Aerospace Education Officer
Handbook

CAPP 50-1

August 2018

TABLE OF CONTENTS

Introduction 3
- Terminology 5
- Definitions 5
- Acronyms 6

Chapter 1 – Duty Assignment
- Appointment 8
- Required Activities 9
- How Do I Do This Job? 10

Chapter 2 – Responsibilities, Regulations, and Resources
- Introduction 14
- AE Specialty Track Ratings 15
- AE Duties 16
- Professional Development 18

Chapter 3 – Aerospace Education — Products and Programs
- Curriculum Products 19
- AE Programs 21
- Aerospace Connections in Education (ACE) 21
- Aerospace Excellence Award Program (AEX) 21
- AFA CyberPatriot 21
- AFA StellarXplorer Program 23
- Model Rocketry and Advanced Rocketry 23
- AE Science, Technology, Engineering and Math (STEM) Kit Program 24
- Systems Tool Kit (STK) 25
- Teacher Orientation Program (TOP) Flights 25

Chapter 4 – Aerospace Education Excellence (AEX) Program and Science, Technology, Engineering and Math (STEM) Kit Program
- AEX 27
- AE STEM Kit Program 29

Chapter 5 – Aerospace Education Members (AEMs), Aerospace Connections in Education (ACE) Program and Teacher Orientation Program (TOP) Flights
- Aerospace Education Members 33
- Aerospace Connections in Education (ACE) 35
- Teacher Orientation Program (TOP) Flights 36

Chapter 6 — AE Awards
- Earned AE Awards 38
  - Aerospace Excellence Award Program (AEX) 38
  -Brigadier General Charles E. "Chuck" Yeager Award 39
  -AE Badge 39
  -A. Scott Crossfield Award 40
  -Squadron AE Achievement Award 40
  -AE Mission Award 40
- Nominated AE Awards 41
  -Deadlines 41
  -Frank G. Brewer Memorial Aerospace 42
  -CAP AEO of the Year 43
  -CAP AE Teacher of the Year 44
  -AFA AE Cadet of the Year 45
- Other Nominated Awards 46
  -Distinguished Service Award 47
  -Exceptional Service Award 47
  -Meritorious Service Award 47
  -Commander's Commendation Award 47
  -CAP Achievement Award 47

Chapter 7 — Budgeting, Grants, and Donations
- Fundraising 49
- Donations 50
- Grants 50
- AFA/CAP Aerospace Grants 51

Chapter 8 – Aerospace Education Plan of Action (AEPOA) 52

Chapter 9 – Aerospace Education Activity Report 59

Chapter 10 – Aerospace Education Inspections 66

Appendix
- Attachment 1, CAPF 50-1 69
- Attachment 2, CAPF 50-2 71
- Attachment 3, CAPF 50-3 73
- Attachment 4, CAPF 50-4 75
- Attachment 5, CAPF 120 76
- Attachment 6, CAPF 164 78

Introduction

Aerospace Education Handbook for CAP Aerospace Education Officers

GENERAL

Thank you for volunteering to help Civil Air Patrol accomplish one of its vital missions, aerospace education. No special credentials are required or necessary for you to perform the Aerospace Education Officer's (AEO) duties. However, an interest in helping CAP members learn more about aviation, space, cyberspace, and STEM (science, technology, engineering and math), and a desire to promote those important topics, will go a long way in helping you accomplish your aerospace duties. CAP's aerospace education mission applies to cadet members, senior members, aerospace education members, and the general public. So, an understanding of CAP's aerospace and STEM programs, and a willingness to share your knowledge and experience are essential in CAP continuing to be a leader in aerospace education.

This handbook 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 any and all information you need to fulfill your obligations as an AE Officer. CAPR 50-1, CAPP 50-2, and this pamphlet.

CAPP 50-1, are your primary sources for pertinent information relating to CAP's Aerospace Education mission and programs. We hope that this publication will be a valuable resource for you. Additional information can also be found at CAP region and wing websites, as well as CAP's National AE website at 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 members, senior members, and the general public and inform our citizens about the importance of maintaining aerospace supremacy for America.

