

AEROSPACE EDUCATION OFFICER HANDBOOK

CAPP 50-1 MAY 2023



TABLE OF CONTENTS

Introduction.....	4
Terminology	5
Definitions	5
Acronyms	6
Chapter 1 – Duty Assignment	8
Appointment.....	9
Required Activities for New Members	10
How Do I Do the Job of an AEO?.....	10
Duties of AEOs at Various Command Levels	14
Chapter 2 – AE Specialty Track Ratings.....	18
Introduction	19
AE Specialty Track Ratings.....	20
Chapter 3 – Aerospace Education Curricula Products	21
Curricula Products	22
Chapter 4 – Science, Technology, Engineering and Math (STEM) Kit Program	25
AE STEM Kit Program	26
Chapter 5 – Other AE Programs	29
Aerospace Education Members (AEM)	30
Aerospace Connections in Education (ACE)	32
Aerospace Excellence Award Program (AEX)	33
Teacher Orientation Program (TOP) Flights	35
Model Rocketry and Advanced Rocketry	36
AFA CyberPatriot Program.....	37
AFA StellarXplorers Program	37
Chapter 6 – Awards- Earned and Nominated	39
Earned AE Awards	40
Aerospace Excellence Award Program (AEX)	40
Brigadier General Charles E. “Chuck” Yeager Award	41
AE Badge	41
A. Scott Crossfield Award	41
Squadron AE Achievement Award	42
AE Mission Award	42
Nominated AE Awards.....	42
Deadlines.....	43
Frank G. Brewer Memorial Aerospace.....	44
CAP AEO of the Year	45

CAP AE Teacher of the Year	46
AFA AE Cadet of the Year	47
Other Nominated Awards.....	48
Distinguished Service Award.....	48
Exceptional Service Award	48
Meritorious Service Award	49
Commander's Commendation Award	49
CAP Achievement Award	49
Forms and Attachments	50
Attachment 2, CAPF 50-1, Frank G. Brewer Civil Air Patrol Memorial Aerospace Award	50
Attachment 3, CAPF 50-2 Civil Air Patrol Aerospace Education Officer of the Year Award	52
Attachment 4, CAPF 50-3 Civil Air Patrol Aerospace Education Teacher of the Year Award ...	56
Attachment 6, CAPF 120 Recommendation for Decoration	60
Attachment 5, CAPF 50-4 AFA CAP Aerospace Cadet of the Year Award	62
Attachment 7, CAPF 164 Donation Receipt	67
Chapter 7 – Financing Aerospace Education	69
Donations	71
Fundraising	72
Grants	73
Chapter 8 – Aerospace Education Plan of Action (AEPOA)	75
Chapter 9 – AE Annual Activity Report.....	84
Chapter 10 – Aerospace Education Inspections.....	90
Attachment 1, Compliance Elements	94

INTRODUCTION

GENERAL

Thank you for volunteering to help Civil Air Patrol (CAP) accomplish one of its vital missions; aerospace education (AE). No special credentials are required for you to perform the Aerospace Education Officer's (AEO) duties. However, to better accomplish the AE mission, an AEO must have an interest in helping CAP members learn more about and build a desire to promote CAP's core areas – aviation, space, and cyber, through CAP's STEM (science, technology, engineering, and math) programs. An understanding of CAP's aerospace and STEM programs, and a willingness to share your knowledge and experience are essential to CAP continuing to be a leader in aerospace/STEM education.



This handbook (CAPP 50-1) is designed to provide you with the information and tools necessary to manage a highly successful aerospace education program in your flights, squadrons, groups, wings, and regions. This pamphlet is organized in a manner that will help you find the information you need to fulfill your obligations as an AEO, and it is your primary source for pertinent information relating to CAP's Aerospace Education mission and programs. Additional information may also be found at CAP region and wing websites, as well as CAP's national AE website www.GoCivilAirPatrol.com/ae.

AUTHORITY

The authority for CAP's aerospace education mission is derived from Public Law 476, 11 July 1946. The law states that CAP is congressionally chartered to provide "aviation education and training" (aerospace education) to cadet, and senior members, and the general public. In 1948, CAP became the civilian volunteer auxiliary of the newly created U.S. Air Force, and both organizations have joined to promote aerospace education for the nation.

The Cooperative Agreement and associated Statement of Objectives between CAP and USAF authorize and encourage CAP to pursue the promotion of aerospace (aviation and space), cyber, and science, technology, engineering, and math (STEM) education to its members and the general public. In accordance with this, CAP provides education and training to help AEOs perform their assigned AE responsibilities.

In 1953, CAP turned to the American school system, primarily grades K-12, as the best means to educate the general public about aerospace education. Presently, CAP provides educational products and programs to pre-K through 12th grade schools around the country to enrich their curriculum by using an aerospace theme. CAP's AE program reaches over 500,000 youth a year with hands-on aerospace/STEM lessons and materials.

In 2008, the National Science Teaching Association endorsed aerospace education as an important component of pre-K-12 science education programs. This brings greater credentialism to CAP's 40+ aerospace educational materials, which meet national academic standards. CAP's aerospace-related STEM programs inspire teachers, students, and CAP members to explore aviation, space, cyber, and other STEM subject areas, examine career opportunities, and appreciate the U.S. Air Force's role in maintaining aerospace supremacy to strengthen national security.

MISSION

CAP's aerospace education mission is to inspire the next generation of aviation, space, and cyber leaders through STEM education. CAP educates its members and the general public on the important role aviation and space hold and will continue to influence America's future. Additionally, CAP encourages our nation's youth to consider aerospace careers and promotes civil aviation in local communities. The U.S. Congress and the U.S. Air Force have given this responsibility to CAP, and this mission is accomplished through the implementation of aerospace education and STEM programs by CAP volunteers.

CIVIL AIR PATROL MISSION STATEMENT:

Volunteers serving America's communities, saving lives, and shaping futures.

AEROSPACE EDUCATION'S MISSION:

Inspire the next generation of aviation, space, and cyber leaders through STEM education.

TERMINOLOGY

Let us begin with a list of definitions and acronyms you should find useful as you become more acquainted with CAP's aerospace programs. The intent is to provide a resource and working knowledge of many of the terms you will read and hear.

DEFINITIONS

AE Annual Activity Report – An annual report documenting a unit's AE activities during the year submitted for the Wing DAE's review.

AE Mission Awards – Awards that identify and recognize the best aerospace wing in each CAP region.

AE Plan of Action (AEPOA) – The wing's yearly plan for conducting aerospace education activities is submitted for review by the Region Deputy Chief of Staff/AE and national HQ/AE.

AE Teacher of the Year Award – An award established to recognize and reward any CAP member who is a certified K-12 classroom teacher for outstanding accomplishments in AE.

AEO of the Year Award – Named after Major General Jeanne M. Holm, this award was established to recognize and reward any CAP Aerospace Education Officer (AEO) who is dedicated to promoting and teaching aerospace in an exemplary manner.

AEO School – A course for any AEO, at any level, wanting to learn more about AEO duties, activities, programs, reports, awards, and much more; usually held annually as both a national school and in most or all CAP regions.

AEO Specialty Track – AE's Specialty Track with three levels (technician, senior, and master), through which AEOs are expected to advance during their tenure as an AEO.

Aerospace Education Excellence (AEX) Award Program – A hands-on AE activity participation and award program for cadets, senior members, and teacher members.

Aerospace Connections in Education (ACE) Program – An AE program for grades K-6 introducing students to academics, character development, and physical fitness using an aerospace theme.

Aerospace Dimensions Modules – A set of seven modules written for cadets in Phases I and II and middle school students used as an introduction to aerospace studying the following topics: principles of flight; aircraft systems; air environment; rockets; space environment; cyber; and spacecraft.

Aerospace Education Member (AEM) – A special CAP membership category for educators who support and promote CAP Aerospace Education – not in squadrons, but in classrooms, museums, and youth organizations.

Aerospace Education Officer – A duty assignment given to a CAP member who implements the AE mission in any given unit of CAP. There are Internal AEOs, who work with CAP members in squadrons, and External AEOs, delivering AE training to teacher members and the general public. Assistant AEOs may be appointed to meet program demands.

Aerospace: The Journey of Flight – A comprehensive textbook and an in-depth study of aerospace used by high school, junior college, college students, and adults; also used by cadets in Phases III and IV and by senior members to prepare for the Yeager test.

AFAAE Cadet of the Year Award – A national AFA award recognizing a cadet for outstanding aerospace education contributions. (Note that there is also an AFA award for outstanding squadron cadets.)

Brewer Aerospace Awards – An annual recognition of contributions to the advancement of youth in aerospace activities; Brewer Awards are named in 4 categories: cadet; senior member; individual/organization; and lifetime achievement and are awarded at the unit, wing, and region levels before the national level awards.

Compliance Inspection – An inspection of wings conducted by National Headquarters IG personnel, to ensure their compliance with regulations.

Crossfield Award – An award named after famed test pilot, A. Scott Crossfield, which recognizes a CAP senior member who has completed the master level of the AE Specialty Track and serves as an Aerospace Education Officer.

ACRONYMS	
AE	Aerospace Education
ACE	Aerospace Connections in Education
AEM	Aerospace Education Member
AEO	Aerospace Education Officer
AEPOA	AE Plan of Action
AEX	Aerospace Education Excellence Award Program
AFA	Air and Space Force Association
CAP/AE	Office symbol for National HQ CAP AE Directorate
CAPF	Civil Air Patrol Form
CAPP	Civil Air Patrol Pamphlet
CAPR	Civil Air Patrol Regulation
CAPT	Civil Air Patrol Test
CI	Compliance Inspection
DAE	Director of Aerospace Education (Wing Level)
DCS/AE	Deputy Chief of Staff/ Aerospace Education (Region Level)
STEM	Science, Technology, Engineering & Math
STK	Systems Tool Kit
SUI	Subordinate Unit Inspection
TCO	Test Control Officer
TOP FLIGHT	Teacher Orientation Program Flight
UAS/UAV	Unmanned Aerial System/Vehicle

CyberPatriot – An Air & Space Forces Association (AFA) program in which middle and high school CAP cadet teams compete in a national cyber competition.

Fiscal Year – The period spanning from Oct. 1 – Sept. 30 which designates CAP's financial year.

Model Rocketry Program – AE's rocketry program consists of 3 progressively challenging phases. Cadets read the few pages of required reading, take a quiz, and then conduct hands-on rocket activities in each phase.

Advanced Rocketry Program – a continuation of the model rocketry program, advancing into phases IV and V, which include middle- and high-power rockets. The Rocketry badge can be earned after completing this program.

Point of Contact (PoC) – An individual who is responsible for coordinating CAP events.

Squadron AE Achievement Award – The Squadron AE Achievement Award identifies squadrons that successfully perform at least eight of the 18 criteria. Four of these AE activities are required, and the other four are optional choices that encompass both internal and external programs in AE.

Systems Tool Kit (STK) – A satellite software that supports satellite systems and mission planning as used in AE program activities (It is also used in another of the AFA's STEM programs in which CAP cadets participate, StellarXplorers.)

STEM Kit Program – A program designed to promote AE and STEM (science, technology, engineering, and math) by providing STEM kits and associated lessons, activities, and career connections, covering aviation, space, and cyber-STEM-related topics for use by our members.

Subordinate Unit Inspection (SUI) – An inspection conducted by region, wing, or group IG personnel of squadrons to ensure their compliance with regulations.



Teacher Orientation Program (TOP) Flights – An AE program that offers any CAP member who is a teacher an orientation flight in a CAP aircraft. It is sometimes accompanied by a workshop. Wing DAEs coordinate the flights with the wing operations team.

Yeager Award – An award accompanied by a certificate received after successful completion of the Yeager test.

Yeager Test – The AE test for senior members; the test is based on Aerospace: The Journey of Flight textbook.

CHAPTER 1

DUTY



Congratulations! You are now an Aerospace Education Officer (AEO). Whether you serve at the squadron, group, wing, or region level, yours is a significant duty within CAP. You are responsible to CAP, the unit commander, personnel in the unit, certain members of the public, and yourself for accomplishing a successful aerospace education program. Remember that aerospace education is one-third of the CAP mission. This pamphlet is written from the perspective of a squadron AEO. The AE activities at the group, wing, and region may differ slightly.

APPOINTMENT

The applicable regulations regarding appointments and duty assignments are CAPR 50-1 (AE regulation); CAPR 30-1; (organization charts) and CAPR 35-1, paragraphs 1-3, a, b, c (appointment process). Other CAP regulations may be helpful, but these are the references that apply directly to the AEO appointment process.

One of the first things you will need to do is ensure that you are officially appointed in writing to the position. This step can be overlooked or not properly documented. This is important because your time-in-service as an AEO (six months each for technician and senior ratings, or one year – for master rating) begins on the date of appointment. It is always smart for a CAP member to follow their individual records and duty assignments under Member Services in eServices to ensure everything is correct and up to date. Though much improved and more reliable, the records system is still occasionally flawed.

There are three primary ways to accomplish the formal AE assignment in writing:

- Submit an individual CAPF 2a to national headquarters.
- Prepare a Personnel Authorization (PA).
- Enter the assignment duty directly into eServices.

CAPF 2a. Commanders who do not wish to use the online CAPF 2a, or who do not have electronic resources available, should submit a hard copy of CAPF 2a. This can be done by fax, e-mail attachment, or, if necessary, by USPS mail to National Headquarters/DP. The CAPF 2a is a multi-use form and also allows documentation of the transfer of pertinent records and assets (notebooks; STEM kits; hands-on project supplies) at the time of the appointment. A copy of the completed CAPF 2a should be placed in the member's personnel file at the local unit.

Personnel Authorization (PA). Many commanders prefer a personnel authorization (PA) as a means of simultaneously appointing all the duty assignments in a squadron, group, wing, or region. A PA is, essentially, a memorandum listing all the available positions and the names of the individuals filling each slot. A copy of this is placed in each member's file, and one is retained by the personnel officer. A copy should be posted on a bulletin board at the unit's meeting place, if available. With the PA appointment method, the unit personnel officer should ensure that each duty assignment is forwarded to eServices to be included in the member's personnel records. The appointee also should confirm the assignment is entered into their official files maintained at National HQ.

Direct Electronic Entry. The third method is for the commander and personnel officer to enter the individual's AE duty assignment directly into eServices. The advantage with this is that each member is assured that their AE duty assignment is recorded at National HQ. The disadvantage is that there is often no visible record of the assignment at the unit meeting space, though such a list could be created if necessary. A copy should be entered into the unit's individual personnel records.

Once appointed to the AE duty assignment, you are expected to accomplish the duties of the AEO as well as enter into training in the AE Specialty Track (discussed in the next chapter). See CAPP 50-2 (AE Specialty Track Guide) for more details.

REQUIRED ACTIVITIES FOR NEW MEMBERS

Prior to being appointed as the AE Officer, you must complete Level I of the Education and Training Program, which is required of all senior members. Level I training is described in detail in the CAP Senior Member Education and Training Program, CAPR 40-1, paragraph 6. Your unit leaders and mentors will guide you through this process.

Level I training is part of the CAP Education and Training program, also known as Volunteer University (VolU) and can be completed in a number of ways, at the unit's discretion. It can be done in conjunction with regular unit meetings; on a weekly basis for over a month; or completed all in one day. If none of these options work for a new member (travel distance, work schedule, weekend conflicts, etc.), the training can be taken online in CAP eServices, with the concurrence of the unit commander and the wing commander. There are four basic components to the Level I requirement: Foundations; Cadet Protection (CPPT); CAP Safety, Operations Security (OPSEC), and Equal Employment Opportunity (EEO).

The Foundations Course involves independently reading a series of articles and taking an open book quiz that will test your basic knowledge of CAP.

Cadet Protection Program Training (CPPT) now has an initial part that serves as an introduction to the concept of protecting cadet members from any physical abuse, bullying, hazing treatment, neglect, or inappropriate adult interaction. It also speaks to the requirements for certain numbers of both male and female adult members to be present to chaperone many cadet activities. After basic cadet protection training, each senior member must complete an update every 48 months.

Safety training is an important component of Level I. There is an initial safety training class, and then monthly safety education is required, which is held in the unit. A safety briefing can also be completed online through eServices. Other classes, such as the FAA Wings program, can be applied for this credit. Check with your unit Education and Training Officer.

Operations Security Awareness (OPSEC) requires some familiarization. Due to the close relationship of CAP with the U.S. Air Force, there are certain functions carried out by CAP which should not be shared with the general public or non-CAP members. The World War II era term for this was "loose lips sink ships." OPSEC is simply a reminder that CAP members should be cautious about how and with whom they share information regarding certain operations.

Equal Employment Opportunity Training (EEO) is a very serious part of Level I training. Your unit instructor(s) will guide you through the process as a part of your program. In addition, there is a required update to this that is held annually in each unit. EO training addresses the need to be mindful of non-discrimination because of race, color, religion, sexual orientation, etc.

HOW DO I DO THE JOB OF AN AEO?

This is one of the most frequently asked questions, especially by new members. The following 6-point organizational path may be helpful to you. Begin by exploring what resources CAP has to offer and taking an inventory of any materials on hand. You can then begin to plan what you are going to do and how to implement those ideas. Finally, you will evaluate and report on the results.

TIP: Keep a notebook (electronic or physical notebook) of your steps as you move through the development of your program. Always keep the unit commander informed.

1 - Explore

First, you must know the AE mission and familiarize yourself with the duties of an AEO. CAP has a wealth of materials to support performance in the AE duty assignment. Here is a list of a few you can begin to get familiar with:

- Aerospace Excellence (AEX) activity booklets.
- AE STEM kits.
- *Aerospace Dimensions* modules used by the cadets.
- *Aerospace: Journey of Flight* text used by senior members.
- *AE website (Especially the AEO sections, but also the AE cadet and educator sections).*
- *eServices (the entire AE section; Online Learning -> AXIS/Learning Management System -> AE sections; and Reports-> Member Reports-> AE Reports).*

Summarizing the AE regulations and pamphlets, the following delineates AEO responsibilities for cadets and senior members.

· Cadets: Though the cadet program is based on cadets helping mentor one another and leading the AE program, AEOs will direct the aerospace education portion of the CAP cadet program and act as an advisor. In addition, the AEO shall:

- Monitor the aerospace education portion of the CAP cadet program.
- Develop and supervise the AE activities and supporting projects for cadets.

· Senior members: AEOs will implement and direct the aerospace education portion of the CAP senior members' program and shall:

- Conduct and monitor the AE program within the unit.
- Assure that Yeager testing is accomplished.

As you continue this exploration, you will examine CAP publications for assistance. These can be found on the [CAP website in the list of publications](#). The primary publications are:

CAPR 50-1 – Civil Air Patrol Aerospace Education Mission
 CAPP 50-1 – Aerospace Education Officer Handbook
 CAPP 50-2 – AE Specialty Track Study Guide
 CAPR 60-1– Cadet Program Management
 CAPR 40-1– Civil Air Patrol Senior Member Education and Training Program
 CAPR 39-3– Award of CAP Medals, Ribbons, and Certificates

The cadet program focuses on helping the cadets gain a better understanding of all the elements of aerospace education. AE encompasses a very broad area of study. The cadets will be frequently tested on their knowledge of AE topics, and that knowledge is critical to their promotions and for their successful overall CAP achievement. A strong foundation in AE and STEM gained through CAP activities will also generally help a cadet gain a better understanding of some school topics, such as science and math.

The senior member AE program is focused on providing those members with a greater depth of understanding of AE. They become more knowledgeable about current events and everyday aviation and space observations within the community and world, such as the International Space Station, aircraft

at the local airport, principles of flight, etc. They may also be working with cadets and would like to be able to better answer their questions. The mark of AE success for a senior member is passing the Yeager exam, which is supported by the text *Aerospace: The Journey of Flight* textbook. For additional information about education and training for CAP senior members, see CAPR 40-1 CAP Senior Member Education and Training Program.

For the outreach aspects of AE, it is recommended that AEOs contact formal and informal teachers in their local community and visit schools, libraries, museums, and youth organizations. AEOs should share aerospace information and materials with the teachers by making presentations or conducting hands-on activities in classrooms or at youth events. Recruit teachers to be AEMs. They then have access to all the programmatic materials described in chapters 3-5 in this pamphlet (and on the AE website's [Educators Page](#)). Arranging visits to community service clubs (AFA, Rotary, Lions, Optimists, etc.) is another way to provide community outreach as well as to youth groups (4-H, Scout programs, museums, libraries, etc.). These groups are often searching for speakers.

2 - Inventory

As a new AEO, you should also conduct an AE inventory in the unit. Look at the unit's previous AE activities. AE activities are those through which unit members gain more knowledge about aviation, space, cyber, and STEM. The unit's education and training agenda may give you an idea of what has been scheduled in the past and what may be planned for the future. Ask unit members, especially cadet members (if in a cadet or composite squadron), what they remember and most enjoyed about past experiences in aerospace education. Ask for ideas for future activities. Record answers in your notebook to use as a basis for your continuing AE program.

You will also need to examine the AE testing accomplishments of cadets and/or senior members. With cadets, which module tests have they taken successfully? This will suggest which cadets need which module tests in the future. For senior members, look at unit records for the Yeager Award. How many senior members have passed the examination required to receive this award? How many have not?

Another aspect of the inventory pertains to CAPP 50-2, the AE Specialty Track Guide. As an AEO, this is your track. Looking at your unit, are other members pursuing AE ratings? If so, they would be excellent candidates for additional AE staff positions. Ask them! There is a lot of content in the AE program; you will need support and assistance to participate in and accomplish many AE programs.

The inventory should also include what AE resources are available in the unit and what needs to be obtained to accomplish your duties. Locate any AE STEM Kits, or other resource materials provided to the unit by CAPNHQ/AE or other sources. Ask the cadets and senior members what other resources they would like to obtain for unit AE programs. You can order additional STEM kits and numerous activity booklets through eServices. Remember, each STEM kit must be briefly evaluated before an additional kit can be ordered. If a previous AEO ordered but did not submit an evaluation, you can gain assistance to move forward by contacting stem@capnhq.gov.

3 - Plan

With the completion of the first two steps, developing a plan is next. With your knowledge of the unit's past AE activities, your assessment of unit AE activity capabilities, and your unit commander's AE guidance, you are ready to develop some plans for future activities based on the Squadron AE Achievement Award. Be sure to notice who, what, when, where, and by what standard each activity was accomplished. Discuss with your cadet leadership (if with a cadet or composite squadron) what activities have been done and what may be desired by the cadets. The cadets' input is very important in ensuring the plan is a success. Do the same for the senior members. Remember that the unit cannot do everything in one year so, work to set manageable AE goals for

your unit. If some cadets want to participate in a special CAP, AFA, or other approved organizational STEM program, let the cadet leaders help develop the plan on who will do what and when so a schedule can be made to accommodate as many special AE programs as the cadets wish to try with the available senior members to help facilitate, as is needed. A full list of the 18 possible tasks to attain the Squadron AE Achievement Award is listed in Attachment 5 of CAPR 50-1 and at the end of chapter 8, Planning, in this handbook. As you work through this process, include your unit commander. Have a discussion about your ideas for AE activities, and make written notes documenting your plans. Add this information to your notebook.

