



# AEO PICAYUNE



THE AEROSPACE EDUCATION DIRECTORATE'S NEWSLETTER

VOL. 2 | U.S. AIR FORCE AUXILIARY – CIVIL AIR PATROL – NORTH CENTRAL REGION – MISSOURI WING | NO. 10

## DIRECTORS VECTOR

Congratulations to the Cadets, Senior Members, and community partners who've excelled in Aerospace Education over the course of the year. Listed are the recipients of the four Aerospace Education awards:

- Frank G. Brewer Memorial Aerospace (Cadet) Category I
- C/SSgt Lennon Carlson**, Harry S. Truman Composite Squadron
- Frank G. Brewer Memorial Aerospace (Senior) Category II
- Lt Col Bill Sander**, DAE
- Frank G. Brewer Memorial Aerospace Individual/Organization Non-CAP Category III
- Cape Air**, Cape Girardeau, MO
- Aerospace Education Officer of the Year
- Maj Ernie Trumbly**, Travis Hoover Composite Squadron & Group V AEO

*Good luck at North Central Region!*

## AEROSPACE STEM ACADEMY (ASA) NEWS

The next ASA will be 14-15 Nov. **FLYER ATTACHED!**

## SIX TEAMS TO COMPETE IN CYBERPATRIOT VIII

Four teams from River City Composite Squadron, a Team from Laclede County Composite Squadron, and a Composite Team from Group 3 are registered to compete in CyberPatriot VIII.

There is NO COST to CAP Cadet Teams! Find out all information at [www.uscyberpatriot.org](http://www.uscyberpatriot.org)

## AE PLAN OF ACTION NOW ONLINE!

The FY 16 online Squadron AE POA can be found on eservices. Look on the left side of the main page if you are using the old eservices, and look in the AE section if you using the new eservices. Read and follow the instructions on the Home Page. The squadron AEOs will find the form to be very self-explanatory. Squadron AEOs should discuss their POA with the Squadron Commander and then obtain the commander's approval prior to submission. The commander's approval will be indicated at the top of the form.

- (1) For wings with group-level organization:
- (a) Squadron AEPOAs are due at Group by **15 Oct**
  - (b) **Group AEPOAs are due at Wing by 15 Nov**
  - (c) Wing AEPOAs are due at Region by 15 Jan

## UNMANNED AIRCRAFT SYSTEMS

Missouri Wing will be receiving a couple [QuadLugs](#) Modular Multirotor Systems from NHQ/AE. Unlike off the shelf Quad Copters, [QuadLugs](#) are kits to be built as a STEM project. This is only one part of the Wing's up and coming unmanned aircraft systems (UAS) program.

## NASA'S SPACE PLACE

For your STEM-based education group's newsletters: As long as you credit NASA's Space Place, you can use any material found on the Space Place Web site, including make-and-do activities. Laura K. Lincoln, communications coordinator for NASA's Space Place, invites clubs to use this resource. The site provides resources for the upper elementary grade level.

## STEM KITS

Reminder, CAP Unit AEOs, AFJROTC Detachments, and CAP educator members can select one kit from five options and after successful implementation and program completion reporting, a second kit can be ordered on a funds-available basis.

## NATIONAL AIRLINE HISTORY MUSEUM

1 November through January 1st, take a break and let off some steam flying an F-4 Phantom; Thunderbird style or you can try a bombing run in the B-52! Packages are available for CAP Squadrons! Make your appointment today by calling 816.421.3401 or send a request to [ifly@airlinehistory.org](mailto:ifly@airlinehistory.org).



## THE YEAGER TEST

This element is a self-paced study based on the Textbook [Aerospace: The Journey of Flight](#). All senior members have the responsibility to read and become knowledgeable with the content of this text. Once members are ready to take the Yeager test, they can do so on-line within eServices or using offline paper-based options. Members are encouraged to take the test on-line. Members completing any of the options will complete the Aerospace Education Program for Senior Members (AEP SM) and earn the Charles E. "Chuck" Yeager Aerospace Education Achievement Award and are authorized to wear the Yeager Award ribbon.

This is now a requirement for completion of [Level III](#) – Management ([Grover C. Loening Award](#)) effective 31 Mar 13 but may be completed any time after [Level I](#) – Orientation completion.