In 1948, CAP became the civilian volunteer auxiliary of the newly created United States Air Force and both organizations joined hands to promote aerospace education for the nation. The Cooperative Agreement and associated Statement of Objectives between CAP and USAF authorizes and encourages CAP to pursue the promotion of aerospace (aviation and space), cyberspace, and STEM education to its members and the general public, as well as the training necessary to educate and train AEOs to perform their assigned responsibilities.

In 1953, CAP turned to the American school system, primarily grades K-12, as the best means to educate the general public on aerospace education. Today, CAP provides educational products and programs to schools to enrich their standard academic subjects using an aerospace theme.

In 2008, the National Science Teachers Association endorsed aerospace education as an important component of pre K-12 science education programs. All of CAP's Aerospace Education educational materials meet national academic standards, as CAP's programs inspire teachers and students to explore aerospace and STEM subject areas, examine career opportunities, and appreciate the Air Force's role in maintaining aerospace supremacy to strengthen our nation's security.

MISSION

CAP's aerospace education mission provides aviation and space (aerospace) education and training to cadets, senior members, aerospace education members and the general public. CAP also educates its members and the general public on the important role aviation and space play and will continue to play in America's future. Additionally, CAP encourages our nation's youth to consider aerospace careers and promotes civil aviation to local communities. The U.S. Congress and the USAF bestowed this responsibility on CAP, and this mission is accomplished through implementation of aerospace education and STEM programs by CAP volunteers.

Terminology

Let's 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 give you a good working knowledge of many of the terms you will see and hear. This will also give you a reference to review from time to time.

DEFINITIONS

AE Activity Report – annual report documenting a unit's aerospace education activities during the year

AE Mission Awards – identifies the best aerospace wing in each region

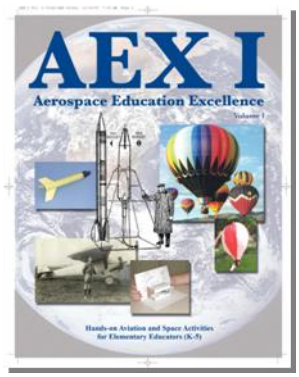
AE Plan of Action (AEPOA) – the yearly plan for conducting aerospace education in the unit

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

AEO of the Year Award – an award established to recognize and reward any CAP Aerospace Education Officer (AEO) who is dedicated to promoting and teaching aerospace

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 region locations

AEO Specialty Track – AE's Specialty Track with three levels; technician, senior, and master, into which AEOs are expected to move 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 – AE program for grades K-6 introducing students to academics, character development, and physical fitness using an aerospace theme

Aerospace Dimensions Modules – 6 aerospace 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, and spacecraft

Aerospace Education Member – a special membership category for formal and informal educators who support and promote CAP Aerospace Education in classrooms, museums, and youth organizations

Aerospace Education Officer – an assignment given to a person or persons who will be responsible for implementing the AE mission in any given unit of CAP. There are two types of AEOs: assistant and non-assistant (the leader). There are two areas of AEOs: internal (CAP cadet and adult/senior members in units) and external (CAP aerospace education members and the general public)

Aerospace: The Journey of Flight – 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

AFA AE Cadet of the Year Award – national AFA award recognizing a cadet for outstanding aerospace education contributions

ACRONYMS

AE	Aerospace Education
ACE	Aerospace Connections in Education
AEM	Aerospace Education Member
AEO	Aerospace Education Officer
AEX	Aerospace Education Excellence Award Program
AFA	Air 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)
POA	AE Plan of Action
SAV	Staff Assistance Visit
STEM	Science, Technology, Engineering & Math
STK	Systems Tool Kit
SUI	Subordinate Unit Inspection
TCO	Test Control Officer
TOP Flight	Teacher Orientation Program Flights
UAS	Unmanned Aerial System
UAV	Unmanned Aerial Vehicle

AFA/CAP Grant Program – awards $250 to CAP units and CAP teachers to promote AE

Advanced Rocketry Program – a continuation of the model rocketry program, advancing into phases IV and V, which include middle and high range rockets