4 - Implement

The implementation step requires coordination between you, those involved in each activity, and, of course, the commander. You will need to be sure that adequate supplies are on hand if you are planning a hands-on exercise. You will need to ensure transportation is available for a field trip experience. When and where will AE activities take place?

Coordinating schedules for meeting times and places, field excursions, or the availability of resources can make the AE responsibility much more complicated. While this step is presented in few words, implementation consumes the most time. Again, as noted in the plans section, if cadets are involved in several extra AE programs, the implementation plan is crucial to ensure there is no overlapping for these events and required “all-unit” events. Coordination with the Cadet Programs Activity Director is paramount as well. Working on annual plans with the cadet leadership team as they do their planning will benefit the entire unit.

5 - Evaluate

With each activity, compare the AE accomplishments with the AE goals you and the commander agreed upon. Were the activities accomplished successfully? What improvement is needed in the future? What might you do differently the next time the activities are attempted? Encourage feedback from the members. Did they believe the activity was worthwhile? Was it a good learning experience? What suggestions do they have for the future? Their feedback will be very useful as you and the assistant AEOs plan ahead. Use the notebook to record this valuable input.

6 - Report

The unit commander needs to know the result of each AE activity and, also, what was achieved within the year. Make notes in your AE notebook for this meeting. Providing the commander with regular updates through informal communication is important. The Squadron AE Annual Activity Report needs to be completed (see chapter 9 in this pamphlet) and forwarded through the chain of command to the next higher headquarters (ending with the Wing DAE). Don't forget that working with the unit Public Affairs Officer along the way can help publicize your AE activities. As an AEO, you are promoting one of CAP's primary missions, aerospace education.

At one end of the spectrum, you are impacting cadets and senior members and introducing them to interesting concepts they might not learn anywhere else. You are increasing their knowledge of science and math principles that will help them throughout life.

At the other end of the spectrum, you are helping shape the future of our country. As a direct result of AE activities and using CAP aerospace/STEM education products and programs, many of our cadets and students in classrooms across America will end up in aerospace/STEM careers. These careers are vital to our country maintaining its economic prosperity. You are promoting aerospace education and training concepts while you are making a tremendous difference to the CAP organization and our country.

DUTIES OF AEOs AT VARIOUS COMMAND LEVELS – SQUADRON, GROUP, WING, AND REGION

These duties and responsibilities are listed in Attachment 4 of CAPR 50-1 *Aerospace Education Mission*. How you accomplish these duties is your decision with the assistance of your unit commander and/or your unit's ETO (Education and Training Officer). These are the important responsibilities for CAP aerospace education roles that will help you fulfill your AE mission. As you review this handbook, most of the AE programs and products will be discussed. This should give you ideas about resources that will help you accomplish your present and future AEO duties.

Squadron AEO:

- Responsible for all AE programs in the unit (cadet and/or senior)
- Maintains an AE notebook; paper or digital.
- Communicates with the commander to develop unit AE goals and objectives, and annual budget, and records the meeting in the AE notebook*.
- Reports periodically to unit commander, group AEO, and/or wing DAE on the AE program
- Selects, trains, and supervises AE assistants (to include cadet leaders) to help assist in AE responsibilities.
- Works toward the next higher rating level in the AE Specialty Track*.
- Initiates and supports external AE programs in the community.
- Supports group/wing/region/national internal and external AE activities.
- Encourages unit and school participation in the Model Rocketry program, * the AE Excellence (AEX) program, ** and the AE STEM Kit program**
- Assists cadets in completing AE requirements to advance in the cadet program.
- Promotes Teacher Orientation Program (TOP) Flights; * working with DAE as Point of Contact (PoC)
- Has completed or is working on completion of the Yeager test*
- Works with senior members to complete the Yeager test (Test Control Officer can also administer the test if paper copies are used instead of an online test).
- Recruits AEMs and assists with AE presentations involving the AEM's students.
- Ensures AE award nominations are prepared and submitted through the chain of command by the designated date(s).
- Completes and submits the AE Annual Activity Report electronically.
- Files reports as required by regulations.

* Indicates an AE activity which contributes credit toward the Squadron AE Achievement Award.

** Indicates an AE activity that may be used for both internal and external projects for the Squadron AE Achievement Award.

There are several more possible activities in addition to this list. Please see CAPR 50-1, Attachment 5, and Chapter 8 in this handbook for the full list of AE accomplishments that apply to the Squadron AE Achievement Award.

Group AEO

- Compiles AE reports and information submitted by subordinate units and forwards these to the wing.
- Assists in AE education and training of AEOs in subordinate units.
- Supports the AE program by being an additional AE information resource.

Wing DAE (Director of Aerospace Education):

- Helps recruit flight, squadron, and group AEOs.
- Trains and assists squadron and group AEOs.
- Appoints internal and external AE wing staff.
- Is working toward the next higher rating in the AE Specialty Track.
- Gives AE updates at wing staff meetings.
- Works with the wing public affairs officer to promote aerospace education.
- Communicates regularly with and/or visits subordinate units for evaluation and assistance.
- Maintains a current wing AEO roster.
- Maintains a regular meeting with or newsletter for all wing AEOs to provide current/relevant information.
- Conducts AE programs within the wing and at the wing conference.
- Assists cadet competition teams with the AE portion of the wing cadet competition.
- Conducts and supports AE's outreach programs.
- Creates an AE page on wing's website.
- Helps recruit flight, squadron, and group AEOs.
- Trains and assists squadron and group AEOs.
- Appoints internal and external AE staff.
- Is working toward the next higher rating in the AE Specialty Track.
- Gives AE updates at staff meetings.
- Works with wing public affairs officer to promote aerospace education.
- Communicates and/or visits subordinate units for evaluation and assistance.
- Maintains a current AEO roster.
- Conducts AE programs within the wing and at the wing conference.
- Assists cadet competition teams with the AE portion of the wing cadet competition.
- Conducts and supports AE's outreach programs.
- Creates an AE page on wing's website.
- Completed or is working to complete the Yeager test.
- Reports to the Region DCS/AE periodically on wing aerospace activities.
- Serves as the point of contact and works with the wing operations team for the Teacher Orientation Program (TOP) Flights.
- Ensures nominations are written for CAP's AE awards program by annual deadlines.
- Forwards award nominations to Region DCS/AE.
- Ensures applications are made for possible grant funding.
- Submits annual AE budget to wing commander.
- Works with squadron AEOs to ensure they complete and submit an Annual Activity Report.
- Uses information from the squadrons' Activity Reports to build a better wing Annual Activity Report and Plan of Action.
- Reports to the wing commander periodically on progress of wing AE Plan of Action prior to final completion and submission.
- Provides the end-of-year AE Annual Activity Report to the wing commander.
- Completes and submits final online AE Plan of Action for review by the Region DCS/AE and NHQ/AE.

Region DCS/AE (Deputy Chief of Staff/Aerospace Education):

- Appoints internal and external AE staff.
- Maintains a current wing DAE roster.
- Assists each wing DAE.
- Gives AE updates at staff meetings.
- Is responsible for all AE programs at the region level.
- Maintains a regular meeting with all wing DAEs to provide current/relevant national level information.
- Assists region cadet competition team preparing for National Cadet Competition.
- Encourages/remind about award submissions from wings, and helps select region AE awards to send to NHQ.
- Submits annual AE budget to the region commander.
- Develops a region AE Plan of Action in coordination with the region commander (suggested, but not mandatory).
- Reports to the region commander periodically on the progress of the wing AE Plans of Action and AE Annual Activity Reports.
- Reports to the region commander those wings submitting AE Plans of Action and AE Annual Activity Reports.

A good place to start would be with the duties and responsibilities expected of you as an AEO. Before you look at those again, notice the staffing chart in this chapter that indicates authorized positions at the different levels of the organization. This chart indicates the minimum number of positions authorized, but many AEOs have additional assistants not listed on this chart. The AE staff works as a team to conduct the aerospace education mission. It is certainly allowable and even encouraged for AEOs to recruit all the help they need to carry out their aerospace duties. Don't forget that having assistant AEOs means that more members become involved in the AE mission, and more can be accomplished.

Commanders at every level should consider finding AE staff officers who:

1. Display a strong interest in and enthusiasm for aerospace education and training.
2. Show initiative and imagination in promoting aerospace education and training.
3. Possess a working knowledge of the educational community; and
4. Demonstrate the ability to work with people and recruit others to assist in conducting aerospace education.

Despite this list, please know that there are no prerequisites for becoming an AEO. No special credentials are needed, but certainly finding someone who takes the responsibilities seriously and has an interest and a desire to be involved goes a long way toward promoting and accomplishing the aerospace education mission.

The table below indicates the minimum number of authorized AE positions:

Minimum Authorized Positions	Each CAP Flight and Squadron	Each CAP Group	Each CAP Wing	Each CAP Region
Aerospace Education Officer	1*	1		
Director of Aerospace Education			1	
Internal Aerospace Education Officer**			1	1
External Aerospace Education Officer**			1	1
Deputy Chief of Staff/ Aerospace Education				1

* Composite squadrons are authorized to have two: one for cadets and one for seniors.

** Any unit may have more than the minimum number of Assistant AEOs indicated in the chart.

CHAPTER 2

AE SPECIALTY TRACK RATINGS

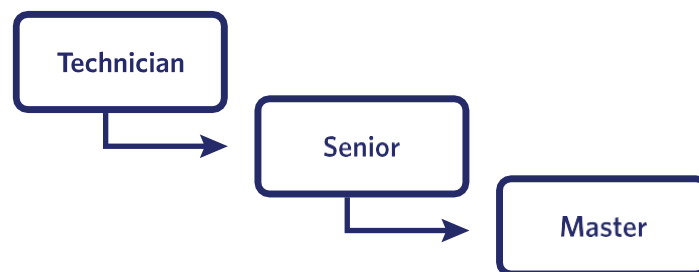


INTRODUCTION

In chapter 1, we discussed the AEO and assignment to the AE duty position for AEOs and Assistant AEOs. Since you are reading this pamphlet, the assumption is that you have been assigned to a position in the squadron or other unit as the primary Aerospace Education Officer (AEO) or as an assistant AEO. Congratulations! You have one of the most fun and interesting jobs in CAP! This duty assignment may seem daunting to you, but this pamphlet will give you guidance you can use to conduct your job successfully. You will learn a lot and share that knowledge with senior members and/or cadets in your unit. This handbook focuses on the tasks of the AEO. Within CAP, there are about 23 specialty tracks covering such jobs as Education and Training Officer (ETO), Historian, Emergency Services Officer and Cadet Programs Officer. Since AE is one of the three major missions of CAP, the AEO holds a very important job in their unit, at any level. The AE Specialty Track is described in CAPP 50-2.

Following your completion of Level I and your assignment as an AEO, holding the position of AEO or assistant AEO means you should be enrolled in the AE Specialty Track. Make sure your squadron commander or ETO has entered you into the AE specialty track in eServices. You must be enrolled in the specialty track to receive credit for it. Once that is done, the time clock for service in the AE specialty track begins on that date. If you are the lead AEO, you will want to recruit an assistant AEO to share the AE tasks. This is advisable, not only to strengthen your program but also to offer service opportunities to more members. You can both advance in the AE specialty track together. The specialty track is verified by job knowledge, performance of AE tasks, and time in service to AE. Do you have the AE knowledge? Did you perform the AE tasks? Did you serve the 6 or 12 months required in one or more than one AE position? When you examine the AE Specialty Track Study Guide, CAPP 50-2, the three words highlighted above will be examined in turn.

A specialty track has three ratings–



A specialty track begins with the technician rating, continues through the senior rating, and culminates with the master rating. With each advanced rating you have more responsibilities as an AEO.

The AE specialty track is timed as follows:

From the moment you sign up, you will be working on AE technician tasks in CAPP 50-2, which can be completed in a minimum of six months. During the next six months, you will complete the senior rating tasks, and during an additional twelve months, you will accomplish the master rating tasks.

Four AE references will guide you throughout this process: CAPR 50-1 Aerospace Education Mission; CAPP 50-2 Aerospace Education Specialty Track Study Guide; this pamphlet; and [CAP's AE website](#).

TIP: It is also highly recommended that you have an AE Mentor to guide you through this process.

AE SPECIALTY TRACK RATINGS

As you review the CAPP 50-2 AE Specialty Track Study Guide, you first note what is expected of an AEO in earning the technician rating. Review those expectations and continue on to the knowledge requirements. A detailed reading of this pamphlet, as well as CAPR 50-1 and CAPP 50-2, will provide references that include much of the AE knowledge information required for the online knowledge technician, senior, and master quizzes that you will take when you are ready.

You should also visit the AE web pages found on CAP's website. On the CAP home page, click on Programs, and then click on Aerospace Education. You should become familiar with the AE website, which has a wealth of AE information for both internal and external aspects of the AE program.

Further into CAPP 50-2, you will find the technician rating topical performance requirement – to construct a paper AE notebook or, preferably, a digital AE notebook maintained on the squadron's computer. Notice the 10 topic areas of the notebook on page 8. The notebook is a great record-keeping device and filing system, which will help guide your AE program planning. Notice that the 10 topic areas of the notebook are the same as the 10 chapters in this handbook. The online knowledge quiz is divided into the same 10 topical areas. One or more questions per topical area will be asked. Each quiz is open book, and there is no time limit for taking it.

In summary, what is required for the AE specialty track technician rating?

- Gain AE knowledge from the four primary AE references and pass the online AE specialty track technician knowledge quiz.
- Develop and use an AE notebook.
- Serve 6 months in an AEO position.

Within the AE specialty track, what is required to achieve the senior rating? For the AE senior rating, the following is required:

- Gain more knowledge and pass the online AE senior rating specialty track knowledge quiz.
- Perform the required AE senior tasks.
- Serve in an AEO position for 6 months beyond earning the technician rating.

For the master rating, follow the same procedures:

- Gain additional knowledge and pass the online AE master rating specialty track knowledge quiz.
- Perform the required AE master tasks, as noted in CAPP 50-2.
- Serve in an AEO position for an additional 12 months after the senior rating.

Senior Member Education and Training Program

Accomplishing the entire CAP mission requires an informed, active senior membership trained in leadership, management, and functional tasks. The CAP Senior Member Education and Training Program prepares senior members to serve their units, their communities, and their nation. This program is detailed in CAPR 40-1. Notice that completion of all AE specialty track ratings – technician through master anchors the program. By completing the stipulated education and training courses, assuming leadership roles, staff assignments, and other activities, you, as a senior member, will grow professionally and personally. CAP has much to offer. Meet with your unit's Education and Training Officer (ETO) and chart your course.

This chapter provides an overview and brief descriptions of some of the aerospace curriculum products that have been developed by the CAP/NHQ AE staff and many AE volunteers. The two following chapters provide more detailed descriptions of many of the programs. Since CAP AE has both internal and external missions, we have found that AE is best accomplished by promoting our products and programs to both CAP members and prospective members – either senior members or AEMs.

For this chapter, we just want you to be aware of the menu of products available for your use and the use of all members. Using these products and our many hands-on activities will help you accomplish the AE mission. As you know, part of our AE mission is to promote aerospace (aviation and space), cyber, and STEM concepts to our cadet and senior members. We are also interested in all our members learning more about these topics and what they mean to the CAP organization, the U.S. Air Force, and the future of the nation.

The other part of the AE mission is promoting aerospace education to the general public, which represents CAP AE outreach. We refer to this as our *External* AE program. This external program focuses on schools, schoolteachers, libraries, museums, and like-minded organizations. Some of these organizations can include youth organizations like the Boy or Girl Scouts, 4-H, or adult service clubs like AFA, Rotary, or Lions Clubs. Through your efforts, we reach hundreds of thousands of cadets and students every year. To accomplish this part of the mission, we seek to collaborate with other organizations like the Academy of Model Aeronautics (AMA), National Association of Rocketry (NAR), Women in Aviation International (WAI), Experimental Aircraft Association (EAA), Air & Space Forces Association (AFA), and many others.

When AEOs are interacting with both cadets and senior members, as well as with teachers, students, and other organizations, our curricula can be very valuable in helping anyone learn more about who CAP is and what we in AE do. The following paragraphs briefly describe the wide array of curriculum products available to you to help you with these interactions and help you better conduct your job as the AEO, serving both CAP membership and many community entities.

All of our curricula products are available to our members at no cost, and these products support and enhance AE activities in squadrons, classrooms, and other youth organizations. AE has 40+ different curricula that can be found on CAP AE's website or can be downloaded and used from the AE Downloads on eServices. Our products cover a wide variety of aerospace-related STEM areas and apply to all ages, from pre-K through 12th grade and beyond. Some of our curricula is written for the very young, some for lower elementary and upper elementary grades, with many of our products aimed at middle-school aged youth. Additionally, some curricula are written at the high school reading level, and we even have some suitable for adults. So, we truly have curricula for all ages.

Here are a few samples from the collection of 40 products:

Aerospace Dimensions: This product is written for a middle-school level audience and is used by the CAP cadets as their basic introduction to AE. Our teacher members use this product for 5-8 grade students. Aerospace Dimensions contains seven modules: Introduction to Flight, Aircraft Systems & Airports, Air Environment, Rockets, Space Environment, Spacecraft, and Cyber Security. Cadets take tests from these modules hoping to meet the AE requirements for promotion in Cadet Programs. These modules are all about 40-60 pages of content and contain several hands-on activities in each module. We highly recommend you use some of the activities to help reinforce the learning from the modules. These modules can be taught in any order to help accommodate any new cadets.

Aerospace: The Journey of Flight is a comprehensive 700-page textbook with 27 chapters. It is aimed at middle to high school level cadets and students. The reading level of this book varies from 6th grade to 9th grade and is used by middle schools, high schools, junior colleges, and some colleges. The textbook is divided into six major sections: (1) The Rich History of Air Power; (2) Principles of Flight and Navigation; The Aerospace Community; (4) Air Environment; (5) Rockets; and (6) Space. There are lots of test questions in the back of every chapter to test your knowledge of what you've just read. Once CAP cadets become cadet officers, they use this book to meet AE requirements for promotions. Additionally, CAP senior members use this book as the resource for passing the test to achieve the Yeager Award.

Model Rocketry and Advanced Rocketry: These modules are both programs and curricula. So, information about them will appear in both chapters 3 and 5. They are mentioned here because some may refer to or read the curricula but may not be involved in pursuing the program requirements. The rocketry programs and how to receive the rocketry badge will be addressed in chapter 5.

The rocketry curricula contain information about the principles of rocketry and the early rocketry pioneers. Additionally, there are several hands-on activities in the curriculum revolving around building and launching rockets. The Model Rocketry is the basic rocketry module, and the Advanced Rocketry takes rocketry to a higher level with more powerful rockets. Both modules are excellent for increasing your knowledge of rocketry.

Women in Aviation is one of our newer products, written to celebrate the accomplishments of many of the early women pioneers in aviation. We developed two modules to cover many of their achievements. The modules are aimed at middle-school aged youth and include biographies of the pilots, the planes they flew, and hands-on activities related to their experiences.

Tuskegee Airmen is our latest module written to celebrate the wonderful exploits and accomplishments of the Tuskegee Airmen. This module is very similar in format to the *Women in Aviation* book. The module contains biographies, aircraft they flew, and hands-on activities related to their experiences. This module is also written for the middle-school level youth audience. These biographies provide insight into these famous pilots' extraordinary lives.

Aerospace Education Excellence (AEX) is both a program and a curriculum. The program aspect of AEX will be discussed in Chapter 5. For now, know that the AEX curriculum consists of two modules: the first (AEX I) is aimed at grades K-6, and the second (AEX II) module is aimed at grades 6-12. Both of these products are full of hands-on activities to help you learn more about aerospace and STEM. (All of our AE curricula can be used in the AEX program, and there are other books with the AEX title on them, but these two books are the basic AEX I and II books.)

Middle School Earth, Life, and Physical Science: These are three different modules written for the 6-9 grade levels and used by both middle and high school-aged youth. These books are also labeled as AEX books, are topically arranged, and provide more detail and information than many of our products. So, they contain both content and hands-on activities.

MARC I and II: MARC stands for Model Aircraft and Remote Control. These modules are also listed as AEX books and provide information and materials to help youth develop a more comprehensive understanding of building and flying all types of flying and model aircraft. (These modules were written and are helpful to support the sUAS, drones, and remote-controlled aircraft STEM Kits.)

Introduction to Robotics: This book is written for grades 6-12 and provides an introduction to building and understanding robotics. It contains 21 lessons that provide information and hands-on

activities presented in an easy to more difficult progression approach. (This book was written and is helpful to support the Robotics STEM Kit.)

Astronomy: This is a two-module set that is written to grades 5-12 and contains telescope and astronomy information and hands-on activities. (These two modules were written and are helpful to support the Astronomy STEM Kit.)

Advanced Math: This module is written to grades 6-12 and provides math information for middle school and high school youth. The module is listed as an AEX book and provides math situations and activities with aviation and STEM themes.

The examples above are not all of our curricula, but should give you a good idea of the broad areas we address with our curricula. We have several products, learning and activity packets aimed at the elementary level. All curricula are listed on the AE website's Curriculum page. They are all also found on the bookshelf as downloadable by the entire book or by chapter in eServices/Aerospace Education/AE Downloads and Resources.

The products described above and the others mentioned on the AE website provide more than 500 individual hands-on aerospace and STEM educational activities from which to choose. These activities provide relevance and real-life applicability for the activities/lessons. Our engaging and interactive activities and products have proven to be effective in both informal educational settings, such as our squadrons and other youth organizations, and home schools, as well as in formal educational settings, such as America's classrooms. To view the entire curriculum selection, as well as many additional lessons and other resources included click [HERE](#).