## TAKE THE SPACE TWINS QUIZ!

Have you heard of the Space Twins Experiment? For an entire year, NASA is doing tests on Mark and Scott Kelly, identical twins that are both astronauts. You can read more material about the Space twins here <https://www.nasa.gov/twins-study>, <https://www.nasa.gov/twins-study/research/>, and <http://www.nasa.gov/content/nasa-launches-new-research-seeks-the-subtle-in-parallel-ways-u>

Once you have read the materials, you can log onto [Kahoot](#), a free resource for educators and organizations with an educational emphasis like CAP, and take a quiz about the space twins using game pin: **104933**. POC is [Capt Katrina Everhart, Asst DAE](#)

## MISSOURI WING AE WORKSHOP

Group 5 Aerospace Education and the Col. Travis Hoover Composite Squadron will be hosting Missouri Wing's Aerospace Education Workshop, **5 December, Joplin, MO**; at the Aerospace Science And Technology Center (ASTC).

Training will cover all aspects of the AEO's specialty track, task responsibilities, functions and performance. All cap AE regulations and publications will also be covered. Will highlight internal and external AEO responsibilities, AEX, AEM, ACE, and share individual efforts (what works/what doesn't work) for these tasks in an open, relaxed atmosphere. Tour the ASTC and learn about aerodynamics and aircraft subsystems (all hands-on.) Time permitting, we will also tour actual aircraft. Extracurricular 'real-world' AE-related courses and external AE presentation 'hazards of a military aircraft crash' will also be offered.

For more information please contact Capt Ernie Trumbly, [Campcookie@Cableone.Net](mailto:Campcookie@Cableone.Net).

Please send updates or suggestions to: [ae@mowg.cap.gov](mailto:ae@mowg.cap.gov)



**When: 13-15 Nov 2015**  
**Where: Ft. Leonard Wood**

**TRACKS**

**Model Rocketry – Beginner \$35**

Hands-On phases for Redstone and Titan stages of the CAP Model Rocketry Program.

**Model Rocketry – Intermediate \$45**

Hands-On phases for the Titan and Saturn stages of the CAP Model Rocketry Program.

**Model Rocketry – Advanced Bronze - \$90**

Advanced Rocketry training using the [NARTREK Rocket Skills Program](#). Cadets that have completed the CAP Model Rocketry Program may apply. **Includes NAR Membership and NARTREK course Fee. Cadets already members of NAR may reduce price to \$65**

**Model Rocketry – Advanced Silver - \$65**

Advanced Rocketry training using the [NARTREK Rocket Skills Program](#). Cadets that have completed Model Rocketry Advanced Bronze may apply.

**MARC track – Basic \$50**

Cadets **MUST** have completed the CAP Model Rocketry Program and the Wright Brothers Achievement to attend.

- Balsa/foam model aircraft construction and test flights
- Real Flight Simulator computer program & hand-held controller
- Wings Aircraft and AeroLab productions
- Academy of Model Aeronautics (AMA) club will provide demonstrations and mentorship in learning to fly real remote-controlled airplanes.
- Limited to 10 cadets**

**MARC track – Intermediate \$50**

Cadets **MUST** have completed a ASA MARC Track Basic Course, first.

- Real Flight Simulator computer program & hand-held controller
- Construction and flight of Remote Controlled Aircraft
- Academy of Model Aeronautics (AMA) club will provide demonstrations and mentorship in learning to fly real remote-controlled airplanes.
- Limited to 10 cadets**

**MARC track – Advanced \$50**

Cadets **MUST** have completed a ASA MARC Track Intermediate Course, first.

- Construction and flight of complex Remote Controlled Aircraft
- Academy of Model Aeronautics (AMA) club will provide demonstrations and mentorship in learning to fly real remote-controlled airplanes.
- Limited to 10 cadets**

**Flight Simulator track – \$30**

Cadets **MUST** have completed the CAP Model Rocketry Program and the Wright Brothers Achievement to attend.

- Comprised of a Microsoft X-gold flight simulator computer program with accompanying yoke and rudder pedals, cadets will learn and perform flight activities to include using flight planning aeronautical charts and lessons to extend the experiential portion of the flight simulator program.
- Limited to 10 cadets**

**Staff \$20**

Cadets that have completed the CAP Model Rocketry Program and the Wright Brothers Achievement may apply for Staff as well as Senior Members who've passed Level 1.