Brewer Awards – annual recognition of contributions to the advancement of youth in aerospace activities; awarded in 4 categories: cadet; senior member; individual/organization; and lifetime achievement

Compliance Inspection – a team of professionals inspecting units' different programs to ensure units are complying with prescribed directives and are operating in a safe manner

Crossfield Award - awarded after CAP Senior member completes the master level of the AE Specialty Track

CyberPatriot – an AFA program where teams compete in a national cyber competition

Fiscal Year – period of time spanning from Oct. 1 – Sept. 30

Model Rocketry Program – AE's rocket program consisting 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

Point of Contact (PoC) -- Individuals who are responsible for events

Systems Tool Kit (STK) – satellite software that supports satellite systems and mission planning

Staff Assistance Visit (SAV) – provides assistance and training for the headquarters being visited and forms a good practice tool prior to an inspection

STEM Kit Program – a program designed to promote AE and STEM (Science, Technology, Engineering and Math) by providing STEM kits covering STEM-related topics for use by our members

Subordinate Unit Inspection (SUI) – conducted by region, wing or group headquarters on units subordinate to their headquarters

Teacher Orientation Program (TOP) Flights – AE program that offers teacher members an orientation ride in a CAP aircraft; it is sometimes accompanied by a workshop

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

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

1. Duty Assignment

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.

APPOINTMENT

The applicable regulations regarding appointments and duty assignments are CAPR 50-1 (AE regulation); CAPR 20-1(I); CAPR 35-1, paragraph 1-3, a,b,c (speaks to appointment process). Other regulations may prove to be helpful, but these are the most likely references that apply to the AEO appointment process. The AE Specialty Track is described in CAPP 50-2.

One of the first things you will need to do is assure that you are officially appointed in writing to the position. This step can be overlooked, or not properly documented, and should not be, because your time-in-service (six months - Technician and Senior, or one year - Master) begins on the date of appointment. It is always smart for a CAP member to follow their individual records and assignments to make sure everything is correct and up to date. Check member records in eServices. Though much improved and more reliable, the records system is still occasionally flawed.

There are three primary ways to accomplish the formal assignment in writing. Commanders not wishing to use the on line application (or not having electronic resources available) should submit a CAPF 2a regarding personnel actions to National HQ. (This can be done by fax, e-mail or, if necessary, by mail.) The CAPF 2a is a multi-use form and also allows documentation of transfer of pertinent records, assets etc. (notebooks; stem kits) at the time of the appointment. A copy of the completed CAPF 2a should be placed in the member's personnel file.

Many Commanders prefer a personnel authorization (PA) as a means of simultaneously appointing all the duty assignments in a squadron, group or wing. A PA is essentially a letter 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 is also often posted on a bulletin board at the unit's meeting space.

With the PA appointment method, the appointee should make sure the assignment is entered into the official files maintained at National HQ. The unit personnel officer should ensure that each track assignment is forwarded to National eServices to be included in the member's personnel records.

The third method is for the Commander and personnel officer to enter the individual's AE specialty track assignment directly into e-services. The advantage with this is that each member is assured that their 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.

Once engaged on the track, you will be expected to accomplish the Technician rating, and then proceed through the Senior and Master ratings.

REQUIRED ACTIVITIES FOR NEW MEMBERS

While you are getting settled in the AE Specialty Track, you will be taking Level I training which is required of all senior members. Level I training is described in detail in CAPR 50-17, Chapter 3. Your unit leaders will guide you through this process.

Level I training 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 over a month; or completed all in one day, probably on a weekend. If none of these options work for a new member (travel distance; work schedule; weekend conflicts, etc.), the training can be taken on-line from CAP eServices, with the concurrence of the unit Commander and the Wing Commander. There are four basic components to the Level I requirement.

Cadet Protection Program Training (CPPT) now has an initial part which serves as an introduction to the concept of protecting the cadet members from any physically abusive, bullying, hazing treatment, 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

on-line through eServices. Other classes such as the FAA Wings program can be applied for this credit. Check with your unit Director of Professional Development.

