



# AK Aerospace Education Newsletter

November 2020

## Are YOU ready to FLY FREE?

One of the most exciting benefits of being a Civil Air Patrol Aerospace Education Member (AEM) is the opportunity to take a Teacher Orientation Program (TOP) flight in a CAP airplane, with an experienced CAP pilot, at a local airport.

New AEM member Adrienne Newman has already gone up flying for her TOP flight today!



This exhilarating program includes a pre-flight briefing, an actual airplane flight, and educational applications to share with students! Taking videos and/or photos to share the experience with students, OR, even live-streaming this flight, will transfer flight excitement to youth in hopes of greater interest in STEM subjects using the aviation theme.

It is more fun to fly with a friend! Thus, educators are encouraged to ask a peer to also join as a CAP AEM. Then, the two can fly together! Another option is for a school or school system to schedule a TOP Flight Day with CAP and make it a grand event with media coverage involved! TOP Flights can be conducted as a part of an educator workshop at an airport or an aviation museum. Contact AK Director of Aerospace Education, Lynda MacPherson at [605271@akwg.cap.gov](mailto:605271@akwg.cap.gov) or call 907.240.7888 to schedule your flight.

## Free ACE Program Still Open To Register

Registration is still open for the 2020-2021 school year. Don't miss this opportunity to bring engaging and meaningful cross-curricular aerospace-themed lessons that support STEM initiatives and enrich the school curricula into your classroom. The ACE Program provides online curriculum of 21 aerospace-themed, national academic standards-driven lessons for your K-6 grade level. Lessons are divided into nine academic lessons, six character lessons and six physical fitness lessons. In addition ... you will receive a classroom set of aerospace manipulative items that relate to one or more lessons for each grade level. To register your class, homeschool, or youth group go to eServices at [www.capnhq.gov](http://www.capnhq.gov) and under Aerospace Education on left side menu click on ACE to start your registration. Remember all students and educators who complete at least 10 of the 21 lessons in ACE receive the ACE Certificate of Recognition.



### CERTIFICATE OF RECOGNITION

For participating in the 2017-2018 Aerospace Connections in Education (ACE) Program  
PRESENTED TO

# Free STEM Kit Program

The Civil Air Patrol's STEM Kit program provides STEM resources for hands-on, inquiry-based learning. The STEM Kit program has been providing a selection of STEM Kits CAP educator members since January 23, 2013, to educate the next generation STEM workforce.

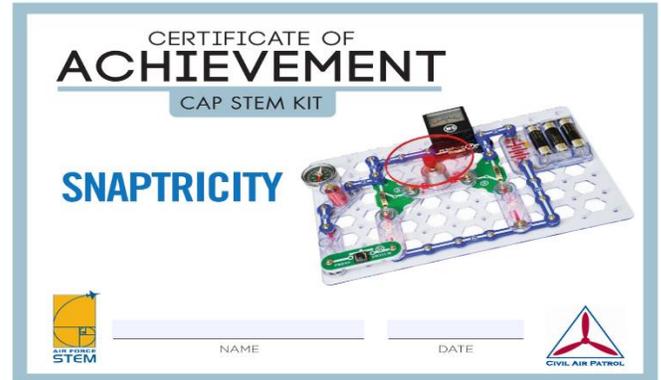
The kits come at no cost to recipients, designed to enhance current CAP educational curriculum and programs, and will be ready for immediate implementation. Educators select kits from the available 18 options.

AVIATION	SPACE	CYBER
 AngLegs	 Astronomy	 Bee-Bot/ Code & Go Mouse
 Build & Learn Geometry	 Hydraulic Engineering	 Kano
 Cross Country Navigation	 Renewable Energy	 Raspberry Pi
 Flight Simulator	 Robotics	 Sphero Mini/ Sphero SPRK+
 Quadcopter	 Rocketry	
 Ready To Fly Quads	 Weather Station	
 Remote- Controlled Aircraft		
 Snaptricity		

STEM kit process:

1. Submit STEM kit application before the end of the month. *All applications reviewed on the first of the month at National Headquarters*
2. STEM kit arrives before the end of the month application approved. **Free shipping to Alaska**
3. Use STEM kit and complete 10-question survey about your student's kit experience... Keep the kit!
4. Submit application for your next STEM kit.
5. Print your student STEM kit certificate of achievement.

All STEM kits have Certificates of Achievement. Need a copy of a certificate? Email [AKAerospaceEducation@gmail.com](mailto:AKAerospaceEducation@gmail.com)



The STEM Kit program continues to set new records!