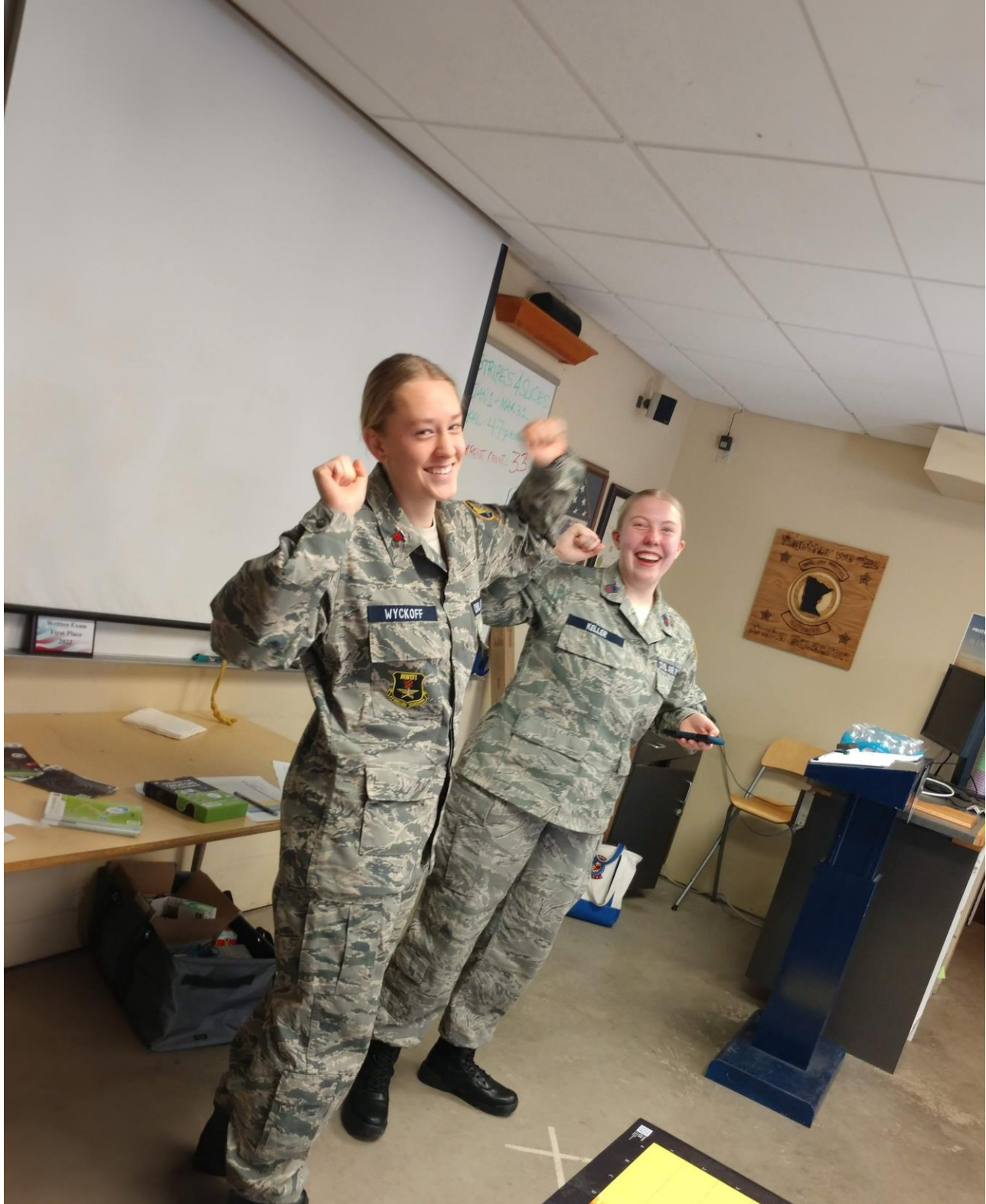
When talking to schools, principals, or teachers, AEOs should remind educators that our products meet national education standards and can easily be integrated into their content skills and classroom instruction. Most of our products contain hands-on activities, which highlight the importance of learning by doing. We all learn more by seeing, hearing about and then actively doing an activity. Involving students in hands-on activities reinforces the learning and enhances the experience for cadets or students. Additionally, the online books in eServices have links to videos, games, and other supplemental online learning and engagement sites.

You are free to use your own ideas or adapt thoughts from others to develop a program that works best for you and your cadets or students to further promote AE concepts and STEM knowledge. Use your imagination. There are many other excellent activities available through other organizations which we try to promote in our AE resources. Educational materials from other sources such as NASA, FAA or other aviation, space, cyber, and STEM-related entities are fully acceptable. See the related links in the left and right menu columns of the AE Curriculum webpage.

Additionally, there are other curriculum and online resources available on the Aerospace/STEM Resources for Remote Education webpage (<https://www.gocivilairpatrol.com/programs/aerospace-education/for-educators/aehome>)

CHAPTER 4

STEM KIT PROGRAM



THE STEM KIT PROGRAM

The STEM Kit program is made available to our units and educator members at no cost, thanks to the generous support of the U.S. Air Force. This program introduces science, technology, engineering, and math (STEM) topics to CAP cadets and other youth located across the nation. The STEM Kit program includes a variety of topics and concepts that promote STEM-related subjects and possible future science and math-related careers while supplying STEM resources for engaging, inquiry-based learning. The STEM Kit program is divided into three core areas: aviation, space, and cyber.

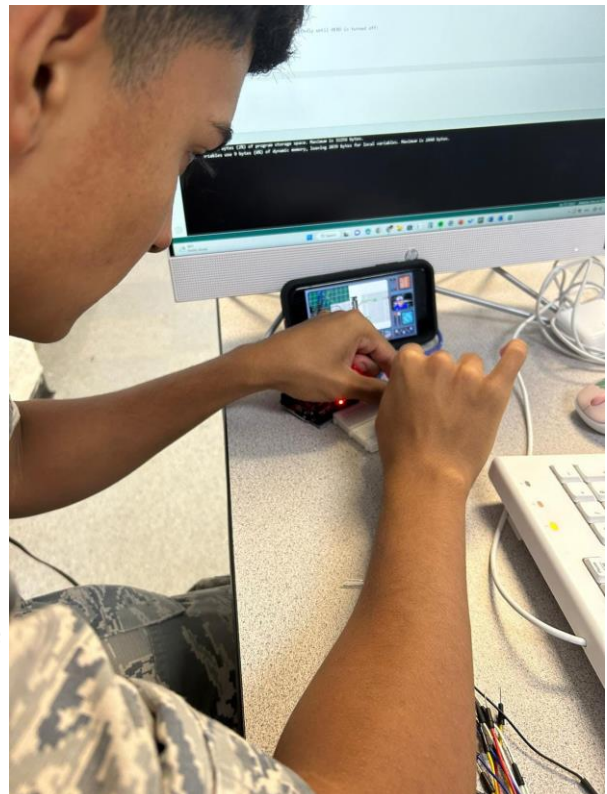
The goal of the STEM Kit program is to develop enthusiastic young learners willing to engage in activities outside of their normal circle. It has been successful in integrating hands-on activities that motivate cadets and other youth to work independently, gaining more knowledge on specific STEM concepts. The AE staff is continually revising, upgrading, and adding to the STEM Kit program with new kits and curricula. Information regarding the STEM Kit program can be found on the STEM Kit webpage.

The STEM Kit program consists of introductory level kits designed to spark interest and excite cadets and students. It is suggested that you contact any organization noted in the STEM Kit curriculum guides as well as other senior members to obtain even more subject matter expertise to further enhance the STEM Kit experience for your cadets/students. All kits are designed to enhance the educational curriculum and programs of CAP units and teachers' classrooms.

Who can apply for STEM Kits (includes two categories)?:

- AEO Officer/Commander: Aerospace Education Officers (AEOs), assistant AEOs, Unit Commanders, and Directors of Aerospace Education (DAEs) have permissions to apply for a STEM Kit.
- CAP member who is an educator: CAP educator members, to include senior members who are educators; AEMs in classrooms, youth organizations, museums, libraries, or other instructional institutions; and AFJROTC instructors who are either CAP senior members in a unit or an AEM all are eligible to apply for a STEM Kit.

The STEM Kit program allows for AEOs and AEMs to apply for one kit at a time in the eServices/Aerospace Education/CAP STEM Kits section. Depending on the number of cadets/students in the unit/classroom, the AEO/AEM may receive more than one kit so that cadets/students can work together in small groups. The STEM kits include curriculum and/or tip sheets developed by CAP volunteer members and CAP/ NHQ AE staff to help implement using the kits.



These resources can be modified for use. If you have questions about the STEM Kit program, email HQ CAP/STEM at stem@capnhq.gov.

How to apply for a STEM kit:

- Applications for the STEM Kit program are completed online in CAP's eServices/Aerospace Education/CAP STEM Kits.
- A video tutorial for the application can be found at <https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/program-process>
- A confirmation email will be sent once the application has been properly submitted. If the application was not submitted successfully, an email will not be sent, and you must resubmit your application.
- For AEOs/squadron commanders, the application will be sent to the wing commander for approval.

What happens after an application has been submitted:

- The STEM Kit Committee meets at the beginning of each month to discuss all applications made the previous month.
- Spreadsheets with all approved applicants will be created and forwarded to vendors.
- An email will be sent to all recipients from the AE staff to notify them that their application has been approved and sent to the vendor.
- Kits will be sent from our vendors to the applicants. If there is a vendor delay or back order, the recipient will be notified by the AE staff.

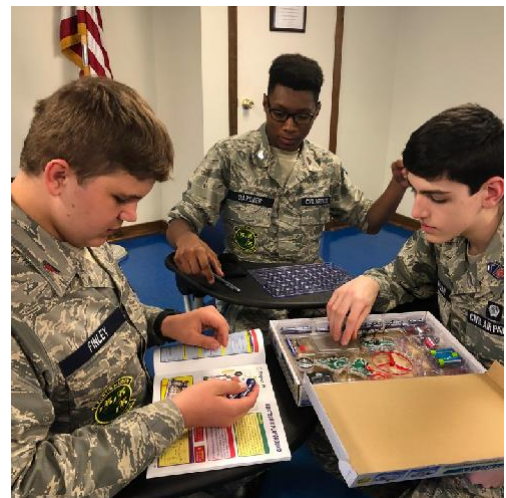
If your kit has not arrived by the date specified on your approval email from the AE staff, please notify stem@capnhq.gov.

After receiving a STEM Kit, the following must be accomplished:

- Administer the pretest (located in eServices AXIS/LMS);
- Spend at least a minimum of six hours working with the kit and its associated curriculum;
- Administer a post-test (located in AXIS/LMS); and
- Complete the online evaluation in eServices.

To aid in the teaching of STEM Kits, resources have been developed and placed in eServices on the Learning Management Systems (LMS) page. You can find these resources by logging into eServices, clicking on Online Learning and clicking on Learning Management System. Click on "Go to AXIS" at the top of the page.

You may need to register for the following courses: Aviation STEM Kits-Resources, Cyber STEM Kits-Resources, and SPACE STEM Kits-Resources. Once registered, you will find the pre-test, post-test, answer keys, and certificates necessary for the specific STEM kits. In addition, there are related documents, lessons, materials, books, and other resources available for your use.



After administering the pre- and post-tests, and spending a minimum of six hours working with each kit, STEM kit recipients must also complete the online evaluation found in the CAP STEM Kit section of eServices. The data received from the pre-tests, post-tests, and online evaluations from kit recipients is used for annual reporting to CAP's national leadership to better position us to maintain and sustain the CAP STEM Kit program. Once the evaluation has been completed, a new STEM Kit application may be submitted.

How to complete the STEM Kit Evaluation:

- After using the kit for at least 6 hours, please poll your cadets to determine if they are more interested in aviation, engineering, science, math, or technology careers.
- Go to eServices/Aerospace Education/CAP STEM Kits/Evaluation to begin your STEM Kit evaluation.
- A video tutorial for the evaluation can be found at <https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/program-process>
- Once the evaluation is complete, please remember to click Submit to ensure your evaluation is received and stored in eServices. (Without this submission, your STEM Kit usage cannot be credited toward the Squadron AE Achievement Award or Quality Cadet Unit Award criteria.)
- A confirmation email will be sent once the STEM Kit Evaluation has been submitted.
- After you have completed the evaluation, you can upload STEM Kit photos through the STEM Kit page on eServices.
- A video tutorial for submitting photos can be found at <https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/program-process>
- Submission of photos assures CAP that there is permission to use such photos in any STEM program promotions and/or social media pages. (CAP cadets sign to give permission for their photograph to be used when joining. Other youth with whom you may work will need to have media release approval prior to using their photos.)

CAP units and CAP educator members, to include AFJROTC Detachments, are encouraged to partner with other units, classrooms, or organizations to bring maximum exposure to the STEM Kit educational value. Collaborative examples are:

- Connect upper and lower grade levels in schools for implementation and mentoring.
- Connect CAP cadet squadrons with community youth groups and/or schools.
- Connect with a community event for educational demonstrations as an outreach effort.
- Partner with an aviation and/or space museum to conduct STEM Kit demonstrations.
- Connect with the organization associated with each kit, as noted in confirmation emails sent to recipients.

The STEM Kit Committee works diligently to provide as many STEM Kits as possible to all applicants. We also strive to be good stewards of the money allocated to the STEM Kit program. To accomplish these goals, we ask that when special situations arise that require additional kits, AEOs locate and borrow STEM Kits from other squadrons to assist with school programs, air shows, and other outreach programs. This will allow CAP AE to maximize the use of its available resources. (NOTE: At the bottom of the STEM Kit homepage, there is a current list (by region/state) of every STEM Kit provided to any squadron and educator.

CHAPTER 5

OTHER AE PROGRAMS



AEROSPACE EDUCATION MEMBER (AEM)

What is an AEM and what is their relationship to CAP? The Aerospace Education Member (AEM) is a special CAP membership category for formal and informal educators within schools and organizations that support and promote aerospace and STEM education. An AEM must be a U.S. citizen or a permanent resident in order to join CAP.

This membership category is open to any reputable individual in a public, private, or homeschool classroom, library, museum, or other youth organization who has an interest in supporting CAP's aerospace and STEM education program. AEMs are not eligible to wear the CAP uniform, attend CAP meetings on a regular basis, or serve in an authorized position within CAP. AEMs are eligible to receive all of the free educational materials, STEM Kits, and other resources from CAP/ NHQ AE.



AEMs play a significant role in CAP accomplishing the aerospace outreach mission. Therefore, Wing DAEs and AEOs must be familiar with the AEM program. It is a great program for expanding aerospace education and STEM influence within your community. As CAP AE leaders, you will have many opportunities to attend community events at schools, libraries, museums, etc. Being able to discuss our AEM program could build a closer CAP and community relationship. These members can also be the link to introducing other age-appropriate youth to the cadet program. Thus, AEMs are useful front-line recruiters.

This category of CAP membership is an important membership category that needs special attention from DAEs and AEOs. To aid you, there is an AEM introductory PowerPoint presentation, an AEM information flier, and a variety of outreach resources, all of which are found at the [AEO Resources webpage](#). There is also a [Recruiting and Retention of AEMs: a Guidebook for AEOs](#) which will prove invaluable for AEOs. Each section of this guide is hyperlinked in specific topic areas listed below. Click on each section for a complete explanation.

Benefits of AEM membership:

AEMs:

- Receive access to a multitude of national academic standards-based aerospace education materials to promote aerospace and STEM subjects and careers in grades K-12. AEMs may receive limited paper copies of curriculum for the grade levels they currently teach. They have full access to the electronic versions. All AE materials are available electronically in eServices/ Aerospace Education/AE Downloads and Resources.
- Participate in the K-12 Aerospace Education Excellence (AEX) Award program.
- Apply for the K-12 STEM Kit program.
- Participate in the K-12 Teacher Orientation Program (TOP) flights.
- Participate in the grades K-6 Aerospace Connections in Education (ACE) program (and the associated ACE Plus Adopt program).

Many AEMs take advantage of the opportunity to participate in these programs. All of the above-mentioned programs, as well as information on how to connect with a local squadron for classroom support or to introduce the cadet program to their students, are covered on the AE [Educators Page](#). The program requires involvement and coordination between teachers and their CAP Wing DAEs (as the Point of contacts) using the [guidance for recruiting AEMs](#)

How can someone join as an AEM?

The quickest and easiest way for a teacher to join CAP as an AEM is to use [the online link](#).

- On the AE website, find Join along the top tab. Select *Educator*, then click the online application link. *If an error message is received while completing the online application, a [paper application](#) will need to be completed and sent to ae@capnhq.gov.*
- If the AEM prefers to pay by check, they will need to complete a paper application and send it to the address provided on the application. The paper application is found [online at this link](#). This also applies to an entire school joining as a group of AEMs, and when all the memberships will be paid for by one school check. CAP does not accept Purchase Orders, but an invoice can be provided for the total number of AEMs joining. Each educator will need to complete their individual paper application, and the school's PoC will need to send all completed and signed paper applications with a check that matches the total number of educators X \$35 each, to be able to process all membership applications at one time.
- For those individual teachers who wish to pay by credit card, the link above will take you to the application form under Join as an AEM, to be filled out online.

AEM Membership Renewal

The easiest way for an AEM to renew is to reply to the email sent 60 days prior to their membership expiring. Once their membership expires, they will be unable to renew using the email link. Many schools screen out our renewal emails as spam, so it would be helpful for all AEMs to provide a secondary email on their application to ensure they receive the free renewal email reminder.

Recruiting AEMs:

A PowerPoint presentation on the AE website (AEO Resources page) will provide an overview of the benefits of AEM membership. There are also flyers for AEMs, curriculum listing, and the ACE program to use when talking with prospective AEMs. Much of this same information is found on the [Join as an AEM](#) web page.

AEMs are taking the CAP AE message into the classrooms of America and spreading aerospace and STEM education to thousands of students. Because of AEMs, we are reaching thousands of young people and making a difference in the lives of students across the country.

Those who teach 5th/6th grades and above can share information with their students about CAP's cadet programs. Thus, it is important to create and maintain contact with the AEMs in your area. You, as an AEO, may assist, as requested, in their classrooms or bring cadets to the school to help introduce the cadet program to 5th/6th graders and older students. AEOs should remember that recruiting an AEM is one of the activities that can be included as credit toward the Squadron AE Achievement Award.

Retention of AEMs to Include Information on How to Locate the List of AEMs in Your Wing

How do you find AEMs in your area and wing?

The AEMs in each wing are listed, alphabetically, by state (wing). In eServices, go to Member Reports. Find Aerospace Education and select the AEM Listing (with names) report. This report will provide names and contact information. Under Dates, be sure to select “Return All Dates” to see all AEMs. DAEs and AEOs can use this list as a basis for contacting their wing’s AEMs.

How do I know when my AEMs’ memberships are expiring?

Many wings will reach out to their AEMs to remind them that their membership is about to expire and that they will need to reply to the renewal email.

To locate expiring membership dates for AEMs in a wing, the Wing DAE should go to eServices and then to *Member Reports*. Find *Aerospace Education* and select the *AEM Expiring Members* report. This report will list the AEMs whose memberships will expire in the next 90 days. It should be noted that the AEMs are listed according to the address that they provided when they joined. If the Wing DAE is aware of any names that are missing from their listing, check with the neighboring wings or the Region DCS/Aerospace to ensure that their membership is current.

What if an AEM’s membership has expired?

Once the AEM’s membership has expired, the educator cannot renew using the email link. The DAE should direct the AEM to the Join as an AEM page or the Educators page on the AE website, where both pages have the ‘renewal form’ to complete and send to ae@capnhq.gov. Once that is received, membership services will renew their membership if it is within 12 months of having expired. After 12 months, an AEM will need to rejoin and pay \$35. They will keep the same CAPID number when they rejoin. The ‘rejoin application’ is the paper application link found on the Join as an AEM and Educator pages on the AE website.

Use the links below to help locate CAP membership renewal materials, or for general information.

- [Renewal of AEMs and helping those whose membership has expired](#)
- [Appendix with all sample e-mails and other useful documents](#)

If any questions are not answered in these comprehensive links, contact ae@capnhq.gov.

AEROSPACE CONNECTIONS IN EDUCATION (ACE)

The ACE Program is a unique program for CAP members who are educators and AEMs working in grades K-6 in schools, home schools, museums, libraries, and youth organizations. The program is designed for educators to implement during the school day, as an after-school program, or as a museum/ library-sponsored or youth organization after-school program. ACE provides engaging and meaningful cross-curricular aerospace lessons that support science, technology, engineering, and math (STEM) initiatives and enrich the school curricula. The aerospace-themed ACE curriculum is grade-level specific and aligned with national academic standards. It is divided into three sections: academics, character development, and physical fitness. This program is designed to introduce young students to aerospace and STEM careers, as well as the CAP cadet program, which is designed to be a follow-on program for many of the 5th and 6th graders, when the students may be at an age eligible for CAP membership.

When CAP members who are educators register for the ACE Program, they will receive a class set of educational manipulatives that go with some of the grade-level lessons. Upon completion of this program, the teacher receives teacher and student completion certificates.

AEOs are encouraged to promote the ACE program to their area K-6 AEMs by assisting with ACE lessons, organizing class field trips, serving as aerospace speakers, or helping with the end-of-program presentation of ACE certificates. They should also introduce the ACE program in squadrons to CAP senior members who are K-6 educators. (NOTE: The 6th grade curriculum can be used for grades 6-8, thus, the ACE program works well in K-8 schools and/or middle schools with grades 6-8.)

All information about this program is found on the ACE webpage, with all left menu items and right menu bars. For more information, contact ace@capnhq.gov

- An associated ACE program is the ACE Plus: A Classroom Adopt Program, created in 2021.

An associated program of the ACE program is the ACE Plus: A Classroom Adopt Program. Intended as an outreach vehicle to help squadrons connect with local 5th-8th grade classrooms, this program's foundation instructional platform is the 6th grade ACE curriculum. Using an age level wherein students are first eligible to join the CAP cadet program, the program's major focus age group is 6th grade, although the program's parameters include 5th-8th grade classrooms.

The goal of the program is to enable squadron senior and cadet members to help introduce a diverse population of students to: (1) aerospace-related STEM subjects and possible career options; and (2) CAP's many opportunities found in the cadet program. CAP provides a complimentary Aerospace Education Membership (AEM) to any new teacher involved in this program. CAP national headquarters provides all lessons and associated student educational materials to ensure either in-person or virtual program presentations are successful. (NOTE: Squadrons and ACE teaches can work together to do more than the required minimum of three lessons and adjust the lessons and additional opportunities as the collaborative team desires.)

All information regarding the program is found on the [ACE-Plus Program webpage](#). For more information, contact adopt@capnhq.gov.

AEROSPACE EDUCATION EXCELLENCE (AEX) AWARD PROGRAM

Aerospace Education Excellence (AEX) is CAP's hands-on aerospace and STEM activity program for squadron AEOs as well as for educator members. It is educational and enjoyable and reinforces many of the important scientific laws, principles, and ideas associated with aerospace-related STEM. The AEX program is both a participation and award program, and it is free for our members.

In order to be eligible for the award portion of the program, unit participants must complete six activities and a two-hour AE "field" experience within the fiscal year. The fiscal year runs from October 1 through September 30. Projects must be completed before September 30 regardless of when you start. If the requirements are completed within the specified time limits, the unit and each participant will receive an AEX certificate. The two-hour field experience can be spent in a variety of ways. For example, time may be spent launching rockets or hot air balloons, or taking a field trip to a local airport, aerospace museum, planetarium, or any other locally available aerospace location. Be creative! Engaging in additional aerospace and STEM activities requiring at least two hours is also acceptable for the two-hour culminating field experience.

NOTE: Several of CAP's educational materials are titled as AEX, but any of CAP's AE curricula can be used to meet the requirements, although not all the activities need to be based on CAP AE books. There are other excellent sources for aerospace activities. As long as the activities revolve around aviation, space, cyber, or any area of STEM, the activities will count toward AEX completion. If for some reason you are unsure as to whether a particular AEX lesson you wish to use (not from CAP books) is acceptable, email CAPNHQ/AE at aex@capnhq.gov.