**ACCOMMODATIONS**

Fort Leonard Wood has barracks and classroom space arranged. Attendees must bring their own linens (**Pad Lock**, Sheet, Mattress sheet, and blanket and/or sleeping bag, pillow, etc.)

**UNIFORM WEAR**

Any authorized uniform combination IAW CAPM 39-1 **MUST** be worn, but BDU's/Utility uniforms preferred.

**EXPECTATIONS**

Training will be conducted in accordance with CAPR 50-20 *CAP Model Rocketry Program* and the *CAP Model Rocketry Program book*, to include building several models with differing fuel sources, then demonstrate their successful launch, flight, and recovery; and/or *CAP AEX MARC module*. Cadets who are between phases can complete partial tracks and their material fee will be reduced, accordingly. Please identify these cadets upon RSVP. Teams may **arrive after 1800 hrs on Friday to remain overnight. Sign in will begin at 0800 hrs Saturday**. Training will conclude at 1800 hrs on Saturday and reconvene at 0800 hrs on Sunday. Training will conclude and members will demobilize NLT 1600 hrs on Sunday.

**All tracks will have instruction in Robotics. CAP Orientation Flights are also planned.**

**PACKING LIST**

See Attached. *Fee includes 2 Breakfasts, 2 Lunches, and 1 Dinner meal.*

**CADET SPECIFIC**

- a. Cadets must hold and take their own medication. However, please identify medications to their responsible Senior Member, on the CAPF 163, and attached Medication Form.
- b. All members must have a CAPF 31 signed by their Unit Commander and cadets under the age of 18 their Parent/Guardian.
- c. There will be both male and female Senior Members RON on premises and genders will billet separately.
- d. Cadets will be assigned to Tracks and may be placed into leadership positions commensurate with their rank.
- e. **Good order and disciplined will be maintained. Horseplay and inappropriate behavior will not be tolerated. Squadron Commanders will be contacted and cadets will not be allowed to graduate for misbehavior and honor code violations. Please remember the core values. ALL CADETS \*MUST\* SIGN THE HONOR AGREEMENT!**

**RSVP - RÉPONDEZ, S'IL VOUS PLAÎT**

Please confirm intent to participate through your unit commander or deputy commander for cadets. In turn, unit points of contact please RSVP to [ae@mowg.cap.gov](mailto:ae@mowg.cap.gov) to ensure enough resources are available **NLT Thursday, 5 November 2015.**

**HOW TO PAY**

Units paying for their members may do a draft back to Missouri Wing's Aerospace Education Activity account. Members can pay by cash or checks/money orders drafted to: "Missouri Wing Civil Air Patrol."

**PREREQUISITES**

- Senior members **MUST** have completed Level I
- Cadets **MUST** have completed their **CURRY** Achievement
- CAPF 31 must have your Squadron Commander's approval to attend.
- This will be demonstrated by a CAPF 31 signed by the Squadron Commander or Deputy.

*Show Me Excellence!*

## Aerospace STEM Academy Packing List

### UNIFORM ITEMS

	QTY	REMARKS
BDU pants	1	
BDU blouse	1	With all insignia
BDU Cover	1	With insignia for officers
Belt (blue webbing with black buckle)	1	
BDU boots	1	
Socks, black	2 pr	
T-shirt, black	2	Crew style, no pocket

### PT UNIFORM

Shorts, blue or black	1	Clean, conservative, not too short
T-shirt, black	1	In addition to above
Sweat pants, running pants, etc	1	Blue or black, conservative
Sweatshirt	1	
Socks, white	2pr	
Shoes, running	1pr	

### PERSONAL ITEMS

<b>NEW</b> Pad Lock	<b>1</b>	<b>Combination Lock preferred, key lock okay</b>
Light Winter Coat	1	Uniform coat if available; conservative civilian coat is acceptable
Gloves	1 pr	
Underwear	3	
Bras (female cadets)	1	Sports bra recommended
Sleeping Bag or Sheet, Mattress cover, and blanket	1	
Pillow with case	1	
Soap and Shampoo		
Toothbrush and toothpaste		
Deodorant		
Washcloth and towel, shower shoes		Flip flops acceptable
Shaving Cream & Razor (in holder)		If necessary
Clothes Hangar	3	
Feminine Hygiene Products(female cadets)		If necessary
Shoe Polish Kit	1	
CAP notebook, pens or pencils		
Drinks with lids		
Snacks		

