms and present our cadet program to students.

Slide 13 – AEMs Sharing CAP Cadet Program

In return, AEMs can help CAP by sharing information on the CAP cadet program with interested students.

- Youth ages 12 to 18 who are interested in flying, aerospace, or the military.
- Youth interested in learning to lead or earning scholarships are also great candidates for the cadet program.
- If joining before age 18, a cadet may remain in the cadet program until 21 or transfer to senior member at age 18 if desired.

Slide 14 – CAP Cadet Program

The CAP cadet program is a military-style program involving:

- Character and leadership development
- Aerospace and STEM career preparation
- Aviation scholarships
- Physical fitness, drill and ceremony
- Community service and mentoring
- Squadrons are in all 50 states and can be found by entering your zip code at gocivilairpatrol.com.

Slide 15 – Cadet Program Career Exploration

CAP has various programs and activities that support exploration of aerospace and STEM careers.

- Aircraft maintenance and manufacturing
- Engineering technology
- Advanced technology
- Space command
- Meteorology
- Pararescue
- Flight training
- Cyber security
- STEM educator
- Many cadets have gone on to attend military academies as well as serve in the armed forces.

Slide 16 – Benefits of CAP AE and Cadet Programs

Some of the benefits of the CAP AEM and cadets programs:

- Offer positive STEM role models and empowers youth with the desire to seek STEM careers
- Provides career development options and opportunities
- Reinforces academic relevance and purpose
- Encourages respect for self and others
- Promotes a physically fit and drug-free lifestyle
- Helps develop a technologically-prepared workforce

Slide 17 – Become an AEM Today!

As a CAP Aerospace Education Member you can inspire youth and share our program with your students and fellow educators!

- For more information please take a flyer packet or visit gocivilairpatrol.com/ae.
- The online AEM application is at gocivilairpatrol.com/joinaem and the one-time \$35 fee can also be paid online with a credit or debit card.
- Alternatively, the application and check can be directly mailed if desired.
- Annual renewals are free!

Slide 18 – Summary

With all of these benefits, the Aerospace Education Member program is a great way for educators to teach STEM subjects in an extraordinary way and help to develop the aerospace and STEM workforce of the future!

Any questions? (provide answer or direct to gocivilairpatrol.com for answers)

Thank you for your time and the opportunity to share this outstanding program with you today!