TIP: Even though each of the CAP AE books was written for a particular age group, the activities can be adjusted to be used with different age groups. AEX is a great program for all ages.

DAEs and AEOs should encourage their wings, groups, and squadrons to get involved with AEX. AEX is an option in the criteria for the Squadron AE Achievement Award and the Cadet Quality Unit Award, so it is always good to implement the program at the squadron level. Our AEMs may also conduct the AEX program in their learning environments during the academic year; so an AEO may want to try to reach out to help the educators who desire assistance in conducting the AEM's classroom AEX program.

How squadrons should register for AEX:

- Aerospace Education Officers (AEOs), Assistant AEOs, unit commanders and Directors of Aerospace Education (DAEs) have permissions to apply for the AEX program.
- Registration is required for each year (1 Oct. – 30 Sept.) in which you choose to participate.
- Applications for AEX are completed online in CAP's eServices/Aerospace Education/AEX. Under Aerospace Education, click on AEX. Then, choose Apply for AEX.
- Confirm the email address is correct, then select the fiscal year.
- Under Organizational Info, select "CAP AE Officer/Commander." Then select the unit.
- Members can order AEX I and AEX II activity books at the bottom of the application. All AEX resources are available in eServices/AE Downloads and Resources.
- A confirmation email will be received once the application has been submitted. Make sure to click "submit." If a return email isn't received, the application did not go through.

Completing the AEX Award Report

- Members must apply for AEX before they can submit an AEX Award Report.
- AEX Award Report is a unit report, not an individual report; therefore, information can be entered by all members who have AEX permissions.
- In eServices, go to AEX Award Report, then select Organization.
- The "Current Status" field indicates the unit's status in the AEX Award Report submission process. "Not Started" will appear until the first information has been saved on the AEX Report. Then the status will change to "In Process" until the AEX Report is submitted. Once submitted, the status changes to "Processing." No further updates may be made once submitted.
- There are two options for completing the AEX Award Report found in CAP's eServices/Aerospace Education/AEX section:
- As each activity is completed, enter the data on the AEX Award Report. Be sure to "save" after entering each activity. Then, you can go back in as often as needed to add additional activities until all are included and saved. After all activities are included, select "submit."

- Members may choose to wait until all activities have been completed and enter the information at one time. Once all data has been entered, “save” your information and then select “submit.” If a report will not submit, check the “Incomplete Fields” at the top.
- A confirmation email will be received once the AEX Award Report has been submitted. If an email isn’t received, the report did not go through.
- The HQ AE staff will send certificates to the unit for each participant, along with one that can be framed for display. Only one award can be earned per year.
- The AEX Award Report must be done no later than Sept. 30. You should submit your completion report at least 3 weeks prior to needing certificates.
- If your unit is unable to complete the requirements within the specified time limits, simply apply again the following year.
- Completion of the AEX Award meets one of the criteria for the Squadron AE Achievement Award and the Quality Cadet Unit Award.

AEX for External Audiences

- Aerospace Education Members (AEMs) may also participate in AEX by following the same registration and completion guidelines listed above. When registering, AEM’s should select the Organization Info “CAP Member who is an educator,” state, school, and school type from the drop-down options.
- All of CAP’s AE curricula are aligned with National Academic Standards and help AEMs teach aerospace principles and other STEM-related subjects with educational and fun hands-on activities.
- DAEs and AEOs should encourage their AEMs to get involved with AEX and also offer to help conduct some of the activities with the students and present certificates at the school.

TEACHER ORIENTATION PROGRAM (TOP) FLIGHTS

The TOP Flight program provides opportunities for teachers to experience orientation flights in CAP aircraft. It is designed to excite teachers about aerospace education and its connections to all aspects of STEM. These flights, conducted at the teachers’ local airports, motivate them to share their pre-flight and in-flight experiences and information with their students. The program requires involvement and coordination between CAP/NHQAE, CAPwings (DAEs and Directors of Operations - DOs), squadron AEOs, wing commanders, pilots, and the teachers.

The TOP Flight program provides a flight for any CAP AEMs or CAP senior members who teach. The program can be used to recruit teachers into CAP, but the teachers must join CAP first and obtain their CAP ID number before they fly. The program can also be a retention tool as a great benefit of being a CAP AEM.

Originally, the program was designed to include an aerospace workshop that provided aerospace materials, information, and hands-on activities for the teachers. However, the program has evolved into an easier manner of conducting the flights by coordinating a flight day for one or more teachers, flying one or two at a time, prefaced by a pre-flight orientation and safety briefing at the plane. With more than 1-2 flights planned for a day, it is best to schedule the teachers for arrival at the airport at a specific time to lessen any wait time.

For a larger group of teachers to fly at the same time, a well-planned workshop or program should be planned with some hands-on activities conducted while teachers are waiting to fly. Having a group of teachers together waiting to fly is a great opportunity to discuss AE programs and products. It is entirely possible that many of the teachers don’t realize all that is available to them as an AEM, and this is an

advantageous opportunity to share that information with them. Obviously, regardless of whether you conduct a workshop, be sure a safety briefing occurs prior to the teacher's flights.

Whenever an AEM contacts ae@capnhq.gov to inquire about a TOPFlight, CAPAE replies by email, being sure to include the Wing Director of AE, as the TOPFlight PoC, to begin the coordination process with the teacher and the Wing DO (or designee). The Wing DO (or designee) will locate a CAP pilot/plane to support the mission and coordinate the flight details with the teacher. Any senior member generating a TOPFlight needs to contact CAPAE to verify that there are funds to support the teacher flight mission before they get too far into the planning process: Any senior member desiring to generate a TOPFlight needs to contact the Wing DAE who can confirm TOPflight funding is available.

All guidance for this program is found in the [TOPFlight Guidebook](#) for the DAEs, which includes information for entering the mission into WMIRS as an A mission and the associated approval process. All TOPFlight information is found on the [CAP TOPFlight webpage](#). For further information, contact ae@capnhq.gov.

MODEL ROCKETRY AND ADVANCED ROCKETRY

Some information about the rocketry curriculum is mentioned in Chapter 3. The rocketry programs and how to receive the rocketry badge will be addressed here.

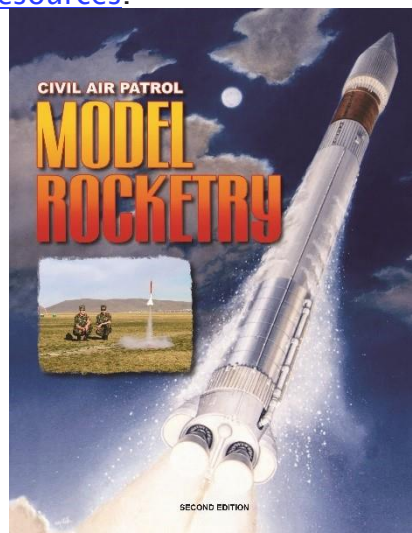
The rocketry curriculum contains information about the principles of rocketry and the early rocketry pioneers. Additionally, there are several hands-on activities in the curriculum revolving around building and launching rockets. Model Rocketry is the basic rocketry module, and Advanced Rocketry takes rocketry to a higher level with more powerful rockets. Both modules are excellent for increasing your knowledge of rocketry.

NOTE: Model Rocketry is one of the most popular unit programs, and cadets yearn to participate and earn the coveted rocketry badge.

Every squadron should have a copy of the Model Rocketry booklet. A printed copy may be requested in either the Administration or Logistics Material Orders areas in eServices or by contacting CAP/AE at ae@capnhq.gov to check on availability. The books are also available for download in [eServices/Aerospace Education/AE Downloads and Resources](#).

The rocketry program adds excitement to AE meetings, educates your cadets about rockets, and emphasizes STEM-related curriculum. It also affords a great opportunity for cadets and senior members to work together in AE.

Cadets have the opportunity to participate in the Model Rocketry program, which includes the Model Rocketry book. The program consists of three progressively challenging phases (referred to as "stages" in the Model Rocketry book). Each phase has a written section, based on a few pages of text. After reading each section, cadets will take a short quiz. The quiz can be taken online through the Learning Management System (LMS) or at the squadron administered by the Test Control Officer or AEO. After passing the quiz, the AEO will enter the score on the progress matrix on page 57 of the second edition of the Model Rocketry book. Then, the cadets move into the hands-on part of the phase/stage. In this section, they



will build and launch a selection of rockets. The cadets must have a qualified senior member witness the rocket launches and then sign the progress matrix. The qualified senior member (QSM) can be any unit staff member; however, the assignment would likely fall upon the AEO (QSM assignment is clarified in the Model Rocketry book). After completing each hands-on part and obtaining the approval of the QSM, the cadet is ready to move on to the next phase/stage. After successful completion of all phases/stages, the cadets receive their Model Rocketry Badge.

For efficiency, many units participate in the rocket program as a group, putting the cadets into small groups to build and launch the rockets together. Using this method, everyone completes the program together and receives their badges. However, cadets can certainly work by themselves as long as they follow the rules outlined above. The Model Rocketry badges are obtained from Vanguard at 1-800-221-1264 or at www.vanguardmil.com for a nominal fee. Every squadron should already have a copy of the Model Rocketry book, but for additional copies please contact CAP/AE at ae@capnhq.gov and check on availability. The rocketry program is also available on the AE website at www.gocivilairpatrol.com/ae. The rocketry program adds variety to AE meetings, educates cadets about rockets, and emphasizes STEM-related curriculums. It also affords a great opportunity for cadets and senior members to work together in AE.

After cadets have completed the three phases of the Model Rocketry program, they can move into the Advanced Rocketry program. The advanced program also has written and hands-on phases that are included in Stages IV and V. The program's Stage IV covers mid-power rocketry, and the program's Stage V discusses high-power rocketry. When a cadet progresses through the stages, the AEO and QSM will complete the Official Witness Logs to be able to provide each cadet with their certificate of completion. Squadron commanders must also sign their approval that they have reviewed the logs. This certificate is located on page 20 of the Advanced Model Rocketry module. The same process of logs and commander's signature applies to Stage V, as well.

The Advanced Model Rocketry booklet may be requested by AEOs and commanders in the Material Orders sections (within the Administration and Logistics areas) in eServices. The book is also available for download in [eServices/Aerospace Education/AE Downloads and Resources](#).

An associated rocketry competition that should be mentioned is the The American Rocketry Challenge (TARC). Teams, usually consisting of youth in grades 7-12, CAP cadet squadrons, or other youth or student organizations, compete to see who can launch rockets to the highest altitude. Teams gather once a year in May



AFA'S CYBERPATRIOT AND STELLARXPLORES STEM PROGRAMS FOR CAP CADET INVOLVEMENT

CyberPatriot and StellarXplorers programs are conducted by the Air & Space Forces Association (AFA) with CAP cadets being one of many invited groups of participants. Both programs' participation is free to CAP units due to agreements with the AFA for each program. Registration is open from April until October each year with the programs' competitions open from September through the final competitions in March/April. Both programs have summer camps for CAP cadets, as well. All information is found on each program's AE webpages: [CyberPatriot is on its own AE webpage](#) and StellarXplorers is found on

the [STK webpage](#), since that program uses the Systems Tool Kit- STK, which CAP also uses. There is no further explanation of these programs in this pamphlet so using the webpages will provide all the detailed information about these programs. For any further questions, contact afa@capnhq.gov.

Systems Tool Kit (STK)

STK is the system used in StellarXplorers, and a long-standing program in AE, donated by Analytical Graphics Inc. (AGI). AGI, is the leading off-the-shelf satellite systems software solution for the aerospace industry. It supports satellite systems from mission planning through operations. Basic applications include tracking satellite locations and analyzing what satellites can see at any point in time.

CAP's partnership with AGI allows AEOs to obtain STK through AGI's Educational Alliance Program. This program provides AEOs with an STK license. The license is a daily license and must be downloaded every day (or for each use), but the license contains the information necessary that allows you to complete that daily download. Email CAP AE at ae@capnhq.gov to receive your license. Please remember that, per our agreement with AGI, these licenses are to be used solely for unfunded academic work. Senior members and cadets working in their squadrons and wings to understand this aerospace/STEM topic definitely qualifies as educational work.

Working with STK affords an excellent opportunity for cadets and senior members to learn more about satellites and satellite missions. Again, the AFA's StellarXplorers program/competition uses STK. Additional information about STK and satellites is available on our AE [STK and StellarXplorers webpage](#).

AFA (Air & Space Forces Association)

AFA is not really a stand-alone program in AE, but the AFA organization has a cooperative agreement with CAP as a whole, though their effort is largely directed to AE activities. The AFA provides unit grants, squadron and national cadet awards, and STEM programs for CAP units. Reciprocally, CAP supports the AFA's teacher of the year program and provides free STEM resources for teachers involved with AFA chapters nationwide. The AFA remains a solid partner with CAP in supporting the AE program. Find out more details at the [AFA/CAP Partnership webpage](#).



USING THE AE WEB PAGES SUCCESSFULLY

The lists of programs and products in this chapter are samples of what is available on the AE web pages.

Look at the array of information you will find there, review the contents, and put the ideas to work in your squadrons. This is a dynamic site, and new materials and ideas are introduced regularly.

Remember too that your unique and creative ideas may be added to the content already shown on the AE web pages. Please share those ideas with us at ae@capnhq.gov.

Throughout this chapter and Chapter 4, there are numerous links to the CAP AE web pages. These will take you directly to the topic you are interested in – including STEM Kits, TOP Flights, AEX, ACE, and Curriculum. To get started, use www.GoCivilAirPatrol.com/ae.

The AE Web site should be the go-to location to find current notices, information, resources, and programs.

CHAPTER 6

AWARDS – EARNED AND NOMINATED



This chapter contains information about and the criteria for CAP's awards – aerospace education and other awards and recognition. This chapter should answer questions you have about these awards, including when and how to submit nominations. AE awards can be divided into two general categories – earned and nominated. Earned awards result from a member or unit completing activities, performing duties, or taking quizzes. Nominated awards result from a nomination packet being submitted on behalf of an individual or organization. Any CAP member may nominate an individual or organization for an award at any command level, but the award nomination must be forwarded through the chain of command.

NOTE: All of these awards are found on the AE website at AEO Resources/Available AE Awards for Individuals and Units at www.GoCivilAirPatrol.com/programs/aerospace-education/ae-officers/available-awards.

EARNED AE AWARDS – FOR CAP SENIOR MEMBERS, SQUADRONS, WINGS, AND AEMs

Aerospace Education Excellence (AEX) Award Program – For Cadet, Composite, and Senior Squadrons

The content details of the AEX Award program are discussed in Chapter 5 of this handbook. Here we include the award requirements. To earn the AEX award, unit participants must complete six hour-long AE activities – usually hands-on -- and an additional two-hour AE activity (i.e., an experience in a museum, planetarium, airport tower, or aircraft static display) within a single fiscal year. Beginning October 1, you have until September 30 to complete the AEX requirements. Upon completion of your activities, go to eServices and enter the data on the completion form. The CAP/NHQ AE staff will send individual certificates for the cadets and a certificate to display in the meeting room.

Only one award can be earned per year per squadron. Even if your unit doesn't complete six activities within the fiscal year, these AEX activities are a great way for the cadets and senior members to learn more about aerospace and have fun doing it.

Aerospace Education Excellence (AEX) Award Program – For Aerospace Education Member (AEM) Classrooms

Teachers who are AEMs, as well as senior members who are classroom educators, can register in [eServices](#) to participate in the AEX program. CAP squadron members can also assist AEMs in preparing and teaching AEX lessons for students in the classroom. To successfully complete the AEX program and be eligible for the award, teachers must perform six one-hour activities, plus a two-hour additional activity. After conducting the activities, they will go to [eServices](#) and complete the report form, listing the activities. CAP/NHQ AE will be notified and will send certificates to the teacher and students who participated in the program. DAEs and AEOs should encourage AEMs to get involved with AEX and also offer to help conduct some of the activities. AEOs should also consider helping present the certificates. (NOTE: Those K-6th grade educators who are participating in the ACE program are not eligible to receive credit and certificates for both ACE and AEX. Since ACE requires more work for completion, the ACE certificates should be requested.) See Chapter 5 of this pamphlet for additional information about the AEX program.

Brigadier General Charles E. "Chuck" Yeager Award – For Senior Members

The Yeager Award for senior members is self-paced based on the CAP text, *Aerospace: The Journey of Flight* textbook. All senior members are encouraged to read and become knowledgeable about the content of this text. The text covers such topics as: introduction to the history of airpower, principles of flight, the aerospace community, weather, rockets, and space. Once members are ready to take the Yeager test online, they have the option of open book or closed book. Members must score 70% to pass the test.

After successful completion of the Yeager test, members can print a copy of the Certificate of Completion from their computer. The completion of the Yeager award online is automatically placed in the member's record at NHQ (in eServices).



Yeager Ribbon

With this credit, members are authorized to wear the Yeager ribbon. The Yeager test is required as a part of achieving Level II Part 2, Learning Phase, of the senior member Education and Training program. All CAP senior members who wish to advance in their CAP careers must earn the Yeager Award. Members may take the test at anytime after joining CAP. For those on the AE specialty track, this may mean you are preparing for the Yeager test while you are working toward the technician rating on the AE specialty track.

AE Badge

Upon achieving the AE specialty track technician rating and meeting the other Level II Part 1 requirements, the senior member has earned the leadership ribbon and is also entitled to wear the AE Badge. The AE badge is worn at all AE specialty track rating levels. A bronze star is added to the badge at the AE senior rating level, and a gold star replaces the bronze at the master rating. The AE badge, along with the CAP ribbons, can be purchased at www.vanguardmil.com. See CAPP 50-2 *Aerospace Education Specialty Track Study Guide*, for additional information.



AE Badge

A. Scott Crossfield Award – For Senior Members

Upon successful completion of the AE specialty track Master Rating and serving as an AEO, the AEO is eligible for the A. Scott Crossfield Award. To receive the certificate, the commander, with the advice of the ETO, completes the master rating checklist. When they are satisfied that the AEO has the necessary knowledge and skills, the commander confirms the achievement with an



A. Scott Crossfield Ribbon

electronic signature in eServices. It is then automatically entered into the AEO's record. Subsequently, the unit commander will forward a letter or e-mail to National Membership Services (CAP/DP) requesting the Crossfield Award. DP will then send the Crossfield Award certificate to the requestor. See CAPP 50-2, *Aerospace Education Specialty Track Study Guide*, for additional information.

Use the grid below to see the relationship of the AE Specialty Track Ratings with the Yeager and Crossfield Awards.

AE Specialty Track Rating	Leadership Ribbon	Yeager Ribbon*	Crossfield Ribbon	AE Badge	
Technician					Basic Badge
Senior	add Bronze Star				add Bronze Star
Master	Replace with Silver Star				Replace with Gold Star

*The Yeager Award can be earned at any time prior to earning the AE Senior Rating.

Squadron AE Achievement Award – For Cadet, Composite, and Senior Squadrons

The Squadron AE Achievement Award identifies squadrons that successfully perform at least eight of the 18 criteria. Four of these AE activities are required, and the other four are optional choices which encompass both internal and external programs in AE. See CAPR 50-1, Attachment 5 and Chapter 8 of this pamphlet for more details.

Aerospace Education Mission Award – For CAP Wings

The AE Mission Award identifies the best wing in aerospace education in each of the eight CAP regions. The AE Mission Award is based on information contained in the wing's annual AE Activity Report. The contents of the AE Annual Activity Report will be evaluated in these AE mission areas: staffing, internal programs, external programs, Wing AE Plan of Action (AEPOA); and the AE Annual Activity Report. Details regarding the deadlines for submission of the [Wing AE Annual Activity Report](#) can be found in CAPR 50-1, Attachment 2. Samples of these reports are included in Chapters 8 and 9 of this handbook. Region commanders, with the assistance of their region AE staff, will determine their respective winner, and will notify NHQ of their selection.

NOMINATED AE AWARDS

Nominated AE awards fall into two categories: national AE awards and awards that can be earned at various command levels recognizing outstanding AE performance.

Introduction

Civil Air Patrol has provided guidance on how to write award nominations. See CAPP 39-3, *Awards Made Easy*. Please review this pamphlet before starting a nomination. Nominations need to be specific as to why the individual or organization deserves an award. CAP doesn't *give* awards; they are earned!

National AE Awards:

- Frank G. Brewer Civil Air Patrol Memorial Aerospace Awards
- Civil Air Patrol Maj Gen Jeanne M. Holm Aerospace Officer of the Year Award
- Civil Air Patrol Aerospace Education Teacher of the Year Award
- Air & Space Forces Association (AFA) Aerospace Education Cadet of the Year Award

Deadlines

Submission deadlines for national AE award nominations, in Attachment 2 of CAPR 50-1, are repeated here for quick reference:

Wings with Groups		Wings without Groups	
Dates		Dates	
Squadron to Group	15 Dec		
Group to Wing	15 Jan	Squadron to Wing	15 Jan
Wing to Region	15 Feb	Wing to Region	15 Feb
Region to NHQ	15 Mar	Region to NHQ	15 Mar

In order to meet these deadlines, AEOs must plan early to identify possible nominees, interview them, and prepare the nomination packet. CAPP 39-3, Awards Made Easy, will be most helpful. Seek help with editing your final nomination packet. Find a squadron or wing member who has written previous nominations, or a teacher, pastor, spouse, or other good writer. NOTE: It is not only what the person has done, but also how the person's contributions are projected in writing that determines if selection committees agree this person is deserving of a specific award. Read the requirements for the award carefully and ensure that the nomination addresses all of the requirements.

CAPF 120 – Nomination Packet Cover Sheet

To submit a national AE award nomination packet, a cover sheet must be attached to the packet. This cover sheet is CAPF 120. It is used only as a cover sheet for nominated national AE awards. Using Form 120 assures proper chain-of-command routing and review of the packet. On CAP Form 120, fill in only the "From" and "To" boxes and boxes 1-4, name, CAP ID number, and membership location, such as squadron, wing, etc. Do not write any portion of the nomination wording on the Form 120 cover sheet. The rest of the nomination packet requirements for the award should be documented on the appropriate award form. Samples of CAPF 120 and the appropriate award nomination forms can be found in the end of this chapter. Go to the [publications/forms page](#) to find Form 120 and other forms that you can fill out and use in the packet.

- NOTE: CAPF 120 and three associated award documents should be submitted for each award nomination via eServices/Personnel/Award Recommendation. CAPF 120 will be the cover webpage, and then the "award nomination form" and two extra pages (each no larger than 3MB) can be submitted as additional documents. Thus, any photos should be inserted on a Word document that is saved as a pdf so more information can be submitted per award (not to exceed the number of pages allowed for that award).