### PROHIBITED ITEMS

- Weapons of any kind (Knives)
- Alcoholic Beverages
- Illegal Drugs
- Tobacco Products
- Explosives
- Matches/Lighters

**APPLICATION FOR CAP ENCAMPMENT OR SPECIAL ACTIVITY**

<b>Name (Last, First, Middle Initial)</b>		<b>CAPID</b>	<b>CAP Grade</b>	<b>Gender</b>	
<b>Member Type</b>	<b>Charter No. (e.g. GLR-MI-059)</b>	<b>Grade in School</b>	<b>Religious Preference</b>		
<b>Address (Include No., Street, City, State and Zip Code)</b>		<b>Home Phone Number</b>	<b>Cell Phone Number</b>		
		<b>E-Mail Address</b>			
<b>Date of Birth (mm/dd/yy)</b>	<b>Shirt Size</b>	<b>Height (Inches)</b>	<b>Weight (Lbs)</b>	<b>Hair Color</b>	<b>Eye Color</b>
<b>Title of Activity</b> ASA		<b>Location of Activity</b> Ft Leonard Wood, MO	<b>Activity Dates</b> 13-15 Nov 2015		
<b>Staff Position(s) Sought</b> Track:					
<b>Emergency Contact Information</b>					
<b>(Primary Contact) Name (Last, First, Middle Initial)</b>		<b>Relationship</b>		<b>Primary Phone Number</b>	
<b>(Secondary Contact) Name (Last, First, Middle Initial)</b>		<b>Relationship</b>		<b>Primary Phone Number</b>	

**RELEASE AGREEMENT**

KNOW ALL MEN BY THESE PRESENTS that I am submitting my application for Civil Air Patrol Special Activities or Encampments, and I hereby volunteer entirely upon my own initiative, risk, and responsibility for an assignment to participate in this activity of encampment at the first available opportunity and with full knowledge that such activity may include:

1. Traveling by land, sea, or air in US military, commercial, or privately owned vehicles from regular place or residence to the site of the activity or encampment, travel incident to the activity or encampment, and subsequent return to place of residence.
2. Participation in aeronautical activities as a passenger or student trainee in US military, commercial, or privately owned aircraft.
3. Living for a period of one week or more on diminished rations and minimal shelter simulating actual survival conditions.
4. Being quartered and/or subsisting away from regular or normal place of residence for an extended period of time.
5. Remaining with the cadet group I am assigned to at all times during the activity or encampment.
6. Acting as a spokesman for Civil Air Patrol, rendering reports on the activity or encampment.
7. Refraining from argumentative discussions concerning governmental policies.

In consideration of the permission extended to me by the Civil Air Patrol/United States of America through its officers and agents to participate in said activity/encampment or activities/encampments, I do hereby for myself, my heirs, executors, and administrators release and forever discharge the Civil Air Patrol, Inc./United States of America, and all its officers, agents, and employees acting official or otherwise, from any and all claims, demands, actions, or causes of action, on account of my death or on account of any injury to me or my property which may occur as a result of the negligence of the Civil Air Patrol/United States of America, its agents or employees during said activity/encampment or activities/encampments or continuances thereof, as well as all ground and flight operations incident thereto.

\_\_\_\_\_ Date

\_\_\_\_\_ Signature of Applicant

(Continued on reverse)

<b>Name (Last, First, Middle Initial)</b>	<b>Title of Activity</b> ASA
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**RELEASE BY PARENTS OR GUARDIAN**

KNOW ALL MEN BY THESE PRESENTS: WHEREBY my child has applied for the activity or encampment referred to above, In consideration of the permission extended to my child by the Civil Air Patrol/United States of America through its officers and agents to participate in said activity/encampment or activities/encampments, I do hereby for myself, my heirs, executors, and administrators release and forever discharge the Civil Air Patrol, Inc./United States of America, and all its officers, agents and employees acting official or otherwise, from any and all claims, demands, actions or causes of action, on account of the death or on account of any injury to my child which may occur as a result of the negligence of the Civil Air Patrol/United States of America, its agents or employees during said activity/encampment or activities/encampments or continuances thereof, as well as all ground and flight operations incident thereto. In addition, by my signature below, I certify the applicant:

1. Is my minor child or ward.
2. Has no history or injury or disease which might be affected by this activity except those previously noted in the Medical Information section of this form.
3. Will follow all rules, regulations, and directives as established by the Civil Air Patrol, Inc., activity project officer or encampment commander, or other staff members. If not following the above mentioned rules, regulations, and directives he/she may be sent home at the discretion of the project officer, encampment commander or activity directory at my expense.