Security awareness (OPSEC) requires some familiarization. Due to the close relationship of CAP with the Air Force, there are certain functions carried out by CAP which should not be shared with the general public and 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 what and how they share information regarding certain operations.

Equal Opportunity Training 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 THIS JOB?

This is one of the most frequently asked questions especially by newer members. The following organizational path may be helpful to you. Explore what CAP has to offer, inventory, plan, implement, evaluate, and report to the unit Commander.

Explore*:* First, you must know the AE mission. Beyond the mission, you explore CAP regulations to familiarize yourself with the duties of an AEO. CAP has a wealth of materials to support performance in the AE specialty track. It will help you immensely to be familiar with the AEX booklets, STEM kits, *Aerospace Dimensions* modules used by the cadets, *Aerospace: Journey of Flight* text used by senior members, and the many other miscellaneous AE materials produced by the National AE program. Summarizing the regulation generically, the following delineates AEO responsibilities in cadet and senior squadrons.

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

- Monitor the aerospace education portion of the CAP program
- Generate 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:

- Monitor the AE program within the unit
- Assure that Yeager testing is accomplished, as needed

As you continue this exploration you will examine CAP publications for assistance. The primary publications are:

Aerospace Education	
CAPR 50-1	Civil Air Patrol Aerospace Education Mission
CAPP 50-1	Aerospace Education Officers' Handbook
CAPP 50-2	AE Specialty Track Guide

Programmatic	
CAPR 60-1	Cadet Program Management
CAPP 50-17	CAP Senior Membership Professional Development Program

Within the cadet program, the AE program is focused 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 advancement through the ranks and for their overall CAP achievement. If a cadet is in a Color Guard activity, a portion of that competition is an AE quiz. A strong foundation in AE and STEM gained through CAP activities will also generally help a cadet with 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 so that they are more knowledgeable regarding current events and everyday aviation observations within the community and world (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 answer their questions. The mark of AE success for a senior member is passing the Yeager exam, which is supported by the *Aerospace: Journey of Flight* text.

For the outreach program, AEOs need to make contact with teachers in their local community and visit schools. AEOs should share aerospace information and materials with the teachers by making presentations or conducting hands-on activities. Recruit teachers to be AEMs. They get access to all the programmatic materials described in Tabs 3 - 5 in this pamphlet. Arrange visits to community service clubs (Rotary, Lions, Optimists, etc.). These groups are often searching for speakers.

Inventory: You now need to conduct an AE inventory in the unit. Look at the unit's AE previous activities. AE activities are those activities through which unit members gain more knowledge about aviation and space. The unit's training agenda may give you an idea what has been scheduled in the past and what may be planned for the future. Ask unit members what they remember and most enjoyed in the past.

In conducting an inventory, you 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 seniors members have passed the examination required to receive this award? How many have not?

Another aspect of the inventory pertains to the AE 50-2 Specialty Track. 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 to a good AE program; you will need support and assistance.

The inventory should also include what AE materials are available in the unit and what needs to be obtained in order to accomplish your duties. You can order what you need through eServices.

Plan: With 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 an AE Plan of Action (AE POA). Chapter 8 has a discussion of the AE POA process and a sample for your review. Be sure to notice who, what, when and by what standard each activity was accomplished. Remember that the unit cannot do everything in one year, so work to develop a manageable AE POA. The AE topics you might choose are:

- Earning the Yeager Award
- Achieving a rating within the AE Specialty Track
- Submitting the Annual Unit AE Report (required)
- Participating in the AE Excellence (AEX) Award Program
- Recruiting Aerospace Education Members (AEMs)
- Assisting a school to participate in the School AEX Program
- Attending an AE session at the annual wing conference
- Submitting a nomination for an AE award, (See Chapter 6)
- Posting AE items on the unit's bulletin board or web site

As you work through this process, include your unit commander. If possible, sit down for a discussion, but at least provide him/her with written notes or e-mail documenting your plans and progress.