FRANK G. BREWER-CIVIL AIR PATROL MEMORIAL AEROSPACE AWARDS

The Brewer Awards are presented in commemoration of Frank G. Brewer, Sr. and his lifelong interest in aviation, youth, and education. Recognition is given to CAP members and other individuals and organizations that have made outstanding contributions to the advancement of youth in aerospace activities. The four award categories, nomination procedures, and the selection criteria for each are covered on the nomination form, CAPF 50-1, *Frank G. Brewer CAP Memorial Aerospace Award* (See sample at the end of the chapter). Any CAP member may nominate an individual for an award; however, each command level forwards only one selection in each category to the next higher level. Commanders or designee (award officer) at each level, with the assistance of their AE staff, will determine their winners. Brewer Awards are not made posthumously. Be sure to meet the time deadlines noted in the table above and in CAPR 50-1. The awards are presented at the annual CAP National Conference.

The four Brewer Award categories are:

Category I – CAP Cadet

- Nomination must be for activities during the previous or last calendar year only.
- Aerospace achievement or activity should be significant — beyond earning the Mitchell Award or completing CAP training requirements.
- The nominee should be doing significantly more than would be expected of anyone in a similar position.
- Recognition is for contributions made out of selfless devotion.

Category II – CAP Senior Member

- Nomination must be for activities during the previous or last calendar year only.
- Aerospace achievement or activity should be significant – additional effort beyond earning the Yeager Award or completing CAP training requirements.
- The nominee should be accomplishing significantly more than would be expected of anyone in a similar position.
- Recognition is for contributions made out of selfless devotion.

Category III – Individual/Organization (non-CAP member)

- Nomination should be for continued contribution over a minimum of five years.
- Aerospace achievement or activity should be significant.
- The nominee's activities should be "above and beyond" what would normally be expected of anyone in a similar position.
- Recognition is for contributions made out of selfless devotion.
- Nominee should have strong involvement with CAP.

Category IV – Lifetime Achievement

- Nomination should be for AE related activities conducted over a period of more than 20 years.
- Nominee should have been a CAP member for at least 20 years.
- Recognition is for noteworthy and consequential contributions to the aerospace field.

The first three Brewer Award categories are awarded every year. The fourth category, Lifetime Achievement, is not necessarily an annual award. The selection committee reserves the right to not select anyone in this category if the nominees do not meet the expectations for this award. Brewer Lifetime Achievement will be awarded whenever exceptional nominations, representing a period of at least twenty years of aerospace education contributions and CAP membership are received.

Nomination Packet Requirements:

The nomination packet consists of the cover sheet (CAPF 120) and CAPF 50-1. Use CAPF 120 only as a cover sheet for the nomination. Nominations should be completed on CAPF 50-1 to detail the AE actions performed by the nominee. A sample of CAPF 50-1 can be found as Attachment 2 to this pamphlet and on the AE website at [publications/forms page](#). If you need more space for the justification, use the reverse side of the page or simply use additional paper. Achievements and aerospace activities should include the nominee's involvement in CAP and the local community. Brewer award winners also are recognized at the region level.

MAJOR GENERAL JEANNE M. HOLM CIVIL AIR PATROL AEROSPACE EDUCATION OFFICER OF THE YEAR AWARD

The CAP AEO of the Year Award will be presented each year at CAP's National Conference.

Purpose:

The Civil Air Patrol Aerospace Education Officer of the Year Award is a national AE award established to recognize and reward any CAP AEO who is dedicated to promoting and teaching aerospace education to the members of Civil Air Patrol and to spreading the excitement of aerospace education to their communities.

Nomination Guidelines:

1. Any Aerospace Education Officer (AEO) in the squadron, group, wing, or region is eligible.
2. Eligible nominations must be supported by a professional or personal letter of reference.
3. Nomination packets will be judged at the wing level, then progress to the region level, and ultimately end at the national level for final selection.
4. Wings and regions will decide how to best recognize the accomplishments of their individual winners.

Nomination Procedures:

Squadron and Group nominations must be received by the Wing Director of Aerospace Education by 15 January. The wing DAE, in coordination with the wing commander, will convene a committee and select the best nomination to send forward. Wing nominations must be received by the Region Deputy Chief of Staff/Aerospace Education (DCS/AE) by 15 February. The region DCS/AE, in coordination with the Region Commander, will convene a committee to make their selection. Region nominations must be received electronically by NHQ/Membership by 15 March (membershipservices@capnhq.gov).

Nomination Packet Requirements:

1. Use CAPF 120 as a cover sheet!
2. One-page overview describing why nominee deserves this award; use Justification block on nomination form, CAPF 50-2 found at the end of this chapter;
3. One-page letter of recommendation by person nominating the individual; and
4. Two-page photograph collage with an additional one-page description of activities, field trips, or special events. This should depict: creativity in developing and using aerospace instructional materials to promote aerospace education for CAP cadets and senior members. Include any community involvement and activities that foster an appreciation of aerospace education and its role in our society.

Optional: Three additional pages of documentation that enhance the nomination packet may be included. Include such items as media coverage of nominee's AE events, special recognition received by the nominee or nominee's unit for aerospace performance. CAPF 50-2 is used to nominate the AEO of the Year, which is found at the end of this chapter. You can download a workable form from CAP's [website publication pages](#).

CIVIL AIR PATROL AEROSPACE EDUCATION TEACHER OF THE YEAR AWARD

CAPAETeacher of the Year Award recognizes a CAP member (AEM or senior member) who is a state certified K-12 teacher promoting aerospace education. This award is presented at the summer CAP Annual National Conference.

Purpose:

The Civil Air Patrol Aerospace Education Teacher of the Year Award is a national-AE award established to recognize and reward any Civil Air Patrol member who is a state certified K-12 classroom teacher for outstanding accomplishments in promoting Aerospace Education in the classroom and in the community.

Nomination Guidelines:

1. Any Aerospace Education Member (AEM) or Senior Member of CAP who is a certified K-12 classroom teacher is eligible.
2. Eligible teachers may nominate themselves or be nominated by someone else.
3. Nominees will be judged at the state (CAP wing) level, then progress to the regional level, and ultimately end at the national level for final selection.
4. The winner will be notified in June in order to make plans to attend the CAP Annual National Conference.
5. Wings and regions will decide how to best recognize the accomplishments of their individual winners. The wing and region will forward their single winner to the next command level.

Nomination Procedures:

For both AEM and senior member teacher nominations: Two copies of the nomination packet (10-page maximum) should be sent to the Wing DAE not later than 15 January.

For all Teacher of the Year nominations: the Wing DAE, in coordination with the wing commander, will convene a committee and make the selection to forward to region. Wing nominations must be received at the region by 15 February. The Region DCS/AE, in coordination with the region commander, will convene a committee and make the selection to send to NHQ/AE. Region nominations must be received by NHQ/AE by 15 March.

Nomination Packet Requirements:

1. Use a CAPF 120 only as a cover sheet. Use Form 50-3 for nomination essentials. Sample forms are found at the end of this chapter and workable forms can be found on the [publication forms/ page](#).
2. One-page overview describing why nominee deserves this award.
3. One-page letter of endorsement by nominee's school principal or other educational leader.
4. Two additional one-page letters from colleagues, students, parents, or others that demonstrate nominee's exemplary teaching performance in aerospace education.
5. Two-page photograph collage with an additional one-page description of classroom activities, field trips, special events, etc. that depicts creativity in developing and utilizing aerospace educational materials in their K-12 classroom to foster an appreciation of aerospace education and its role in our society.

Optional: Three additional pages of documentation that enhance the nomination package may be included. This may include media coverage of nominee's AE events, special recognition received by nominee or nominee's unit for aerospace performance, etc. CAPF 50-3 is used to nominate the Teacher of the Year. CAPF 50-3 is located at the end of this chapter, or the form can be [downloaded from CAP's website](#).

AIR & SPACE FORCES ASSOCIATION'S (AFA) AEROSPACE EDUCATION CADET OF THE YEAR AWARD

The Air & Space Forces Association recognizes one CAP cadet for outstanding aerospace education contributions with its national AFA Aerospace Education Cadet of the Year award. This is an annual award that goes to the most deserving cadet in the nation who has made significant contributions by promoting aerospace education within CAP and the local community. Use CAPF 120 only as a cover sheet and CAPF 50-4 to make the nomination and follow the directions on the form. A sample of this form is included at the end of this chapter and can be found in [CAP's website publication pages](#).

Anyone in a CAP squadron/unit may nominate a deserving cadet. This award timeline follows all other CAP awards, but the AEOs at each command level will be the PoC for this award. By 15 January, unit commanders will submit nominations to the wing DAE. By 15 February, wing DAEs will screen wing nominations and forward the best nominee to the region DCS/AE for consideration. By 15 March, region DCS/AEs will select the best nominee to send forward to CAP/AE for national consideration. (Send to afa@capnhq.gov.)

The selection criteria at each level should be based on significant aerospace education accomplishments

during the year. These accomplishments should include support for CAP's aerospace mission with the unit, as well as school and community involvement. Since the AFA includes CAP cadets in their two national STEM competitions, CyberPatriot and StellarXplorers, involvement in one or both of those programs would enhance the nomination. The award will be presented at CAP's annual national conference or the AFA's national annual conference.

This cadet award is separate from the Brewer Cadet AE Award and CAP's National Cadet of the Year Award.

Thus, this award provides a third opportunity for a CAP cadet to be recognized nationally. Nomination packages should contain a CAPF 120 cover sheet, the completed nomination form CAPF 50-4, and a written narrative describing the cadet's accomplishments during the past year. The package can contain photos and information about the cadet's educational endeavors, especially if they involve any aspect of aerospace/STEM education. The package should not be more than three pages in addition to the cover sheet and nomination form.

OTHER NOMINATED AWARDS

When considering awards and whose activities are worthy of recognition (decoration), AEOs, DAEs, and DCS/AEs usually think only of national AE awards, but there are other recognitions of special service to CAP and AE that may be made at various command levels. CAPR 39-3 describes the medals and awards. These may be awarded to any CAP cadet or senior member. The regulation establishes the requirements to qualify for them, explains the administrative procedures involved, and prescribes how the medals and ribbons are worn.

For these awards, the CAPF 120, Recommendation for Decoration, must be completed in full. The intent of the award is described in the justification block on the form with any additional acceptable documents to also be submitted. Review CAPR 39-3 to learn about specific requirements relevant to these awards. AEOs and others involved in aerospace education are eligible to receive these awards. Investigate CAPR 39-3 and carefully consider those with whom you work to accomplish the AE mission to find a worthy recipient.

CRITERIA FOR AWARDING DECORATIONS

Award: Distinguished Service Medal



Award Criteria: Conspicuous performance of outstanding service in a duty of great responsibility where the position held and results obtained reflect upon the accomplishments and prestige of CAP on a national scale. Recognition should be for an extremely difficult duty of marked national significance which is performed in a clearly outstanding manner or service which clearly aided CAP in furthering national policies.

Award: Exceptional Service Award



Award Criteria: Exceptionally outstanding service to CAP in a duty of great responsibility while serving in any capacity with CAP. However, the duty should carry the ultimate responsibility for the successful operation of a region, wing, or major project within the region or wing. The discharge of such duty must involve the acceptance and fulfillment of the obligation so as to greatly benefit the wing or region and CAP.

Award: **Meritorious Service Award**



Award Criteria: Outstanding achievement or meritorious service rendered specifically on behalf of CAP. Superior performance of normal duties does not, in itself, constitute automatic justification for the Meritorious Service Award.

Award: **Commander's Commendation Award**



Award Criteria: Outstanding duty performance where achievements and services are clearly and unmistakably exceptional when compared to similar achievements and service of members of like rank and responsibility.

Award: **CAP Achievement Award**



Award Criteria: Outstanding service to the unit, group, or wing. This award may be approved by the group commander.

Reference – CAPR 39-3. Section B – Decorations, Criteria for Awarding Decorations, Paragraph 9

AUTHORITY TO AWARD DECORATIONS					
Commander	Distinguished Service Medal	Exceptional Service Award	Meritorious Service Award	Commander's Commendation Award	CAP Achievement Award
National	X	X	X	X	
Region		X	X	X	
Wing				X	X
Group					X

Reference – CAPR 39-3. Section B – Decorations, Authority to Award Decorations, Paragraph 8

THE FRANK G. BREWER - CIVIL AIR PATROL MEMORIAL AEROSPACE AWARD

The Brewer Awards are presented in commemoration of Frank G. Brewer, Sr., and his lifelong interest in aviation, youth, and education. Recognition is given to individuals and organizations having made outstanding contributions out of selfless devotion to the advancement of youth in aerospace activities. Nominees should have had a strong connection to CAP during the time frame noted for each category.

See nomination package guidance for each award category, below. Suggestion is to include as much information as possible in a clear and concise manner. Good photos are really helpful, as well. The person/organization may be very deserving, but without a good nomination package, the person/organization may not be selected for recognition. So, take some time to get all info in an organized and interesting manner; trying to use all pages allowed for justification documentation.

- Each nomination package should have a [CAPF 120](#) as the cover (but this page is NOT counted in the total number of pages that can be included).

NOMINATION PACKAGE MAY NOT EXCEED CAPF 120, THIS NOMINATION FORM, PLUS FOUR ATTACHED DOCUMENTATION SHEETS. Nomination packages exceeding this length will not be considered.

Suggestions for additional four pages:

- 1- An overview of all the things the person or organization has accomplished which fit into the time frame for that particular category.
- 2- How the person or organization has improved the aerospace education programs of CAP.
- 3- Any news articles or photos showing the person or organization conducting CAP AE programs or program support. (Ensure article copies are clear. Ensure photos are labeled to tell what is happening.)
- 4- Save the form and all pages into pdf documents. Then combine all pages into one pdf document folder to be submitted upward to the next level for consideration.

CATEGORY I – CAP CADET: Nominee must have earned the Billy Mitchell Award and must be a current Civil Air Patrol member. The nomination should include a strong justification that supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection. Nominations must adhere to calendar year requirement to be considered.

CATEGORY II – CAP SENIOR MEMBER: Nominee must have earned the Yeager Award and must be a current Civil Air Patrol member. The nomination should include a strong justification that supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection. Nominations must adhere to calendar year requirement in order to be considered for the award.

CATEGORY III – INDIVIDUAL OR ORGANIZATION (NON CAP): Nominees may include educators, state aviation officials, fixed base operators, state superintendents of public instruction, members of the armed forces, members of Congress, or elementary or secondary schools, colleges and universities, airlines, aircraft industries, flying schools, governmental agencies, associations, or other individuals or organizations who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field over a continuous period of at least five years. *Nominee should have a strong involvement in CAP, but not be a member.*

CATEGORY IV – LIFETIME ACHIEVEMENT: Nominees must be Civil Air Patrol members for at least twenty years. Nominees can be educators, state aviation officials, fixed base operators, state superintendents of public instruction, members of the armed forces, members of Congress, or other individuals who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field for a period of twenty or more years while having a strong involvement in CAP during that time.

The Civil Air Patrol
Major General Jeanne M. Holm
Aerospace Education Officer of the Year Award

Purpose: The Civil Air Patrol *Major General Jeanne M. Holm Aerospace Education Officer of the Year* award is a national-level award established to recognize and reward any Civil Air Patrol member who is dedicated to promoting and teaching aerospace to the members of Civil Air Patrol and spreading the excitement of aerospace to their communities.

Nomination Guidelines:

1. Any Aerospace Education Officer (AEO) in the Squadron, Group, Wing or Region is eligible.
2. Eligible nominees must be nominated by a professional or personal reference.
3. Nominees will be judged at the wing level, then progress to the region level, and ultimately end at the national level for final selection.
4. Wings and Regions will decide how to best recognize the accomplishments of their individual winners. Squadron and Group nominations must be received at the Wing by **15 January**; Wing nominations must be received at the Region by **15 February**. Region nominations must be received at NHQ/AE by **15 March**.

Nomination Package Requirements:

- Each nomination package should have a [CAPF 120](#) as the cover (but this page is NOT counted in the total number of pages that can be included).
- 1. Nomination form and two-page overview describing why nominee deserves this award. (Use Justification block on nomination form below.)
- 2. One-page letter of recommendation by person nominating the individual.
- 3. Two-page photograph collage (with description of each photo) of activities, field trips, special events, etc. that depicts:
 - creativity in developing and utilizing aerospace materials for the promotion of aerospace in the squadron, group, wing, and/or region.
 - cadet, senior or community involvement and activities that foster an appreciation of aerospace education and its role in our society.

Optional, but enhances the total package:

Three extra pages of documentation that enhances the nomination package. This may include additional letters of recommendation, copies of media coverage of nominee's AE events, special recognition received by nominee or nominee's unit for AE performance, etc. **This would make 8 pages total beyond CAPF 120. Please save all sections as a pdf file; then combine all pages into one pdf document, if possible.**

Award Elements:

- For national awardee, a commemorative national plaque will be presented at CAP's annual national conference.
- Wings and regions will determine how to best provide an award element and presentation at those levels.
 - Hopefully, at the least, a certificate made for the awardee could be presented.
 - A plaque for wing and/or region award(s) is the best, if possible.

The CAP Maj Gen Jeanne M Holm AE Officer of the Year Award Nomination Form					
Nominee (Last Name, First Name, Initial)			CAPID #	Best Contact Phone #	
Home Address			City, State, ZIP Code		
			E-mail Address		
Date Joined CAP	CAP Grade	Unit Charter # & Name		Date of Yeager Award	
Justification (This page & following page.) <u>Then, add additional requirements</u> as noted on guidelines above.					
Nominated By					
Grade, Name, Title				Date	
Phone #		E-mail Address			

The Civil Air Patrol Aerospace Education Teacher of the Year Award

- **Nomination Submission information for Wing DAEs and AEOs (found on page 2)**

Purpose: The CAP Aerospace Education Teacher of the Year Award is a national-level award established to recognize and reward any CAP member who is a certified K-12 teacher for outstanding accomplishments in aerospace/STEM education and for possessing those honorable attributes we expect from American teachers who are inspiring the next generation of aerospace-related STEM citizenry.

Award Elements:

- ☐ Free room and registration at the Civil Air Patrol's Annual Summer National Conference (date and location TBD each year)
- ☐ \$1000 cash award and commemorative plaque (to be presented at CAP's Annual Summer National Conference Awards Ceremony)

Nomination Qualifications and Guidelines:

- ☐ **See expanded/more specific Qualifications on the CAP Educators Award Page [HERE](#).**
- 1. Any Aerospace Education Member (AEM) or Senior (uniformed) Member of CAP who is a certified K-12 teacher is eligible.
- 2. Eligible teachers may nominate themselves or be nominated by someone else by submitting a complete package of the nomination form and up to 10 additional pages, as described below.
- 3. Nominees will be judged at the state (CAP Wing) level after January 15 submissions, and, if selected, will progress to the CAP regional level by the February 15 deadline. If selected at the regional level, will end up at the CAP national level (by March 15 deadline) for final selection.
- 4. The national winner will be selected and notified by the first week of May in order to make plans to attend the CAP Summer National Conference (date and location determined annually).
- 5. State and Regional winners will be notified of their accomplishment by the CAP State (Wing) Director of AE and the Region Director of AE, as is appropriate.

Ten-page Maximum Nomination Package Requirements **to be added to the nomination form** (please title each section):

Section 1- Nominee Overview: (1 page max)

One-page overview describing why nominee deserves the award (**aligned with [qualifications](#)**).

Section 2- Supervisory Endorsement Letter: (1 page max)

One-page letter of endorsement by school principal or other educational leader.

Section 3- Support Letters: (2 pages max)

Two additional one-page letters from colleagues, students, parents, or others that demonstrate nominee's exemplary teaching performance in aerospace-related STEM education.

Section 4- Photograph Collage and Event Descriptions: (3 pages max)

Three-page photograph collage with descriptions of classroom activities, field trips, special events, etc. that depicts:

- creativity in developing and utilizing aerospace materials in the K-12 classroom to enhance the teaching of the core curriculum, especially focusing on STEM-related curriculum areas
- student involvement and classroom activities that improve the learning by the student through aerospace-related STEM education

Section 5- Optional Extra Documentation: (3 pages max)

Three extra pieces of documentation that enhance the nomination package. This may include media coverage of nominee's aerospace-related STEM events, special recognition received by nominee or nominee's students for aerospace-related STEM performance, etc.

*****NO extra pages allowed beyond the nomination form plus 10 additional documentation pages.**

Submission Procedures:

Not later than January 15, the teacher should send the completed package (nomination CAP Form 50-3 and allowed 10- page maximum documentation pages, as noted above) to the teacher's state (Wing) Director of AE. * CAP DAE listing [HERE](#). If the teacher is unfamiliar with the CAP structure, he/she can also send the nomination package to ae@capnhq.gov and CAP National HQ/AE will immediately forward this package to the appropriate Wing DAE for submission for consideration.

Nomination Submission Procedures for Wing DAEs or AEOs who are nominating a teacher or submitting a teacher's nomination package to be considered at the Wing level:

- If the nominated teacher is an **AEM**, the [paper CAP Form 120](#) should be used as the AEM cannot submit the online CAPF 120 since they are not affiliated with a squadron, which is required for online submission.
- Only complete pertinent AEM info as follows:
- #1 - Other- CAP Teacher of the Year
 - #2- Personal data with unit:NHQ-NHQ-004 and Wing: NHQ
 - #3- Same as #2
 - #4- 1 Jan- 31 Dec of previous year
 - #5- Enter the following statement: *"As per guidelines from CAP NHQ/AE, all pertinent information will be in the CAPF 50-3 and accompanying 10-page teacher award package."*
 - #6- ONLY enter a 2-3 statement "overview" of why the teacher should be selected. This is for a quick glimpse view only. The rest of the justification will be included in the 10 pages of supplemental info to be submitted in the teacher nomination package.
- Save the completed CAPF 120 and add to the CAPF 50-3 and maximum 10 pages of attachments all info ONE pdf document. (** See directions for combining files to submit as one pdf binder below.)
 - The combined package should be sent as one document to the Wing DAE (or Region DSC/AE, if there is no Wing DAE).
 - All signatures and dates should be completed as the nomination moves upward.
- If the nominated teacher is a **uniformed member of a squadron**, the nominating AEO or Wing DAE should complete the online CAPF 120, Recommendation for Decoration, found in [eServices/Personnel/Award Recommendation](#). (If the wing is requesting and accepting online CAPF 120. If not, use the AEM directions above.)

The teacher's info should be inserted therein, as follows:

- 1- Select **Aerospace Education Teacher of the Year** in the drop-down box.
- 2- Enter teacher's CAP ID and the boxes should auto-fill.
- 3- Unit data: The teacher's CAP squadron unit will auto- fill.
- 4- The inclusive dates of act or achievement should be 1 January- 31 December of the previous year.
 - Historical award? DO NOT enter "yes." Leave this blank.
- 5- Previous Awards- **Do not enter any previous awards. Enter the following:**
As per guidelines from CAP NHQ/AE, all pertinent information will be in the CAPF 50-3 and accompanying 10-page teacher award package.
- 6- ****Justification-** Enter a 2-3 statement "overview" of why the teacher should be selected. This is for a quick glimpse view only. The rest of the justification will be included in the 10 pages of supplemental info to be submitted.
- 7- ***Attachments: This may be tricky for some, but it CAN be done***
 - a. First, save CAPF 50-3 as a pdf.
 - b. Work on all 10 supplement pages as a Word document and save the entire document.
 - c. Then, transfer the 10 Word document pages to ONE pdf file. (See directions to transfer to a pdf file below.)
 - d. The pdfs can then be uploaded per the directions on CAPF 120 online, which says the following:
Attachments -- Upload up to 3 attachments. Only JPEG, PDF, MS Word (.jpg, .pdf, .doc) files can be uploaded. Size limit is 1 MB.