However, in case of injury, disease or other illness, permission is hereby granted to treat the applicant as required, and if the applicant is released from the activity before recovery from said injury, disease, or illness, further treatment will be provided by myself.

_____	_____	_____
Date	Witness for Father's Signature	Father or Legal Guardian
	_____	_____
	Witness for Mother's Signature	Mother or Legal Guardian

**Squadron Certification.** (Squadron Commander's signature is not necessary if the activity is approved in eServices or if it is a squadron activity.)

I certify that the above information is correct and that all requirements for attendance, as specified in National Headquarters Directives, will be completed by the required dates.

_____	_____
Date	Squadron Commander

**Group Certification.** (Group Commander's signature is not necessary if the activity is approved in eServices or if the activity is held within the group.)

_____	_____
Date	Group Commander (or designee)

**Wing Certification.** (Wing Commander's signature is not necessary if the activity is approved in eServices or if the activity is held within the wing.)

_____	_____
Date	Wing Commander (or designee)

**PERMISSION FOR PROVISION OF MINOR CADET OVER-THE-COUNTER MEDICATION**

This form may not be usable in some states due to statutes concerning who can administer medications and administration conditions. Wings with such restrictions will publish appropriate additional guidance in a supplement to CAPR 160-1.

<b>Name</b> ( <i>Last, First, Middle</i> )	<b>Grade</b>	<b>CAPID</b>	<b>Charter Number</b>
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**Over-The Counter/Non-Prescription Medications**

The following over-the counter medications may be administered according to package directions by CAP senior members. Cross out any medications not approved.

Acetaminophen (Tylenol) for fever or pain	Visine eye drops for dry, irritated eye relief
Ibuprofen (Advil, Motrin) for fever or pain	Op-Con A eye drops for allergic conjunctivitis
Bacitracin or Neosporin antibiotic ointment to prevent infection	Benadryl liquid/tabs for allergic reactions
Hydrocortisone anti-inflammatory rash cream	Claritin antihistamine for seasonal allergies
Calamine/Caladryl for poison ivy itch relief	Robitussin products for relief of cough and cold symptoms
Antifungal creams and sprays for treatment of fungal rashes	Delsym to suppress cough
	Tums or Maalox for relief of stomach upset

**Allergies**

My child/ward has the following allergies or reactions to over-the-counter medications (list type of reaction):

**Consent For Minor Cadet To Receive Over-The-Counter Medications**

My signature below evidences my consent for CAP senior members to provide over-the-counter non-prescription medications (such as those listed above) to my child/ward if indicated in the reasonable judgment of such senior members. I understand that I will be informed if any such medications are administered.

<b>Date</b>	<b>Signature of Parent/Guardian</b>
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## HONOR AGREEMENT

I, Cadet, \_\_\_\_\_ CAP, have come to the Aerospace STEM Academy (ASA) to experience the full range of opportunities and challenges available in the CAP Cadet Program. I understand that ASA offers me a chance to

- develop leadership skills,
- learn about science, technology, engineering, and math,
- demonstrate my commitment to physical fitness, and
- live the Core Values.

I understand that to accomplish those goals the ASA is run in a military-like training environment, and therefore I pledge to:

\_\_\_\_\_ consistently display a high level of self-discipline, military bearing, and military customs and courtesies.

\_\_\_\_\_ maintain my quarters and personal gear in a constant state of readiness for inspection.

\_\_\_\_\_ be open to new experiences and actively participate in all classes, tours, activities, academic assignments, and calisthenics and sports.

\_\_\_\_\_ live in a community with my fellow cadets, rise for First Call at, turn-in for Taps at, and, to develop my self-reliance, go without phones and the Web.

\_\_\_\_\_ obey all CAP rules and regulations in fact and spirit, and to cooperate with the cadets and seniors who are appointed to lead, train, and assist me.

\_\_\_\_\_ help my fellow cadets succeed as I put service to my team before myself.

I accept ASA's challenges and pledge to meet them with my very best effort. I am ready to train and I hereby request admittance to my Track.

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CADET