So far this year, the program has:

- Filled 1,800 Applications
- Served 155,241 Participants
- Distributed 3,600 Kits

The total since 2013:

- Filled 11,349 Applications
- Served 715,903 Participants
- Distributed 21,306 Kits

## STEM Kit Program to add new kits throughout year

Update: The STEM Kit Program has exciting news! Based off feedback from recent surveys, new STEM Kits will be introduced and added throughout the year. Check back regularly for new additions and descriptions.

If you are new to CAP, you will want to visit <http://www.gocivilairpatrol.com> to familiarize yourself with what we have to offer.

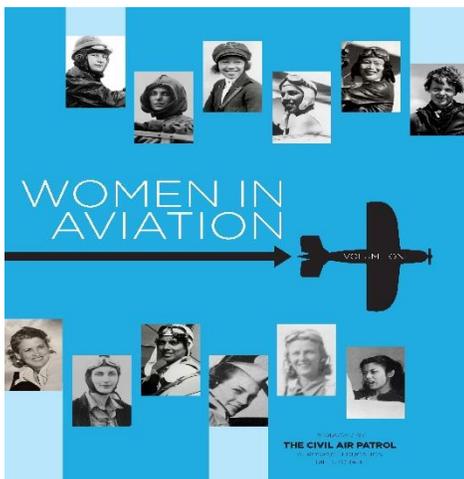
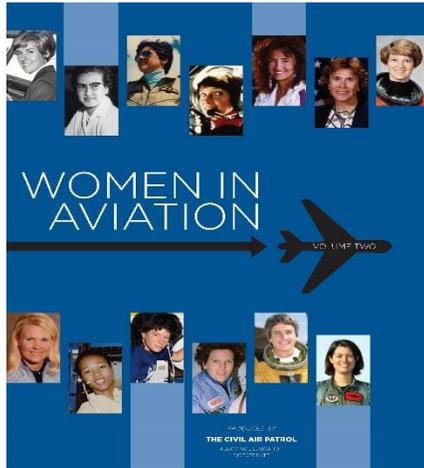
## New Women in Aviation Curriculum

CAP's "Women in Aviation" books provide an introduction to and historical account of the contributions women have made to the field of aviation and aerospace since the beginning of the 20th century.

Focusing on the stories of 25 diverse women, each representing a different chapter. Each chapter involves

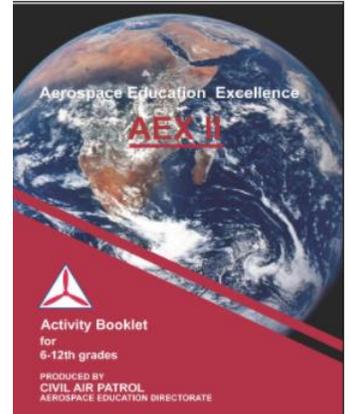
model-building relating to the aircraft that aviator flew. Also included with the hands-on activities discussion questions and other activities designed to connect these aviators from the past with today's youth. For instance, cadets and students are asked to explore present-day gender barriers that have recently been broken or have not yet been broken. The book aligns with national academic standards and highlights a wide variety of careers. Currently, these books are available in the AE Downloads and Resources section, along with our other curriculum products in CAP's member portal,

[www.capnhq.gov](http://www.capnhq.gov)



## Now Open: Aerospace Education Excellence Program-AEX

A new year of AEX is beginning! Make sure your classroom, homeschool, library, or youth group applies for the 2020-2021 AEX Award



Program in eServices. AEX program activities should take place from Oct. 1-Sept. 30 each year. Completing the required activities may



For outstanding achievement in CAP's Aerospace Education Excellence Award Program

	PRESENTED TO
	STUDENT
	TEACHER
	SCHOOL
	DATE

look a little different, and creativity will be needed to fulfill the required six AEX lessons and two-hour extension activity. Suggested activities and resources are available in eServices, AE Downloads and Resources, and on the AE website, Lessons and Activity Videos and Aerospace/STEM Resources. Virtual tours have been recommended for the two-hour extension activity. If you have ideas, you wish to share, please send to [605271@akwg.cap.gov](mailto:605271@akwg.cap.gov)

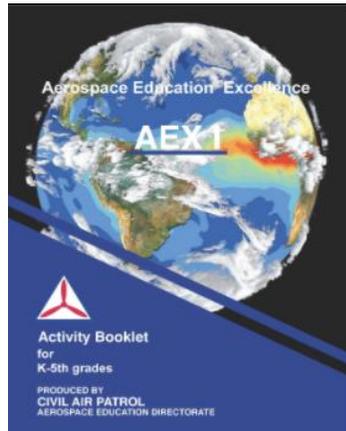
Program requires completion of your choice of six STEM and/or Aerospace Education activities and a two-hour field experience. That's it. Students and educators receive an AEX Certificate of Achievement

To enroll your students or group in the AEX 20/21 program simply log into eServices [www.capnhq.gov](http://www.capnhq.gov) and under Aerospace Education on the left menu click on AEX and complete the form.