BEST SUGGESTION for the Online CAPF 120 Teacher of the Year Award submission:

- (1) **Only upload pdf files**—The Word documents will have the photos you are including embedded. Then, when you save as a pdf file, it will not use so much space to reach the size limit. (**Do not upload JPEG or MS Word documents.**)
- (2) If you can combine all pdf pages into one pdf file, you will not exceed the 3 attachment limit.
 - If you have to keep CAPF 50-3 as one pdf and the combined 10 supplemental pages as one pdf, that is fine, as you still do not exceed the 3 attachment limit.

*** Directions for converting Word documents into pdf files and combining pdf files into one binder:

If you need to learn how to change a Word document to a pdf file, the following instructions may help you:

1- Save your Word document. Then, go back and click on "Save as an Adobe PDF."

OR

2- Choose File>> Export>> Create PDF. Click Publish.

3- Advanced:

Combining PDF Instructions- If you want to combine pdf pages, you will need to open one of your pdf files for the teacher packages and go to "Tools."

Then, go to "Combine Files."

Click on "Add Files."

Click on the first page you want (such as CAPF 50-3) and it should come up.

Then continue adding files until you have all the 10 supplemental pages in that ONE pdf "binder."

Save the "binder" with the title of your Teacher of the Year package- with teacher name and state (wing).

➤ The next section is the actual CAPF 50-3 National CAP Aerospace Teacher of the Year Nomination Form.

Civil Air Patrol National Aerospace Education Teacher of the Year

CAP Form 50-3 Nomination Form

Nominee (Last Name, First Name, Initial)		CAPID #	Cell Phone #
Home Address	City, State, Zip Code		
	E-mail Address		
Formal Education:			
College/University	Dates Attended	Degree	
Teaching Positions (list 3 most recent):			
1. Title:			
Name and Address of School		Grade Level/Discipline	
2. Title:			
Name and Address of School		Grade Level/Discipline	
3. Title:			
Name and Address of School		Grade Level/Discipline	
Honors and Awards Received by Nominee (list top 5):		Date of Honor/Award	
1.			
2.			
3.			
4.			
5.			
Professional Organization Affiliations and Activities to Improve Educational Performance (Attach one additional sheet if necessary. This will not be counted as an additional page in the overall package, if noted as additional to CAP Form 50-3.)			
Nominated By (can be self nomination)		Title	
Nominator's Contact Information <i>(If other than nominee):</i>			
Cell Phone	E-mail Address		

RECOMMENDATION FOR DECORATION		DATE	
TO: (National, Region, Wing, or Group)		FROM: (Originating Organization and Address)	
1. RECOMMEND INDIVIDUAL/ UNIT INDICATED BE AWARDED : <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Silver Medal of Valor <input type="checkbox"/> Bronze Medal of Valor <input type="checkbox"/> Distinguished Service Medal <input type="checkbox"/> Exceptional Service Award (Approved by Region) <input type="checkbox"/> Meritorious Service Award (Approved by Region) </div> <div style="width: 48%;"> <input type="checkbox"/> Commander's Commendation Award (Approved by Wing, Region or National) <input type="checkbox"/> Achievement Award (Approved by Group) <input type="checkbox"/> Certificate of Recognition for Lifesaving (Approved by Wing or Region) <input type="checkbox"/> Unit Citation Award <input type="checkbox"/> Other: </div> </div>			
2. PERSONAL DATA (Data Required for Individual Award)			
LAST NAME, FIRST NAME, AND MIDDLE INITIAL		CAPSN	GRADE
UNIT NAME AND CHARTER NUMBER		WING	
3. UNIT DATA (Data Required for Unit Citation)			
UNIT NAME AND CHARTER NUMBER		WING	
4. INCLUSIVE DATE(S) OF ACT, ACHIEVEMENT, OR SERVICE (Required for all awards)			
FROM _____ TO _____			
5. PREVIOUS AWARDS AND DECORATIONS (List previous CAP awards and dates below:)			
6. JUSTIFICATION			
COMPLETE ITEM 6 ON THE REVERSE SIDE OF THIS FORM			
REQUESTED BY	SIGNATURE OF FLIGHT OR SQUADRON COMDR	FLIGHT OR SQUADRON	DATE
APPROVED	SIGNATURE OF GROUP COMMANDER	GROUP	DATE
APPROVED	SIGNATURE OF WING COMMANDER	WING	DATE
APPROVED	SIGNATURE OF REGION COMMANDER	REGION	DATE

6. **JUSTIFICATION:** (Description of the act, achievement, or service, including specific dates, places, and facts. If additional space is required, continue on plain bond paper.)

**TYPED NAME, GRADE, AND TITLE OF
INDIVIDUAL INITIATING RECOMMENDATION**

SIGNATURE

Be sure to attach a sample citation to accompany the Silver Medal of Valor, the Bronze Medal of Valor, and Distinguished Service Medal.



The Air & Space Forces Association Sponsors National Cadet Award: *Civil Air Patrol Aerospace Education Cadet of the Year*

All information about this award, to include past recipients, is found on the [CAP AE webpage for this award](#),

The AFA recognizes one CAP cadet for outstanding aerospace education contributions with its national **CAP Aerospace Education Cadet of the Year Award**. This is an annual award that goes to the most deserving cadet in the nation who has made significant contributions by promoting aerospace education within CAP and the local community.

Anyone in a CAP squadron/unit may nominate a deserving cadet. This award timeline follows all CAP awards timelines, but the AE Officers at each level should be the POC for this award. By 15 January, unit commanders will submit nominations to the Wing DAE for consideration. By 15 February, Wing DAEs will screen nominations from unit commanders within their Wings and the Wing commander (or designee) will forward the best nominee to the Region DCS/AE for consideration. By 15 March, Region DCS/AEs will select the best of the Wing nominees and the Region commander (or designee) will forward one nomination to NHQ/Membership for consideration. The NHQ AE staff will convene a selection committee for final determination of the award.

The selection criteria at each level should be based on significant aerospace education accomplishments during the past year, to include possible involvement in the AFA's aerospace/STEM programs, CyberPatriot and/or StellarXplorers. These accomplishments should include support for CAP's aerospace mission within the unit; with community/school involvement, as well.

This award is a separate award from the Brewer Cadet AE Award and CAP's National Cadet of the Year Award. Thus, there is the opportunity for three outstanding cadets to receive national awards! Nomination packages should contain the completed [CAPF-120](#) as the cover form (with this award name in the "other" section); the **CAPF 50-4**, below; and a written narrative with color photos describing the cadet's accomplishments during the past year, not to exceed these four pages on CAPF 50-4..

These directives are found on pages 45-46 in CAPP-50-1, ***The Aerospace Education Officers Handbook*** [HERE](#). ***Compile the entire package into one pdf document and submit forward. Questions? afa@capnhq.gov***

The award is presented by the AFA at the AFA's Annual Air, Space, and Cyber Conference, typically held in September in/near Washington, D.C.

AFA's CAP AEROSPACE EDUCATION CADET OF THE YEAR AWARD

This award recognizes the outstanding education contributions of a CAP cadet who possesses a strong interest and commitment to aerospace education and activities. These contributions should include both CAP activities and community involvement.

Nominee (Cadet's First Name, Initial, Last Name)		CAP Grade	CAPID #
Charter #	Duty Position		
Best Contact Phone #	E-mail Address		
Home Address (Street, City, State, Zip Code)			
Justification (Can be up to three additional pages long and photos are encouraged.)			
Nominated By (First Name, Initial, Last Name)		CAP Grade	CAPID #
Charter #	Duty Position		
Best Contact Phone #	E-mail Address		

AFA's CAP AEROSPACE EDUCATION CADET OF THE YEAR AWARD

Justification (Additional Page 1))

AFA's CAP AEROSPACE EDUCATION CADET OF THE YEAR AWARD

Justification (Additional Page 2))

AFA's CAP AEROSPACE EDUCATION CADET OF THE YEAR AWARD

Justification (Additional Page 3))

DONATION RECEIPT

To

Thank you for your charitable contribution of _____ to Civil Air Patrol. Civil Air Patrol, whose taxpayer identification number is 75-6037853, is a non-profit organization under section 501(c)(3) of the Internal Revenue Code and contributions to Civil Air Patrol may be deductible under section 170 of the Internal Revenue Code. Your contribution will help us carry out our important emergency services and civil support, aerospace education and cadet programs.

The IRS has ruled that Civil Air Patrol and its subordinate units are exempt from federal income tax under Section 501(c)(3) and the Internal Revenue Code. This makes donations to Civil Air Patrol eligible for deductions from income by donors as “charitable contributions” to the extent allowed by law.

Donor’s Taxpayer Identification Number: _____

Motor vehicle or aircraft identification number: _____

Check and complete one of the following paragraphs:

The motor vehicle, aircraft or boat was sold in an arm’s length transaction between parties. The gross proceeds received from the sale were \$ _____ which is the maximum amount you can deduct.

☐ Civil Air Patrol intends to use the motor vehicle, aircraft or boat for Civil Air Patrol business for at least two years. Civil Air Patrol will not sell the motor vehicle, airplane, or boat before the completion of that use.

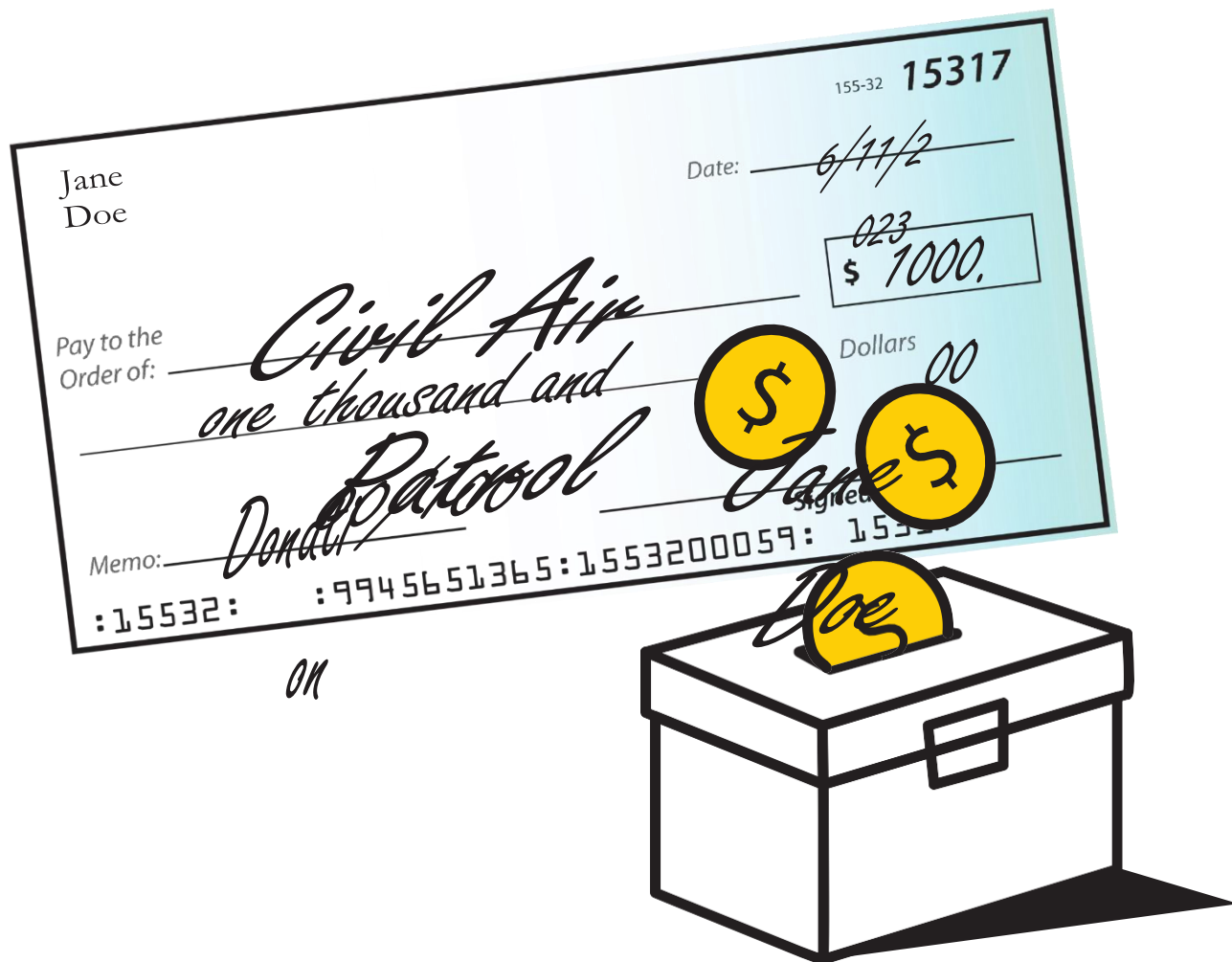
☐ Charter Number: _____ Date: _____

Grade Name: _____

Signature: _____

CHAPTER 7

FINANCING AEROSPACE EDUCATION



GENERAL FINANCE MATTERS

Civil Air Patrol, like every other public or private organization, must have funds to be able to meet the requirements of the mission. It is in the proper handling of funds that CAP units at any level face their greatest potential for liability and exposure to legal issues. There are several potential sources of funding for your AE program: member dues; USAF appropriations; fundraising; donations; and grants. The unit receives funds for its overall budget, largely from member dues. Some of that money may be specifically designated for the AE program, but that may not be sufficient to fund all the AE activities you wish to pursue. Beyond what is available in the unit budget, to support your program you will probably want to seek donations, create fundraising events, and pursue available grants.

Congress, through the U.S. Air Force, provides much of the funding for the CAP organization as a whole. This provides for major capital expenditures such as buildings, facility rental (meeting/office space, hangars), aircraft and vehicles, equipment support/repairs, maintenance costs, and member education and training opportunities. It also at least partially supports many smaller-scale CAP expenses. The U.S. Air Force expects CAP units and members to be good stewards of this fiscal allocation. Though generous, U.S. Air Force funding simply cannot cover every small detail necessary to support an exemplary AE program.

Regulations CAPR 173-1 (Finance) and CAPR 173-4 (Fundraising and Donations) are the principal guidelines for all CAP financial transactions, from accepting member dues to processing high value gifts. If your CAP unit is the recipient of any financial benefit, these regulations will help. Also, check with your chain of command and CAP national resources, such as the Director of Development, NHQ/COD; financial management personnel, NHQ/FMF; logistics staff, NHQ/LG; and the Office of General Counsel, NHQ/GC. There is help available from all these people to avoid any potential financial errors.

It is a good idea for each unit to present a budget, though not all wings and regions require this important element of financial planning. As the AEO, it is especially important to submit a budget to the unit commander for anticipated AE activities. The proposed AE budget helps define your ideas as an AEO and gives you a framework on which to base next year's expected AE expenditures. It also establishes a basis for any fundraising efforts you might plan for the AE program. Possibly the most important impact of presenting a written AE budget is that a budget document calls attention to the financial needs for a strong AE program which will be considered along with all the other requests for financial support. Having an AE budget helps keep the AE mission from being overlooked or even ignored.

One of the most crucial aspects of AE success is funding the small items needed to accomplish the full range of the CAP AE mission. For every hands-on project there are materials (i.e. paper, scissors, rulers, tape, string, glue, hot glue guns) that need to be available to facilitate building model rockets, tissue paper hot air balloons, aircraft models, space craft, and many other worthy aerospace/STEM scientific projects. Many of these items may be reused. Regularly allocated funds from the U.S. Air Force have underwritten the expenses for the AE STEM Kit program for several years.

There remains a continuing need for supplemental funds to be able to fully accomplish all aspects of a vital AE program. A well-thought-out AE program spans many special activities and smaller scale projects, such as additional supplies for AE projects, field excursions, hearing a special speaker, or participating in special local events, such as an occasional air show or aircraft static display. Such opportunities can enrich an AE program but may require extra financial support.

DONATIONS

Donations to CAP as a national organization and to individual subordinate units at any level are fully acceptable. It is always permissible to ask for a donation. Be gracious in your acceptance of it. Fortunately, CAP is an attractive organization to receive gifts generated from outside the organization. CAP is classified as a 501(c)(3) corporation, therefore donations to CAP units are considered to be exempt from federal taxes, under laws governing charitable donations. The fact that CAP has public service status, serves youth, and provides supplemental education opportunities also makes CAP a favorable recipient for donations. As an AEO, part of your responsibility is to help inform and assure as many people and community organizations as possible understand the advantages of supporting CAPAE projects, education, and training.

While the tax-exempt status of CAP as a nonprofit organization makes it a favorable organization to receive donations, there is further assurance for a potential donor. Nonprofit organizations in the U.S. are rated by two different organizations: Guidestar and Charity Navigator. The rating systems concentrate on management of funds donated to an organization, their methods of handling financial matters, and the effective application of donated funds – how successfully donated money is accomplishing their goals.

CAP has earned high recognition from both rating organizations. In 2020, CAP earned the Platinum Seal of Transparency from Guidestar, which has looked at 2.4 million nonprofit organizations. Charity Navigator is perhaps the most used rating group. Under their Encompass Rating System, CAP has met the criteria for being “effective and transparent” and now holds the “Give with Confidence” designation. Such high evaluations should ensure those who are considering a donation to CAP are confident that their money will be well-spent and effectively applied. *(Note: information in the above two paragraphs is based on an article that appeared in the Civil Air Patrol Volunteer, Fall 2020.)*

Large, well-financed aerospace industries, various corporations, foundations, and scientific research institutions often support major national CAP membership events, such as national conferences and cadet special activities or competitions, such as National Color Guard competition. The CAP organization, as a whole, benefits greatly from such assistance.

Donations include a wide range of items. Gifts can range from smaller in-kind considerations to large-scale, very valuable items. In the past, CAP – and occasionally, specifically AE – has received aircraft, boats, vehicles, real estate, buildings (some portable, others not so much), office and electronic equipment, and cash or other personal property. Some of these generous gifts are from living individuals. Donations also may come as posthumous bequests through estates, wills, or trusts. Though they are often unplanned and unscheduled, all donations are a welcome contribution.

Please contact donors (or their executors) to determine if they wish to have their donation publicized. Some relish publicity. Some shun it and wish to remain anonymous. Respect their wishes in either case.

Regardless of the nature of the gift, if the value is more than \$250.00, a CAPF 164, Donation Receipt, must be filled out for the donor, and a copy retained in the unit's files. Additional IRS or local documents may also be required. For your convenience, a sample of CAPF 164, *Donation Receipt*, is provided at the end of this chapter. You can download a workable form from [CAP's publications/forms webpage](#). If you have any questions, check with your wing finance and/or legal officers.

AEOs, particularly, need to know that CAP Form 164 is also required for in-kind gifts, which often include both goods and services. Though these contributions may be of lower value, they can make a big difference in the success of an AE program. For in-kind gifts, any combination of goods and services

valued at more than \$75.00 requires a CAP Form 164 to be filed with the finance officer. This action is often omitted for smaller donations but should not be.

Filing the Form 164 can also be a reminder to write a thank-you note. This does not have to be long, but the thoughtful gesture of writing “Thanks” is always appreciated. Include a few words about how the donation was used and how many cadet and senior members benefited from the help. Every donor deserves this, and your consideration may pay economic dividends in the future. Soliciting donations and charitable giving is acceptable. This often is as easy as simply explaining CAP missions and the AE component to potential donors.

CAP units may accept donations through the Combined Federal Campaign when federal workers may designate a portion of their pay to be given to local charities. The campaign managers often make available a list of eligible recipients, either electronically or in print, before the campaign starts in the fall. The United Way campaign (sometimes referred to as “Community Chest”) is also conducted in the fall and provides a similar format for non-federal employees to make local charitable donations.

Schedule an early meeting with the local organizers of both fund drives to make sure CAP, and the AE mission, are considered. Get CAP on the list of approved charities for either drive. This has proven profitable for some units. This is also a good opportunity to spotlight your AE program, mentioning specific needs or projects. Work with the Public Affairs Officer (PAO) in your unit to help publicize how your AE accomplishments benefit the local community.

CAP is a tax-exempt 501(c)(3) organization which has an assigned tax number. Check with your unit commander and/or the wing administrator to obtain a copy of the letter indicating this status to take to your local vendors. This designation allows CAP units to make many purchases tax-free, such as office supplies or items that might support AE projects. Local art supply or hobby/craft stores often have materials that can be used for AE hands-on projects. The AEO might also check with hardware, paint, or lumber suppliers for materials that will support their AE projects and determine if it is possible to arrange for tax-free purchases. Squadron commanders should apply to set up a tax-exempt account with these businesses. Once an account is in place, it may take only an occasional reminder to maintain it over a period of years.

Though not specifically a donation, these small tax savings incrementally help improve the entire financial situation, and particularly can help smaller CAP units support their AE programs. If the AEO has any questions, recommendations and further information are available at NHQ, through the office of the Director of Development (NHQ/COD).

FUNDRAISING

Seeking financial support for special CAP/AE projects with fundraising events when many people participate can be fun. It is also an area where members must be careful since certain activities are prohibited by CAPR 173-4. Fundraising is a specialized skill; so much so, that some individuals make this their professional career. These creative people design special programs to attract donors, tailored to the values of the organization. If your unit or wing is blessed with one of these talented and knowledgeable people, take advantage of any assistance they can give you to assure successful results and avoid legal pitfalls. Remember, however, that it is prohibited to use people who are merely funding promoters – who work for a percentage of the proceeds – for any CAP fundraising.

Anyone involved in unit fundraising should refer to CAPR 173-4. It is a terrific reference to help safely navigate this sometimes-complex area. Examples of fundraising activities that are permitted are listed

in Section C, paragraph 13 of that regulation. These are suggestions, but you can use your imagination to expand on the ideas. You will note the reference to “sale of Christmas items.” This permissible activity helped CAP initiate the popular annual memorial fundraiser, “Wreaths Across America.”

On the other side, and to be in compliance, CAPF 173-4, Section C, paragraph 14, lists those activities that are explicitly prohibited. There are also other policies of which you need to be aware. A very important rule to remember for any proposed fundraising effort is that the wing commander must be aware of your fundraising project and the desired goals. The commander must give written permission for you to proceed. The written permission may be provided electronically or by mail and should be retained in the unit’s files. The good news is that most wing commanders are acutely aware that fundraising is crucial to accomplishing the CAP AE mission, and they are willing to support most activities that meet CAP regulations and state and local ordinances.