Implement: The implementation step takes coordination between you, those involved in each activity, and, of course, the commander. You will need to assure that adequate supplies are on hand if you are planning a hands-on exercise. You will need to assure transportation is available for a field trip experience. When and where will AE activities take place? While this step is presented in few words, this activity consumes the most time.

Evaluate: With each activity you compare the results with the AE topics and standards noted in the AE POA. Were the activities accomplished successfully? What improvement is needed in the future? What might you do differently the next time the activities are attempted? Look at the AE POA, and let it be your guideline. 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?

Report: The unit commander needs to know the result of each AE activity and, also, what was achieved within the year. Providing the commander with regular updates through informal communication is important. The AE POA will figure in these discussions. The Squadron AE Activity Report needs to be completed (See Chapter 9) and provided to the appropriate headquarters. Don't forget that working with the unit Public Affairs Officer can achieve publicity for your activities.

As an AEO, you are promoting one of CAP's primary missions, aerospace education. At one end of the spectrum, you are impacting students and cadets, and introducing them to wonderful concepts they might not get anywhere else. You are increasing their knowledge of science and math principles that will help them in school and in life. At the other end of the spectrum, you are helping shape the future of our country. After using CAP aerospace/STEM education products, many of our cadets and students in classrooms across America, will end up in aerospace careers. And, worth noting, these aerospace careers are vital to our country maintaining its economic prosperity and safeguarding our freedoms. So, even though you are about to have a great time promoting aerospace, remember, you are making a tremendous difference to our organization and our country.

2. AE Specialty Track and Professional Development

INTRODUCTION

In Chapter One, we discussed the AEO and specialty track associated with the AEO's position. Since you are reading this pamphlet the assumption is that you have been assigned to a position in the squadron or other unit as its Aerospace Education Officer (AEO) or as Assistant AEO. You have one of the most fun and interesting jobs within CAP! This duty assignment may be daunting to you, but this pamphlet will give you the guidance you need to conduct your job successfully. You will learn a lot and share that knowledge with Senior Members and/or Cadets in your unit. The position of AEO or Assistant AEO means you are in the AE Specialty Track. The specialty track focuses upon the tasks of the AEO and will be explained in this pamphlet. Within CAP there are about 25 specialty tracks covering such jobs as Professional Development Officer (PDO), Historian, Emergency Services Officer and Cadet Programs Officer. The AE Specialty Track is only one of many being implemented throughout CAP.

A word of advice – make sure your squadron commander or PDO has entered you into the AE Specialty Track in eServices. Once that is done, the service time clock in AE starts on that day. If you are the lead AEO, you will want to recruit an Assistant AEO to share the AE tasks. You both can advance in the AE Specialty Track together. Each 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 positions? When you examine the AE Specialty Track Guide, CAPP 50-2, the three highlighted words will be examined in turn.

A specialty track has three ratings – beginning with the technician rating, continuing to the senior rating, and culminating with the master rating. With each rating, more is expected of you as an AEO.

The AE Specialty Track is timed as follows: from the start you will be working on AE technician tasks in CAPP 50-2 which can be completed in six months; during the next six months you will be working on the senior tasks; and during the next twelve months you will be accomplishing the master tasks.

Four AE references will be guiding you throughout this process: CAPR 50-1 Aerospace Education; CAPP 50-2 Aerospace Education Specialty Track Guide; this pamphlet, CAPP 50-1 Aerospace Education Officer Handbook; and CAP's AE website .

AE SPECIALTY TRACK RATINGS

As you review CAPP 50-2 AE Specialty Track Study Guide, you first note what is expected of an AEO at the technician level – review those expectations and continue on to the knowledge requirements. A detailed reading of this pamphlet – Aerospace Education Officer Handbook – 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 quiz 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. A wealth of AE information will be found in the AE website, referring to both internal and external aspects of the AE program. You should become familiar with the AE website.

Further into CAPP 50-2, you will find the technician performance requirement – to construct an AE Notebook or, preferably, a digital notebook on the squadron's computer. Notice the 10 topics areas of the notebook. The online knowledge quiz is divided into the same topical areas. One or more questions per topical area will be asked. The quiz is open book. There is no time limit on the quiz.