## AEX I and AEX II

Two new 2020 editions of AEX I and AEX II are now available on the AE Downloads and Resources virtual bookshelf in eServices. AEX I (2020) offers 13 hands-on aerospace/STEM activities for K-5th graders. There is also an air traffic control-themed coloring book. AEX II (2020) features 13 hands-on aerospace/STEM activities for 6th-12th graders and cadets. These two books replace AEX I

(Volumes I and II), AEX II (Volumes I and II) and AEX for Seniors. We took the best of all three books and condensed it to two. Hard copies of the 2020 books are in production and will be available to order from Materials Orders in eServices soon.



## Free Hangar Field Trips

Even with all the COVID restrictions, happening CAP has still been able to help students in learning about aviation and CAP. Over the past six weeks in Anchorage, we have been able to assist over 500 visitors to our Polaris hangar on Merrill Field for an educational field trip. We have gone through gallons of sanitizer, boxes of masks, and cleaning the hangar before and after each field



trip. CAP field trips are free to schools, homeschools, youth groups, etc. During the visit, students will learn about CAP history, aviation information, tour the hangar, sit inside one of our CAP aircraft, and handle the controls to see how the pilot controls the ailerons and elevator on the aircraft. This is a great photo opportunity for mom and dad. Parents, don't be shy...you are welcome to climb inside and view the controls up close. To conclude the trip students complete a hands-on activity around aviation.

We are working with our other hangars throughout Alaska to offer the same field trip opportunities. Current hangar locations: Anchorage, JBER, Birchwood, Kenai, Valdez, Juneau, Tok, and Fairbanks.

Interested in setting up a field trip? Contact [AKAerospaceEducation@gmail.com](mailto:AKAerospaceEducation@gmail.com)

## Is it time to renew your membership?

All Aerospace Education Members (AEMs) are offered annual FREE "in-kind renewal." The online renewal email is sent 60 days prior to the membership expiration date. A renewal banner appears at the top of the eServices sign-in page 90 days prior to expiring. (You can't renew earlier than 90 days.) Find additional information at <https://www.gocivilairpatrol.com/programs/aerospace-education/for-educators>

### **RENEWAL for AEMs- Membership has expired:**

\* If membership expired within the last year, use the Free Renewal form.

\* If membership has been expired more than a year, or you are unsure, please contact [ae@capnhq.gov](mailto:ae@capnhq.gov) for assistance.

## Special for Alaskans

The Alaska CAP Aerospace Education officers have created several free Bingo and Memory card games linked to CAP curriculum for our Alaskan educators. Currently we have games available for:

Uncle Wiggly Wings  
Civil Air Patrol  
Astronomy  
Aerospace for the Very Young  
Women in Aviation  
Weather  
Rocketry  
STEM  
Aviation

If you would like a pdf copy of any of these games, send an email request to: [AKAerospaceEducation@gmail.com](mailto:AKAerospaceEducation@gmail.com)

## Upcoming Classes in November

CAP offers enriching education classes for students and adults for a low cost. Classes upcoming in November: Coding for the Very Young, Paint and Code with Sphero, Flight Simulators, Astronomy 101, and Aerospace Education for the Very Young ages 3-8, STEM day, Uncle Wiggly Wings the Candy Bomber, and Hydraulic Engineering.



For adults we offer classes in How to Teach Multiple Subjects with STEM kits, STEM kits 101.

Would you like any of our classes offered in your area? Send us an email and we will do our best to get classes to your location.

If you are interested in any of the above classes coming up in November, contact us at: [605271@akwg.cap.gov](mailto:605271@akwg.cap.gov) and reference CLASSES in the subject line.

## CAP on the Home School Vendor Lists

Civil Air Patrol is currently on the approved vendor lists with Family Partnership, IDEA, and Totem. If you are enrolled with a different home school and would like CAP to see about getting on that vendor list send us an email and contact information and we will look into becoming a vendor with them.

## Contact Information

AK CAP Director of Aerospace Education & STEM

Lynda MacPherson

[Lynda.macpherson@akwg.cap.gov](mailto:Lynda.macpherson@akwg.cap.gov)

[605271@akwg.cap.gov](mailto:605271@akwg.cap.gov)

907-240-7888

Internal Aerospace Education

Mary Stella

[Mary.stella@akwg.cap.gov](mailto:Mary.stella@akwg.cap.gov)

Email

[AKAerospaceEducation@gmail.com](mailto:AKAerospaceEducation@gmail.com)

Website

[WWW.AKWG.CAP.GOV](http://WWW.AKWG.CAP.GOV)

Facebook

[www.facebook.com/AlaskaAEM](http://www.facebook.com/AlaskaAEM)