It is always a good idea to involve your unit commander in the project from the beginning. If he/she does not support your ideas, it is not going to happen. Your commander also may have constructive suggestions for improving your fundraiser, and the commander will want to avoid conflicts in scheduling. As a matter of courtesy, be sure to request the commander’s permission several weeks before your planned event, so there is enough time to respond and allow for any questions to be clarified or possible issues to be resolved. In the case of fundraisers that are held regularly (such as an annual air show or a seasonal parade), the written permission may be received more quickly.

If your fundraising effort is to be targeted to a special group or is intended to support specific AE hands-on projects, field trip experiences for AE enhancement, special event participation, etc., consider bringing in some cadets to talk about the benefits they previously have enjoyed through the AE program. If you are planning a “Buggy Bath” (aircraft/vehicle wash), pick a warm day and have the cadets help wield the sponges. Take pictures.

After your project has CAP command permission to proceed, there is another critical issue to remember. There will be no U. S. Air Force involvement in CAP fundraising. CAP and U. S. Air Force are to be kept as separate entities. Any promotional materials should clearly identify CAP as a distinct organization from the U. S. Air Force. It must be made clear that the U. S. Air Force is not going to benefit from the proceeds. Wearing the U. S. Air Force style CAP uniform is not permitted at fundraising events. There are some exceptions to this rule, but only for cadets and under limited circumstances. If you are unsure, check with the Deputy Commander for Cadets in a composite squadron or the Director of Development at CAP/NHQ.

Do not forget to include the wing Legal Officer (LO). Involve the LO early in your planning process to confirm the plans for the fundraising effort. The LO can assure you that you are compliant with all CAP regulations as well as state and local statutes and are operating within the applicable laws, such as required permits, licenses, or fees.

GRANTS

There are literally hundreds of corporate, foundation, and community sources which offer formal grants that support many different interests. Libraries and the internet have many references listing such potential donors. As with fundraising, there are professional grant writers who make a career of applying their talents to help those who need financial assistance. Obtaining a grant is not difficult, and the grant applicant does not need to have any special credentials to apply for assistance. Grantors look at the cause for which you are seeking funding, not necessarily the writer.

Many granting entities promote educational opportunities. The key is to match your AE project with a grantor who supports similar ideas. Youth and STEM education are popularly supported topics; so, there is often a natural fit between grantors and the goals of AE in CAP. With so much to choose from, you are likely to be successful. The effort you put into the grant research can be very rewarding.

Most grantors clearly explain what interests they support, the rules for applying for their grant, and the stipulations relating to the use of their funds. As a grant applicant, make sure your AE project fits within their qualifying requirements. Read the directions/requirements for the format of the application carefully and follow all the grant guidelines to the letter. These are not suggestions. They are the ironclad expectations of the granting group. Follow their rules precisely. Be persistent, but polite. Promptly answer any follow-up questions they might have.

Once your AE projects have been recognized and accepted, most granting agencies expect that the use of the money will be closely monitored throughout the project. Make sure to document all use of the grant funds. Give progress reports, if requested, but always provide a conclusion. Whether the grantor requests it or not, provide an end-of-project report, describing how the funds were used and who benefitted. Be generous with your appreciation and thanks.

Some large corporations are known to be especially generous with organizations which promote the positive development of youth, and particularly CAP cadets. They specifically support AE and the development of aerospace careers. Be careful not to over-solicit such a company. Someone, such as your commander or a Development Officer should coordinate grant applications to assure that this overload is not happening. A community relations person or CAP public affairs officer (PAO) should be included in making any donation requests to such a company. It is one thing for a company to receive a grant request from a local squadron, but to have multiple requests from several CAP units may close off the resource to all.

Proceed with confidence as you ask for financial support for AE. Using the resources mentioned in this chapter will get you off to a strong start. Look forward to some sales tax relief, donations, and receiving funds from fundraising activities and grants. Remember, it never hurts to ask for a donation. Try to set up tax-free accounts and write grant applications. There is much assistance available throughout CAP if you have any technical problems or questions. If you are unsure, ask for help before you make a financial error.

CHAPTER 8

AE PLAN OF ACTION (AEPOA)



There is a military saying: “Failure to plan means you plan to fail.” In CAP this is very true. Units in CAP that plan have greater success in aerospace education. Planning takes thought and time. Implementing the plan means that AE activities will occur.

Remember this statement: If you fail to plan, you plan to fail!

Introduction

Planning is everywhere in everyday life. One plans meals to cook, and grocery lists are developed. You own an automobile and maintenance plans are portrayed in owner’s manuals. It must be noted, however, that grocery lists can change while in the store and planned auto maintenance can be expanded if the mechanic finds something else. Plans in CAP can change during the training year. CAP planning is similar to these two examples. In a CAP unit one can develop a list of tasks for AE training.

You might well review Chapter 1 of this pamphlet and examine the six steps for CAP unit success. It covers education and training in CAP units regardless of the size of the unit – squadron, group, wing, or region. The six steps are:

1. Explore the AE education and training resources that are offered by NHQ’s AE website,
2. Inventory the unit’s previous year’s AE activities,
3. Plan, with guidance from the unit commander,
4. Implement AE education and training,
5. Evaluate AE activities the unit performed, and
6. Report what was accomplished using the AE Annual Activity Report.

With these six steps reviewed from Chapter 1, you are now ready to proceed. Make some notes as to what AE tasks your unit could or might do. Choose interesting tasks to hold member’s interest. Planning occurs at all levels in CAP. Personnel at all levels in CAP think and look ahead to the next fiscal year for training and education.

Squadron AE Planning

As stated in CAPR 50-1, Attachment 4, the squadron AEO’s planning tasks are:

- Responsible for all AE programs in the unit (cadet and senior if applicable),
- Discusses the AE activities planned for the upcoming year with the squadron commander and documents the meeting in the AE notebook or in a digital record,
- Supports group/wing/region/national internal and external AE activities, and
- Reports periodically to unit commander and group AEO, or wing DAE on AE the program.

As you consider AE activities in a squadron, last year’s unit AE Annual Activity Report might suggest improvement for the next training year being planned. Personnel at all levels in CAP think and look ahead to the next fiscal year for training and education. The Squadron AE Achievement Award will focus your attention on what CAP considers an active and vital squadron AE program. The squadron’s AE success can be measured by earning the Squadron AE Achievement Award. See Chapter 6 of this pamphlet for

additional information. The requirements for the award are also found in CAPR 50-1, attachment 5, and also displayed at the end of this chapter. After reviewing the AE tasks contained therein, seek out the squadron commander and receive guidance of what is possible within the squadron AE plan. Complete the Squadron AE Planning Checklist. This checklist follows possibilities you might choose for unit's coming year's AE activities. The award notes the required internal and external tasks.

These are the required AE tasks for the squadron:

1. Aerospace Education Officer (AEO). Every squadron will have a minimum of one AEO.

The first task for the Award is the unit has an assigned AEO. This means that NHQ has received notification from the squadron who is the AEO. Make sure this task is accomplished as it affects the next task. See Chapter 1 of this pamphlet to see how the assignment is done. Every unit needs an AEO and, if possible, assistant AEOs.

2. Aerospace Education (AE) Specialty Track. All AEOs in the squadron will be working to achieve or will have achieved the master rating in the AE Specialty Track IAW CAPP 50-2.

The second required task is that the AEO is assigned to the AE Specialty Track for training. Chapter 2 of this pamphlet and CAPP 50-2 Aerospace Education Specialty Track describe this process of track assignment and completion.

3. Meet with the commander. The AEO will identify the AE activities to be accomplished during the fiscal year and discuss ideas with the commander. This meeting will be documented with notes or audio/video recording.

This task points out that the unit commander is involved in the planning process. If this doesn't happen, training problems will result.

4. AE Annual Activity Report. The squadron will submit an AE Annual Activity Report no later than October 30.

The final required task that the squadron submits is the AE Annual Activity Report. *See Chapter 9 of this pamphlet for guidance.*

The internal AE tasks are those that can be accomplished within the squadron.

5. AE Excellence Award Program (AEX). The squadron will enroll and complete the AEX Award Program. *See Chapter 5 of this pamphlet for assistance.*

6. Model Rocketry Program. Squadrons with cadets will complete the Model Rocketry Program. *See Chapter 5 of this pamphlet for assistance.*

7. Science, Technology, Engineering and Math (STEM) Kits. Squadrons will order, use, and evaluate at least one CAP STEM Kit. *See Chapter 4 of this pamphlet for assistance.*

8. Yeager Award. The AEO and 75% of Senior Members will have earned the Yeager Award. *See Chapter 6 of this pamphlet for assistance.*

9. AE Award Nominations. The squadron will submit at least one AE award nomination.

See Chapter 6 of this pamphlet for assistance.

10. AEO School. AEO will attend either a regional or national AEO School.

See notices from NHQ/AE and region as schools are developed and advertised.

11. Wing Conference. AEO will conduct a seminar or make a presentation at the wing conference.

The Wing Director of Aerospace Education will seek assistance from wing AEOs when the conference is being planned. Volunteer.

The external AE tasks can be accomplished within the squadron's community.

12. Aerospace Education Member (AEM). The squadron will recruit an AEM.

See Chapter 5 of this pamphlet for assistance.

13. AEX and AE Activities. A squadron member or members will assist an AEM in completing AEX program activities, STEM activities or present an AE activity in a local school/home school learning environment. *See Chapter 5 of this pamphlet for assistance.*

14. Science, Technology, Engineering and Math (STEM) Kits. A squadron member or members will assist an AEM in ordering, participating, and evaluating a CAP STEM kit. *See Chapter 4 of this pamphlet for assistance.*

15. Aerospace Connections in Education (ACE). A squadron member or members will assist an ACE teacher with their ACE lessons or activities. *See Chapter 5 of this pamphlet for assistance.*

16. Youth or Civic Group AE Activities/Presentation. A squadron member or members will assist a community youth group with an AE activity/presentation or make an AE presentation to a community civic organization. Topics for presentation will be developed dependent upon the organization to receive the talk.

17. Teacher Orientation Program (TOP) Flights. AEO will assist in helping an AEM receive a TOP Flight. *See Chapter 5 of this pamphlet for assistance.*

18. School Visits. AEO will visit the classroom of either a public, private or home school and promote CAP AE. This task can be developed through a CAP cadet or family member.

Place a completed copy of the Squadron AE Achievement Award Checklist Form into the Squadron's AE notebook or digital record for future reference. Send a copy of the Squadron AE Planning Checklist, dependent upon the wing's command structure, to the group AEO or the wing DAE.

Depending on the command structure of your wing, you might talk to the AEO next in the chain of command. It might be the group AEO or the wing DAE. Ask other AEOs in your wing. You are not alone, ask. After detailed development of your plan, share it with either the group AEO or wing DAE as the command structure of your wing demands.

Discuss the plan with the Education and Training Officer of your squadron. The squadron's agenda or training schedule is a partnership of all staff officers of the unit. Plan together and decide who will do what, when, where, and how.



Group AE Planning – if the wing has groups

As stated in CAPR 50-1, Attachment 4, the group AEO's planning tasks are:

- Assists in AE education and training of AEOs in subordinate units,
- Supports the AE program by being an additional AE information resource, and
- Compiles AE reports and information submitted by subordinate units to the wing.

A group AEO serves as a helper and trainer for squadron AEOs in the group, offers AE education and training for the group level personnel, and forwards the Squadron AE Planning Checklist and group AE plans to the wing DAE. Remember the chain of command. Solve AE questions and problems at the lowest command level. Remember that one of the major tasks of the group AEO is to encourage all squadron AEOs in the group to plan and have the squadrons earn, with the help of all squadron members, the Squadron AE Achievement Award.

Wing AE Planning

As stated in CAPR 50-1, Attachment 4, the wing AE planning tasks are:

- Completes final online AE Plan of Action and ensures the Wing Commander approves,
- Submits annual AE budget to wing commander, and
- Reports to the Wing Commander periodically on progress of wing AE Plan of Action.

The wing Director of Aerospace Education (DAE) serves as the AE leader of the wing for the wing commander. The DAE's AE tasks can be summarized as plan, observe, help and report. Planning involves suggesting squadrons in the wing earn the Squadron AE Achievement Award and involves, at the wing level, receiving AE plan information from subordinate units and developing the online wing AEPOA with Wing Commander's approval. The online wing AEPOA format is attached at the end of this chapter. Follow the directions on submitting the report through channels to arrive at region by the deadline as stated in CAPR 50-1, Attachment 2. Follow the directions on submitting the report through channels to arrive at region by the deadline as stated in CAPR 50-1, Attachment 2. Observing means seeing what is occurring in subordinate units. Staff visits and telephone calls to subordinate units are ways to secure AE accomplishments and help provide assistance. DAEs can utilize AE personnel within the wing AE Directorate to help in securing observations. Finally, reporting to the Wing Commander on the wing AEPOA.

The wing DAE works to ensure a wing AE budget exists and is utilized within the wing to help all wing units. Remember not all money can be planned, earned, and spent at squadron level. Wing AE tasks may need funding.

Teacher Orientation Flights involve planning by the squadron AEO and the wing DAE in coordination with AE NHQ. Securing funding is crucial along with wing aviation assets, pilots, and planes. Review Chapter 5 of the pamphlet for additional guidance on this essential activity.

Region AE Planning

As stated in CAPR 50-1, Attachment 4, the region AE planning tasks are:

- Develops a region AE Plan of Action in coordination with the region commander (suggested, but not mandatory),
- Reports periodically to the Region Commander on the progress of the wing AE Plans of Action and AE Activity Reports, and
- Reports to the Region Commander those wings submitting Wing AE Plans of Action and Wing AE Annual Activity Reports.

The region Deputy Chief of Staff/Aerospace Education (DCS/AE) serves as the AE leader for the region commander. In addition to the above stated duties, the DCS/AE will mentor and monitor the subordinate DAEs as needed and requested. Report and award submissions, as required by CAPR 50-1, Attachment 2, will be submitted in a timely manner. The DCS/AE will offer and conduct Region AEO Schools and workshops.

National AE Planning

It is recommended that CAP's National Headquarters' AE Directorate remind CAP's Chain of Command to begin AE planning for the next fiscal/training year. National AE goals and guidance can be offered to the subordinate units. The Directorate can speak to AE materials that are in abundance or in short supply. Supply chain problems can affect the availability of certain AE STEM kits that a squadron of Aerospace Education Member might request. This leadership in telling the chain of command can be helpful and solve problems before the training year starts.

AE planning can be examined separately from national down through the commands to squadron or from squadrons through to national. AEOs at all command levels must understand who does what and when at each level to achieve the greatest AE result for CAP, its members, and the USA. The AE mission is vital for total CAP success.

Notice to all AEOs in the AE planning process use the "AE Chain of Contact" to answer questions.

In CAP the chain of command flows from squadron, to group, to wing, to region and to NHQ. The commanders at each level are involved in this chain of command. If you are having questions about AE planning or about how to solve an AE problem and you haven't found the answer in any of the AE pamphlets, the AE website, or regulation, use the "AE chain of contact." The flow in this chain is from squadron AEO, to group AEO, to wing DAE, and to region DCS/AE. If no satisfactory answer is available, the last one in the AE chain of contact is the region DCS/AE. If the question involves something not covered in CAPR 50-1, CAPP 50-1 and/or CAPP 50-2, the DCS/AE contacts AE at NHQ. Remember AE at NHQ cannot respond individually to all 1500 squadrons or all AEOs in CAP. AE NHQ has many tasks to accomplish at the headquarters level. But AE NHQ is happy to respond to calls or contact from anyone or all eight of the region DCS/AE DCS. Remember eight or 1500 AEOs asking questions. Be a helpful member of CAP and remember the AE chain of contact.

Squadron AE Planning Checklist

Squadron Charter Number _____ Name of AEO _____

Wing _____

References: CAPR 50-1, Attachment 5
CAPR 50-1, Chapter 8

The purpose of this checklist is to help squadron Aerospace Education Officers (AEOs) and commanders plan Aerospace education (AE) activities for the fiscal year. An additional purpose is to help plan AE activities, which help earn the Squadron AE Achievement Award.

Completing this form does not mandate or require the completion of any or all tasks selected. This form indicates the squadron's plans, but plans can change during the training year. Tasks not selected during the planning phase may be selected later and thus can still be credited towards the Squadron AE Achievement Award.

To earn the Squadron AE Achievement Award, a squadron must perform EIGHT of the below listed tasks.

Tasks - 1, 2, 3 and 4 are required.

Squadrons must achieve at least one task from each of the AE internal and external task areas.

This unit will attempt to complete the following tasks as indicated by the mark of an "X" in the YES ___ spaces.

Required Tasks

1. YES _____
2. YES _____
3. YES _____
4. YES _____

Internal Tasks

5. YES _____
6. YES _____
7. YES _____
8. YES _____
9. YES _____
10. YES _____
11. YES _____

External Tasks

12. YES _____
13. YES _____
14. YES _____
15. YES _____
16. YES _____
17. YES _____
18. YES _____

*Note – Discussing this checklist with your squadron commander and placing a completed checklist into your unit's AE Notebook means that required task number 3 has been met.

Required Tasks:

1. Aerospace Education Officer (AEO)- Every squadron will have a minimum of one AEO.
2. Aerospace Education (AE) Specialty Track- All AEOs in the squadron will be working to achieve or will have achieved the master rating in the AE Specialty Track IAW CAPP 50-2.
3. Meet with the commander- The AEO will identify the AE activities to be accomplished during the fiscal year and discuss ideas with the commander. This meeting will be documented with notes or audio/video recording.
4. AE Annual Activity Report- The squadron will submit an AE Annual Activity Report no later than 30 October.

Internal Tasks:

5. AE Excellence Award Program- (AEX) The squadron will enroll and complete the AEX Award Program.
6. Model Rocketry Program- Squadrons with cadets will complete the Model Rocketry Program.
7. Science, Technology, Engineering and Math (STEM) Kits- Squadrons will order, use, and evaluate at least one CAP STEM Kit.
8. Yeager Award- The AEO and 75% of Senior Members will have earned the Yeager Award.
9. AE Award Nominations- The squadron will submit at least one AE award nomination.
10. AEO School- AEO will attend either a regional or national AEO School.
11. Wing Conference- AEO will conduct a seminar or make a presentation at the wing conference.

External Tasks:

12. Aerospace Education Member (AEM)-The squadron will recruit an AEM.
13. AEX and AE Activities- A squadron member or members will assist an AEM in completing AEX program activities, STEM activities or present an AE activity in a local school/home school learning environment.
14. Science, Technology, Engineering and Math (STEM) Kits- A squadron member or members will assist an AEM in ordering, participating, and evaluating a CAP STEM kit.
15. Aerospace Connections in Education (ACE)- A squadron member or members will assist an ACE teacher with their ACE lessons or activities.
16. Youth or Civic Group AE Activities/Presentation- A squadron member or members will assist a community youth group with an AE activity/presentation or make an AE presentation to a community civic organization.

17. Teacher Orientation Program (TOP) Flights- AEO will assist in helping an AEM receive a TOP Flight.

18. School Visits- AEO will visit the classroom of either a public, private or homeschool and promote CAP AE.

Online Wing AE POA

Director of Aerospace Education (DAE)

The Wing Commander has appointed a DAE. Yes

DAEs will plan to contact (phone, email, text or visit) each squadron AEO during the year. Yes

DAEs will focus the squadron AEOs on accomplishing the Squadron AE Achievement Award. Yes

DAEs will remind squadron AEOs to complete the AE Annual Activity Report at the end of the fiscal year. Yes
AE Specialty Track

If yes, what is the highest rating the DAE has achieved. MASTER

AE Excellence Award Program (AEX)

DAEs will recommend squadrons enroll and complete the AEX program. Yes

Model Rocketry Program

DAEs will recommend squadrons complete the Model Rocketry program. Yes

CAP STEM Kit Program

DAEs will recommend squadrons order a STEM kit. Yes

DAEs will recommend squadrons complete the STEM kit evaluation. Yes

Yeager Award

DAEs will recommend primary squadron AEOs earn the Yeager Award. Yes

DAEs will recommend additional senior members earn the Yeager Award. Yes

AE Award Nominations

DAEs will recommend squadron AEOs submit AE award nominations. Yes

If yes, how many award nominations will be submitted?

10

Aerospace Education Member (AEM)

DAEs will recommend squadron AEOs recruit an AEM. Yes

DAEs will personally recruit an AEM. Yes

Teacher Orientation Program (TOP) Flights

DAEs will support and facilitate AEM TOP Flights. Yes

School or Community Visitations

DAEs will recommend squadron AEOs visit schools. Yes

DAEs will personally visit schools. Yes

DAEs will encourage AEOs to share information or visit community organizations. Yes

DAEs will personally share information or visit community organizations. Yes

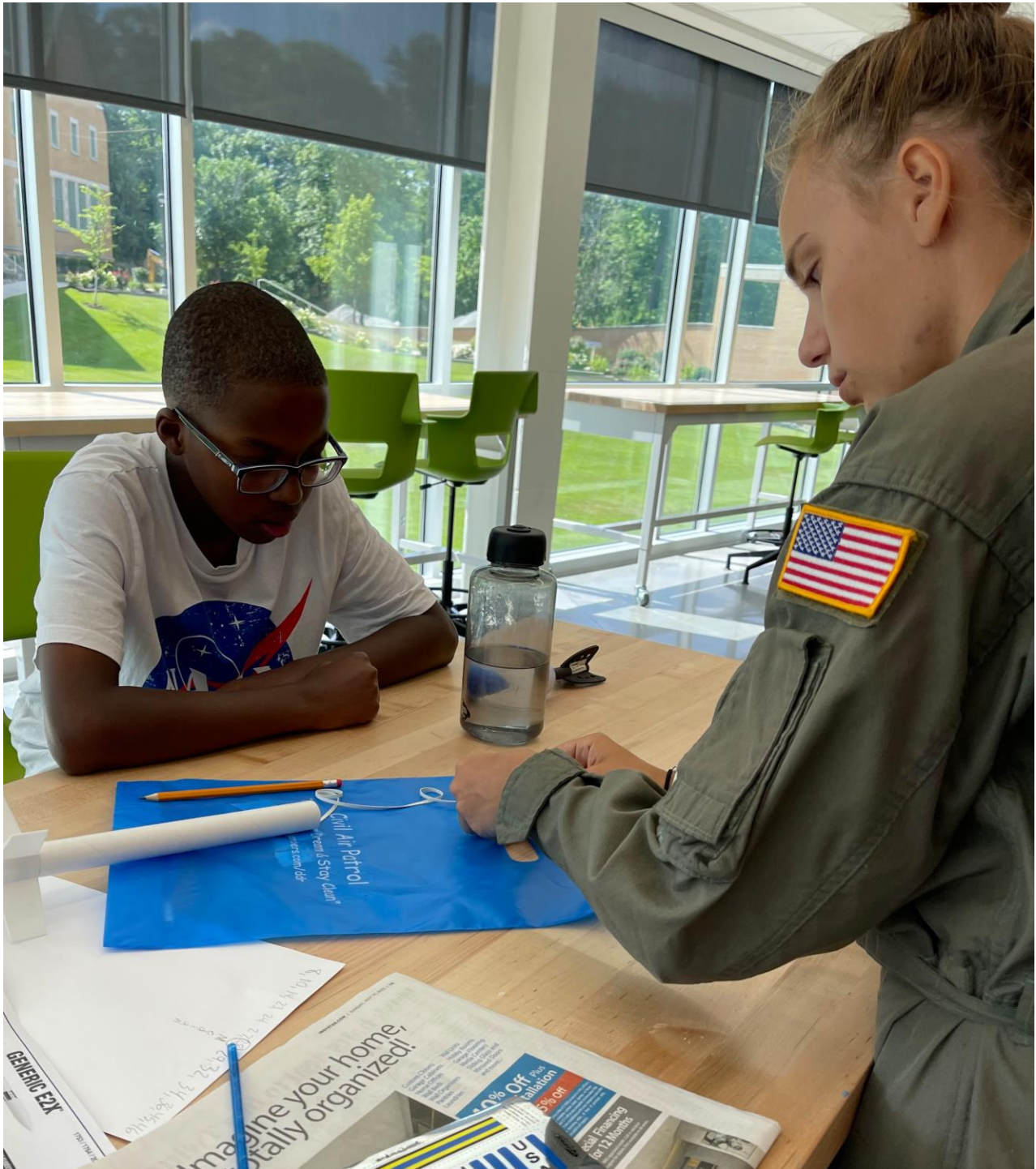
Above and Beyond

DAEs may perform additional AE activities beyond the listed items.