In summary, what is required for the AE Specialty Track technician rating?

- **Gain AE knowledge from all 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 and master ratings? 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.**

For the master rating, it is more of the same:

- **Gain more knowledge and pass the online AE master rating specialty track knowledge quiz.**
- **Perform the required AE master tasks.**
- **Serve in an AEO position for 12 months.**

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

These duties and responsibilities are listed in CAPR 20-1(I) Organization of CAP and in Attachment 4 of CAPR 50-1 Aerospace Education. How you accomplish these duties is up to you with assistance of your unit commander and/or your unit's PDO, but these are the important responsibilities for these CAP aerospace positions that will help you fulfill your AE mission. As you review this handbook, all of the AE programs and products will be discussed; and this should give you ideas on how to accomplish your present or future AEO duties.

Squadron/Group AEO:

- Responsible for all AE programs in the unit (cadet and senior if applicable)
- Communicates and coordinates with the commander to develop unit AE goals and objectives and annual budget
- Reports periodically to unit commander and group AEO, or wing DAE on AE program
- Selects, trains and supervises AE assistants to help perform AE responsibilities
- Working 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
- Encourages and helps cadets to complete AE requirements
- Promotes the Teacher Orientation Program (TOP) Flights; working with DAE as Point of Contact (PoC)
- Has completed or working on completion of the Yeager test
- Administers and evaluates the Yeager test for senior members. (Test Control Officer can also administer the test.)
- Applies for AFA/CAP unit AE grants
- Develops the annual squadron AE Plan of Action
- Completes the AE Activity Report
- Files reports as required by regulations
- Maintains an AE Notebook; paper or digital

Wing DAE (Director of Aerospace Education):

- Helps recruit flight, squadron, and group AEOs
- Trains and assists squadron and group AEOs
- Appoints an internal and external AE staff
- Is working toward the next higher rating level 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
- Conducts and supports AE's outreach programs
- Creates an AE page on wing's website
- Has completed or is working on completion of the Yeager test

- Reports to the DCS/AE periodically on wing aerospace activities
- Serves as point of contact for the Teacher Orientation Program (TOP) Flights
- Ensures nominations are written for CAP's AE awards program by annual deadlines
- Forwards award nominations to DCS/AE
- Ensures applications are made for AE grants
- Submits annual AE budget to wing commander
- Develops and submits draft of annual AE Plan of Action to DCS/AE for review
- Submits final AE Plan of Action, signed by wing commander, to DCS/AE
- Reports to the wing commander periodically on progress of wing AE Plan of Action
- Provides end-of-year AE Activity Report to the wing commander

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

- Assists each wing DAE
- Appoints an 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
- Assists region cadet competition team preparing for National Cadet Competition
- Helps select the region AE awards
- Submits annual AE budget
- Develops a region AE Plan of Action in coordination with the region commander (not mandatory, but suggested)
- Reports to the region commander periodically the progress of the wing AE Plans of Action and AE Activity Reports
- Reports to the region commander those wings submitting AE Plans of Action and AE Activity Reports

These duties and responsibilities are also listed in CAPR 20-1(I) and here in CAPP 50-1. How you accomplish these duties is up to you, but these are the important responsibilities for these CAP aerospace positions that will help you fulfill your AE mission. As you review this handbook, all of the AE programs and projects will be discussed, and this should give you ideas on how to accomplish your duties.

So, where do you start? A good place to start would be with the duties and responsibilities incumbent on you as an AEO. Duties and responsibilities that are expected and are routinely accomplished by AEOs are listed above. 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 assistants not listed on this chart. These additional assistants help the AEOs perform 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. An additional note: Commanders at every level should consider finding AE staff officers who: 1) display a strong interest in and enthusiasm for aerospace education; 2) show initiative and imagination in promoting aerospace education; 3) possess a working knowledge of the educational community; and 4) demonstrate the ability to work with people and recruit others to assist in promoting aerospace education. Having listed these characteristics, 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 to promoting and accomplishing the aerospace education mission.