Upload a document describing these activities or upload a blank document if none.

CHAPTER 9

AE ANNUAL ACTIVITY REPORT



Each squadron will complete the online AE Annual Activity Report in eServices every year. This report records all the unit's AE accomplishments for the past fiscal year. Groups and wings will review the consolidated activity reports they receive from their squadrons, with the group and wing commanders approving their squadrons' or groups' reports. Regions will then review the wing submissions. Refer to CAPR 50-1, Attachment 2 for submission deadlines.

The AE Annual Activity Report contains all the information pertaining to your unit's aerospace education activities during the previous fiscal year. Providing information on the activities in the squadron, group, wing, and region supports the CAP aerospace education mission, encourages additional funding from government and private sources, enhances the quality of our program locally and nationally while demonstrating the strength of each unit. The AE Annual Activity Report Checklist should be found at the end of this chapter.

It is highly recommended that you keep a record of your AE endeavors and accomplished AE activities by the month, or at least quarterly. Add them to your notebook. These records will be of great value when you are compiling the year's AE activities. Therefore, you will have no last-minute scrambles when you are compiling your report at the end of the year.

It is your primary tool in tracking and reporting aerospace activities to your commander. It is also the only source of information used by Region Command when selecting the wing that has earned the annual Aerospace Education Mission Award.

THE VALUE OF PROVIDING DETAILS OF YOUR UNIT'S ACTIVITIES IN THE ABOVE AND BEYOND SECTION:

The process starts with the squadron AEO completing the AE Activity Report, adding detail to the Above and Beyond section by adding photos, lesson plans, a summary of the unit's AE activities and more. The squadron will strive to meet the criteria to earn Squadron AE Achievement Award. The Group AEO or Wing DAE reviews the individual squadron AE Activity Reports accumulating information on what may be working well in the unit and how they can help if the unit needs support.

- The Group or Wing AEO will review all the Squadron Activity Reports as they are submitted. Each will observe through the reports what is working well or where they may assist other units.
- The Group AEO will develop their own AE Annual Activity Report adding their group wide activities. The group Commander forwards the compiled reports to the Wing Commander and DAE.

Wings with Groups:

The Wing DAE will review all online group AE Activity Reports submitted by the commander.

- The wing DAE will develop their own Annual Activity Report and submit it to the Wing Commander who approves and submits it online for Region Commander review.

Wings without Groups

The Wing DAE will review all online group AE Activity Reports submitted by the commander.

- The wing DAE will develop their AE Annual Activity Report and submit it to the Wing Commander, who approves and submits it online for the Region Commander.

Region DCS/AE

The DCS/AE will review all wing AE Annual Activity Reports submitted to the Region Commander, developing a region summary of activities for the Region Commander.

AE activities can play a significant role in recruitment of cadets, AEMs and senior members.

Squadron, group and wing AEOs have had a significant impact on CAP in the past few years. They have participated in the development of various AE projects and AE STEM Kits in the recent past:

- Weather Station and AE STEM Kit
- Advanced Rocketry
- Model Aircraft- AMA (MARC) and AE STEM Kit
- CAP-TERS
- Introduction to Robotics
- AEX for Advanced Math

Did your unit develop a project, activity or curriculum that would benefit other CAP units? Did your unit use an AE STEM kit or AEX program to recruit members and/or teachers? Without your completing the AE Annual Activity Report, we may not have discovered the impact your program can have on Civil Air Patrol.

UNIT AE ACTIVITY REPORT CHECKLIST:

This checklist is designed to assist the Unit AEO to finish the on-line eServices Unit Annual Activity Report on time, and with a better understanding of the requested information. If you have any questions about content, requesting reports on-line or need other assistance, please contact your Group AEO.

AE ANNUAL ACTIVITY REPORT

Pre-report:

Verify with your unit commander that you have the duty assignment as the unit primary AEO is correctly displayed in eServices. Select the ending fiscal year as the reporting period:

- o For an AE Annual Activity Report submitted 10-30-2022 the correct fiscal year is 2023
- o For an AE Annual Activity Report submitted 10-30-2023 the correct fiscal year is 2024

Unit AEO verifies that the unit AE Plan of Action has been completed online and approved by the Unit Commander.



Deadlines for Report Submissions

o Wings with Groups AE Activity Report

Squadron to Group	30 Oct
Group to Wing	30 Nov
Wing to Region	31 Dec
Region to NHQ	28 Feb

o Wings without Groups

Squadron to Wing	30 Oct
Wing to Region	31 Dec
Region to NHQ	28 Feb

AEO has gathered Reports from eServices:

- o Reports may include: (Group-Wing-Region AEO may assist in gathering reports)
 - AEM Listing and AEM Expiration Date Reports
 - Yeager AE Total Report
 - AEX Application / Completion Unit & Schools
 - Duty Position – Aerospace Education
 - Commanders Dashboard (AE portion)
- o <https://www.capnhq.gov/CAP.MemberReports.Web/Modules/MemberReports.aspx?ae=1>
- o <https://www.capnhq.gov/preview/eServices.aspx?area=Command>

UNIT ACTIVITY REPORT

Report located: https://www.capnhq.gov/preview/eServices.aspx?area=Aerospace_Education
(Attachments 4 and 5)

Unit AEO specifically answers question 1 verifies answers to questions 2 through 7 are correct.

Aerospace Education Activity Report

This is the Aerospace Education Activity report that is completed by 30 October

Response Submitted by: _____ Year: _____
Date Submitted: _____ by: _____ Last Updated: _____

Aerospace Education Officer (AEO)

The squadron commander appointed a primary AEO. Yes

The squadron commander is presently serving as the unit's AEO. No

The AEO met with the Squadron Commander and identified AE activities to be accomplished during the fiscal year and discussed ideas. The meeting was documented with notes or audio/video recording.

Did AEO attend either a Region or National AEO School? No

Did AEO conduct a seminar or make a presentation at the wing conference? Aerospace Education (AE) Specialty Track	No
The squadron's primary AEO is enrolled in the AE Specialty Track.	Yes
If not enrolled, is it because the primary AEO has the master rating.	No
If no, what is the highest rating the primary AEO has achieved? AE Excellence Award Program (AEX)	NONE
The squadron enrolled in the AEX program.	No
How many participated in the AEX program?	0
The squadron completed the AEX program. Model Rocketry Program	No
The squadron completed the Model Rocketry program.	No
If yes, how many rocket badges were awarded? CAP STEM Kit Program	0
The squadron ordered and received a STEM Kit.	Yes
The squadron completed the STEM Kit evaluation.	Yes
How many members participated in the STEM Kit program? Yeager Award	17
The primary squadron AEO earned the Yeager Award.	Yes
Additional senior members completed the Yeager Award.	Yes
Percentage of total senior members who have earned the Yeager Award. AE Award Nominations	83.33
The squadron submitted AE award nominations.	No
If yes, how many nominations were submitted.	None
List nominees and awards for which they were submitted Aerospace Education Member (AEM)	NA
A squadron member recruited an AEM.	No
List the names of AEMs recruited this fiscal year.	NA
Did AEO assist AEM in receiving a TOP Flight?	No
A squadron member or members assisted or visited schools. (Some examples of potential program involvement)	None
A squadron member shared information about the AE mission and products with a community organization.	No
List the community organizations you assisted: (ie. Boy/Girl Scouts, 4-H, Rotary, NA or Lions Clubs)	Above and Beyond
The squadron performed AE activities above and beyond the listed items. Upload a document describing these additional activities (or a blank document if none).	

GROUP OR WING AE

Group and Wing AEO verifies the Above and Beyond section of their report reflects the information provided by the Units and the Above and Beyond activities completed at the Group and Wing level.

SUBMIT REPORT

Unit AEO notifies the Unit Commander when the report is complete and ready to be submitted to the next command level.

Unit Commander approves the report clicks 'submit' and advises the Group and/or Wing Commander.

Group AEO and Wing DAE review each Unit report, add information to their Group/Wing reports and notify the Group/Wing Commander the report is ready to be submitted to Region Commander.

- Group Commander submits to Wing, Wing Commander submits to Region.
- Region Commander uses the AE Activity Report to determine the recipient of the Aerospace Education Mission Award. See CAPR 50-1, Paragraph 9.1.5.



CHAPTER 10

INSPECTIONS



Introduction

Many in CAP harbor a certain level of concern about inspections. That should not be necessary. If you are performing your AE assignment to the best of your ability and according to all the program guidelines available to you, you should come through your inspection with flying colors. Ask your commander and others in your squadron or wing if you have questions or concerns. Preparation for the inspection process is often a group effort.

The Subordinate Unit Inspection (SUI) is a review of a squadron's program management, mission accomplishment and regulatory compliance. A wing Compliance Inspection (CI) also looks closely at all expected components of a successful, mission-ready unit. Aerospace Education is a critical mission element at all levels of the CAP organization; so, your AE program will be inspected.

Your squadron will not be asked to answer questions about any portion of the CAP mission that is not applicable to its operation. Thus, a senior member squadron, with no cadet component, is not expected to answer questions about the cadet program. A squadron that is not currently assigned a CAP vehicle or airplane will not have questions about the equipment inspection.

The CAP regulation governing the inspection process is detailed in CAPR 20-3. A tabulated form of the information on inspections and procedures for clearing discrepancies can be found in Attachment 1 of CAPR 50-1, Aerospace Education Mission. It is highly recommended that everyone in your unit who will be involved in an inspection read these regulations and be thoroughly familiar with the contents. CAPR 20-3 is relatively short, but it clearly explains exactly what to expect during an actual inspection. It is also a resource to help guide you through the process of clearing any discrepancies. Many of you may also find helpful the [Inspection Knowledge Base \(IKB\)](#) on the [Civil Air Patrol Inspector General Home Page](#).

If you have been involved in an inspection in the past, whether a Subordinate Unit Inspection (SUI), at the squadron level, or a Compliance Inspection (CI) at the wing level, the manner in which an inspection is conducted may have changed slightly. The requirement and expectation that programs in your unit will comply with the regulations remain the same.

Which CAP units are inspected? CAPR 20-3 discusses inspections of squadrons and wings. Groups have not been inspected in the past, but if that is implemented, the experience would be much like an SUI. Patron and Legislative units are currently excluded from the inspection requirement. Regions are excluded because their responsibilities and operational procedures differ from that of other CAP units.

Who conducts the inspection? For the SUI, your unit will be inspected by other CAP members from your wing, but not from your squadron. The wing needs to provide a sufficient number of Inspector General assistants and/or Inspection Augmentees (requires a special training class to qualify) to conduct the required SUI program inspections. SUI inspection teams must have at least two members. All unit staff officers should be present or readily available for the unit SUI. For wing compliance inspections, a team of CAPIG and CAP-USAFIG personnel conduct a joint inspection of each wing, but in all other aspects the same basic rules apply.

When will your inspection occur? Squadron SUIs are expected to occur every 24 months. Most SUIs can be concluded in one day, or even in an afternoon or evening. The unit commander should discuss details of the schedule with the wing IG. In the year between SUI visits, a squadron conducts a self-inspection. The questions for a self-inspection remain the same as for an SUI. If a unit exceeds 27 months between SUI visits, the wing commander must suspend the squadron's activities until the on-site SUI can be completed. The wing IG, with the concurrence of the wing commander, will develop an SUI

inspection plan for all the squadrons each year. The wing IG or wing commander will notify the squadron commanders of the inspection schedule.

Wing CIs are conducted approximately every 48 months. This is simply a pragmatic way to deal with 52 CAP wings. By spacing the schedule over 48 months, it allows team members to have some catch-up time between inspections and still provides that the 52 wings are inspected every four years in a predictable manner.

The IG schedule at either squadron or wing level will avoid holidays and try not to schedule an inspection at a time that conflicts with a major local event in which many CAP personnel might be involved in a community activity. If the schedule creates a conflict, the squadron commander should discuss a possible schedule change with the wing commander and wing IG. Likewise, the wing commander should discuss the CI schedule with the national IG, so that any needed adjustment may be made.

What questions will be asked during the inspection? Many programs in the CAP mission now have far fewer questions than was the case several years ago. The five AE questions can now largely be answered based on electronic submission of the squadron's AE Annual Activity Report and the wing's AE Plan of Action (POA) and AE Annual Activity Report. This is in part why the AE inspection interview may be conducted by telephone. Having the data from those reports means AE information is easily accessible for both the inspector and the AEO or DAE. Refer to Chapters 8 and 9 of this pamphlet and the CAP web pages for details on the completion of these reports.

The SUI questions are as follows:

- Did the AEO and commander discuss the next year's AE activities?
- Does the unit have an internal Aerospace Education program?
- Does the unit have an external Aerospace Education program?
- Did the unit complete an AE Annual Activity Report?
- Are the AEO and assistant AEOs properly enrolled in the AE specialty track, and progressing toward or have achieved the Master rating?

The wing CI questions are as follows:

- Has the wing submitted a Plan of Action?
- Is there an external AE program in place?
- Was an AE Annual Activity Report submitted?
- Is there an internal AE program?
- Are the DAE and assistant DAEs enrolled in the AE specialty track, or have they achieved the Master rating?

The submission of supporting materials, worksheets, questions asked, and evaluation procedures remain standard for all units. Most of this information can be submitted before the inspection team arrives on-site. An inspector cannot ask additional off-topic questions other than those prepared for AE, but it is not unusual for an inspector to ask additional clarifying questions during your inspection discussion.

If the inspector needs to see paper or electronic copies of supporting information for the AE reports, they will request that the AEO (or DAE) be on-site at the inspection with their AE notebook or any other supporting paperwork. Whether your inspection is a phone conversation or a face-to-face interview, this is your opportunity to shine. Has your unit exceeded the basic program requirements? There is space on the electronic form where "over and above" expectations for AE activities can and should be noted.

Don't be afraid to "sell" your successes in AE. Your enthusiasm for sharing knowledge about aerospace education topics has helped you build an excellent AE program. Now, let it show!

What grades are earned during an inspection? The overall grade for the squadron or wing is derived by electronically compiling all the individual tab grades. An effective unit is one in which all operations meet mission critical requirements. An ineffective unit does not meet these criteria. Individual Tab grades, of which AE is one, may be identified as highly effective – exceeding mission critical requirements; effective – meets mission critical requirements; or ineffective – failing to meet mission requirements.

The grading system has changed over the duration of the inspection program. Several different grading systems have been introduced at various times. There has always been a struggle to maintain objectivity in grading AE program accomplishment. The system now in place is very simple and gets away from subjectivity as much as possible. The digital grade calculator has helped with this process. Grade determination is based on an objective database. The data or information that is gathered during the inspection meeting is entered into a set electronic format, and the grade is developed by comparing the facts from AE program being inspected with standard baseline expectations for effective AE programs.

Where can I find more information and supporting materials for an inspection? Regulation CAPR 20-3 is the most comprehensive guideline for the inspection process, along with CAPR 50-1. The IG inspection knowledge base, mentioned above, will be helpful both before and after the inspection should there be a need to clear any discrepancies. SUI and CI worksheets can be downloaded by going to the Inspector General Home Page and navigating to Compliance Inspection Information and SUI Information. Use the worksheets on those pages to help you prepare for the inspection.

Background: The compliance inspection program was introduced to assure that CAP resources, funds, and personnel are being effectively applied and that CAP programs/missions are efficiently administered. It had come to the attention of leaders in CAP and the U.S. Air Force that there were some irregularities and lack of proper accountability in the management of both funds and equipment within CAP, so oversight regulations needed to be enacted.

The inspection program was developed because the U. S. Air Force wanted complete accountability for how their funding was being used by CAP. CAP leaders needed to be able to show how that funding was contributing to a successful CAP mission. Compliance inspections and SUIs answered the needs of both organizations. Inspections also bring CAP functions into better alignment with U.S. Air Force standard procedures. The inspection program remains a command program and commanders at each level are responsible for its success. Wing inspections are conducted by CAP-USAF and CAP Inspector

General (IG) personnel in support of the wing commander. Squadron inspections are conducted by wing personnel.

The inspection program has been gradually evolving since its beginning. The make-up of the inspection teams, originally six members, three from USAF and three from CAP, plus trainees, has been reduced due to fiscal limitations. Various grading systems have been introduced and later improved. More information supporting the inspection is now derived from information submitted electronically prior to the arrival of the team. The time the inspection team is "on-site" has been substantially reduced, made possible, in part, due to the increased application of electronic data sources. Most interviews are based on previously submitted IT data. That means there is a somewhat reduced requirement for "eyes on, hands on" with paper documents at the time of the inspection. The inspection program now in place is the result of several years of experience working through the process.

COMPLIANCE ELEMENTS

Checklist and Tab	Compliance Questions	How to Verify Compliance	Discrepancy Write-Up	How to Clear Discrepancy
SUI 01	Did the AEO and the commander discuss future AE activities for the upcoming year?	AEO will provide notes or audio/video record of discussion between AEO and CC about future AE activities.	(Discrepancy): [xx] (A1 Question 1) Unit failed to provide documentation of discussion of future AE activities, IAW CAPR 50-1, Attachment 4.	Attach a copy of the documentation to the discrepancy in the Discrepancy Tracking System (DTS).
SUI 02	Does the unit have an Internal Aerospace Education program?	Unit will submit examples of AE events (presentations, workshops, other activities, etc.) agendas which will include date and topic presented, activity done, etc.	(Discrepancy): [xx] (A1 Question 2) Unit failed to have internal Aerospace Education efforts, IAW CAPR 50-1 para 5.	Attach a copy of examples to promote internal AE to the discrepancy in the Discrepancy Tracking System (DTS).
SUI 03	Does the unit have an external Aerospace Education program?	Unit will submit examples of cooperative events with either schools or community organizations, such as civic or youth groups, which resulted in the promotion of Aerospace Education. NOTE: If unable to provide documentation then provide documentation of attempts to establish cooperative events to promote Aerospace Education.	(Discrepancy): [xx] (A1 Question 3) Unit failed to have external Aerospace Education efforts, IAW CAPR 50-1 para 6.	Reference CAPP 50-1 for suggestions. Accomplish cooperative events with either schools or community organizations which result in the promotion of Aerospace Education. Attach a copy of documentation of the activities with the school or community organization which promoted Aerospace Education to the discrepancy in the DTS. Attach a plan of action, approved by Unit/CC, to prevent reoccurrence to the discrepancy in the DTS.
SUI 04	Did the unit complete an AE Annual Activity Report IAW CAP regulations?	Unit will submit a copy of the AE Annual Activity Report.	(Discrepancy): [xx] (A1 Question 4) Unit failed to complete an AE Annual Activity Report, IAW CAPR 50-1 para 11.	Complete an AE Annual Activity Report for the missing year. Attach a copy of the unit AE Annual Activity Report to the discrepancy in the DTS.
SUI 05	Are AEOs assigned to the duty position enrolled in the AE specialty track, unless they have already achieved the AE master rating?	Unit will provide a list of AEOs enrolled in the AE specialty track from Member Reports.	Discrepancy: [xx] (A1 Question 5) Unit failed to enroll AEOs in the AE specialty track, IAW CAPR 50-1, para 7.2.	Unit will attach a list of enrollees to the discrepancy in the Discrepancy Tracking System (DTS).

Checklist and Tab	Compliance Questions	How to Verify Compliance	Discrepancy Write-Up	How to Clear Discrepancy
CI 01	Has the wing completed an annual AE Plan of Action (AE POA)?	Wing will submit a copy of the most recent AE POA. Compliance is determined by reviewing materials submitted by the wing.	(Discrepancy): [xx] (A1 Question 1) Wing failed to consolidate an annual AE POA IAW CAPR 50-1 para 10.	Attach a copy of the AE POA to the discrepancy in the Discrepancy Tracking System (DTS).
CI 02	Does the wing advance the CAP external AE program?	Wing will submit examples of cooperative events with either schools and/or community organizations (Explorer/Boy Scouts/Brownie/Girl Scouts, 4-H, etc.) which resulted in the promotion of Aerospace Education for the last two years. Note: If unable to provide examples, then provide documentation of attempts to establish cooperative events to promote Aerospace Education.	(Discrepancy): [xx] (A1 Question 2) Wing Failed to advance the CAP external AE program IAW CAPR 50-1, para 6.	Attach a copy of examples to promote external AE to the discrepancy in the Discrepancy Tracking System (DTS).
CI 03	Did the wing complete an AE Annual Activity Report?	Wing will submit copies of the last two AE Annual Activity Reports that were forwarded to CAP/AE.	(Discrepancy): [xx] (A1 Question 3) Wing failed to complete an annual AE Annual Activity Report IAW CAPR 50-1 para 11. List missing year(s).	Attach a list of activities to the discrepancy in the Discrepancy Tracking System (DTS).
CI 04	Does the wing advance the CAP internal AE program?	Wing will provide a list of AE activities for the last two years which resulted in the promotion of Aerospace Education within CAP.	Discrepancy: [xx] (A1 Question 4) Wing failed to advance the CAP internal AE program, IAW CAPR 50-1, para 5.	Attach a list of activities to the discrepancy in the Discrepancy Tracking System (DTS).
CI 05	Are AEOs assigned to the duty position enrolled in the AE specialty track, unless they have already achieved the AE master rating?	Wing will provide a list of AEOs enrolled in the AE specialty track from Member Reports.	Discrepancy: [xx] (A1 Question 5) Wing failed to enroll AEOs in the AE specialty track, IAW CAPR 50-1, para 7.2.	Wing will attach a list of enrollees to the discrepancy in the Discrepancy Tracking System (DTS).