Here are the authorized 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 two – one for cadets and one for seniors

Professional Development

To accomplish its mission, CAP requires an informed, active senior membership trained in leadership, management, and functional tasks. The CAP Senior Member Professional Development Program prepares members to serve their units, their communities, and their nation. CAPR 50-17, CAP Senior Member Professional Development Program, discusses this topic. This regulation summarizes the requirements for senior members' professional development. Notice that completion of all AE ratings anchors the program. With CAP professional development courses, leadership and 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 Professional Development Officer (PDO). Chart your course.

3. Aerospace Education Products and Programs

This chapter discusses the aerospace products and programs that you should be aware of, familiar with, and using in your unit's AE program to help you accomplish the AE mission. As you know, the AE mission is to promote aerospace (aviation and space), cyberspace, and STEM to our members and to the general public. Our members include both cadets and adult members. We are interested in all of our members learning more about these topics and what they mean to the organization, the United States Air Force, and nation. The other part of the AE mission is the general public, which represents our outreach. When promoting AE, we should focus on schools, teachers, museums, and like-minded youth organizations. Since CAP AE has both internal and external missions, we have found, over the years, that AE is best accomplished by promoting our products and programs to both members and prospective members. The following is a description of the wide array of products and programs available to you to help you better conduct your job as the AEO.

CURRICULUM PRODUCTS

CAP AE has over 40 curriculum products in our inventory to share with our members. We have products for all ages, pre-K through 12 and beyond, and in a wide variety of aerospace and STEM areas. When talking to schools, principals or teachers, AEOs should tell educators that our products meet national standards and easily can 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 doing an activity. Involving students in hands-on activities reinforces the learning and enhances the experience for the cadet or student.

CAP AE has more than 500 hands-on aerospace and STEM educational activities from which to choose, which provides for relevance and real-life applicability of the activities/lessons. And, of course,

there are many other wonderful activities available through other organizations which we try to promote on our AE Resources webpage. Feel free to use whatever works best for you and your cadets to further promote AE and STEM, but you should be familiar with all the CAP products that are available to you.

Our products have proven to be effective in both informal educational settings, like our squadrons and other youth organizations, and formal educational settings, like America's classrooms. Our engaging and interactive activities are a big reason for that.

A complete listing of all of CAP's AE products can be found on the AE website Educational Products page. Two of these AE products apply specifically to the Cadet Programs rank progression, and they are described below.

When cadets join CAP, they receive their Phase I packet, which includes *Aerospace Dimensions*. This product is a six-module grouping that covers an introduction to flight; aircraft systems and airports; air environment; rockets; space environment; and spacecraft. This is the cadet's introduction into AE in CAP. In order to progress in rank, they must pass tests on the different *Aerospace Dimensions* modules.

There are plenty of AE products that introduce cadets to various AE and STEM subjects; however, in their first two phases of Cadet Programs, only *Aerospace Dimensions* is tied to cadet promotions. Many of the other AE products will broaden their interest and understanding of aerospace and STEM education.

When cadets become officers in the cadet programs, they use *Aerospace: The Journey of Flight* textbook for their advancement in rank. *The Journey* contains a comprehensive look at aviation history through the years and into the space program up to today.

Aerospace Dimensions and *The Journey of Flight* are only two of the over 40 curricula CAP products available to CAP members to help promote AE and accomplish our AE mission. AEOs at all levels should become familiar with all of the AE products.

CAP's AE mission, as noted before, is divided into two parts; internal and external. The internal program supports our members in uniform, both cadets and adult members. Our Aerospace Education Members (AEMs) are not a part of the internal program but assist us in performing our external mission of reaching out to our communities and schools to promote aerospace and STEM education. Our external mission enables us to connect with formal educators and educational institutions, as well as museums, youth organizations and other informal educational groups and is vitally important to reaching students across the nation.

AE PROGRAMS

Because there is such an overlap between programs that apply to both our internal and external activities, we are simply listing our programs alphabetically and discussing them within their sections. Due to the outline of this pamphlet, some of these programs will be discussed in more detail later in the pamphlet. It is a good idea to be familiar with all of these programs and use them accordingly. They certainly will help you with the responsibilities of promoting aerospace and STEM education to various audiences.

Aerospace Connections in Education (ACE)

The ACE Program is an aerospace education program for CAP educator members in grades K-6 in schools, home schools, museums and youth organizations. 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 theme-related lessons support academics, character development, and physical fitness. This program is designed to help foster good natured and healthy citizens who will develop an interest in and appreciation for aerospace as we seek to inspire the aerospace workforce of the next generation. AEOs are encouraged to support ACE classrooms by assisting with ACE lesson implementation, organizing class field trips, or serving as aerospace speakers. The ACE program is discussed in more detail in Chapter 5 of this pamphlet. For more information, go to www.gocivilairpatrol.com/ace.

Aerospace Education Excellence Award Program (AEX)

The AEX Award Program is CAP's hands-on aerospace activity participation and awards program for cadets, senior members, and educator members. It is free to our members. Members conduct hands-on activities choosing from any of our AE products, or they can conduct activities using any other organization's curriculum, as long as the activities are AE or STEM related. Conducting six activities, plus an additional two-hour activity, meets the requirements for program completion.

AEX is a great program for all ages. It is educational and enjoyable, and reinforces many of the important laws, principles and ideas associated with aerospace and STEM. DAEs should encourage their AEOs and AEMs to get involved with AEX and also offer to help conduct some of the activities with educator members' students and present the certificates at the school. For more detailed information about AEX, go to chapter 4 of this pamphlet.

Air Force Association (AFA) STEM Programs for CAP Units

Two national AFA competitions are open for CAP squadron participation: CyberPatriot and StellarXplorer. Both programs have similar timelines for annual participation and national competitions. CAP squadrons are encouraged to try to participate in one or both of these exciting STEM competitions conducted by the Air Force Association. CyberPatriot is discussed below and StellarXplorer is discussed later in this chapter.

1. AFA's CyberPatriot Program

The AFA's CyberPatriot program for CAP is funded by CAP so that there is no cost for squadron participation. An agreement between CAP NHQ and AFA CyberPatriot was created in the second year of

the program wherein CAP team registrations are waived in return for CAP NHQ paying travel/lodging expenses for the CAP teams that attend the national competition each year.

CyberPatriot is the National Youth Cyber Education Program. At the center of CyberPatriot is the National Youth Cyber Defense Competition. The competition puts teams of high school and middle school students in the position of newly hired IT professionals tasked with managing the network of a small company. In the rounds of competition, teams are given a set of virtual images that represent operating systems and are tasked with finding cybersecurity vulnerabilities within the images and hardening the system while maintaining critical services in a six-hour period. Teams compete for the top placement within their state and region, and the top teams in the nation earn all-expenses-paid trips to Baltimore, Md., for the National Finals Competition where they can earn national recognition and scholarship money.

Registration is open annually from 1 May until early October. Competition lasts from late October until late February. The national competition, to which CAP's two top teams will advance, is held in late March to early April.

Each CyberPatriot team can have up to six members, one coach, and (optional) one mentor. Typically, a team is made up of cadets/coach/mentor from one squadron. But, since many CAP squadrons have a small number of cadets, the AFA CyberPatriot office allows more than one squadron in a Group to combine to make one or more teams. Prior to team registrations, these "composite" CyberPatriot teams have to seek and gain approval from the CAP NHQ AFA liaison at afa@capnhq.gov.

CAP participates in two Divisions of the Cyberpatriot program: 1- the high school All Service Division; and, 2- the Middle School Division. CAP teams do not participate in the third division of the program, the Open Division (which is comprised of schools and youth organizations). Even if a CAP squadron is a school squadron, that squadron has to be either in the high school All Service Division or the Middle School Division.

1-In the high school All Service Division, CAP is one of 5 military service organizations, joining the Air Force, Army, and Marines AFJROTC and the Navy Sea Cadets. Each All Service Division organization earns two slots at the national competition each year. There is one Wild Card slot in the All Service Division, and a CAP team has earned that extra slot several years, resulting in having three CAP teams at the national competition at times. CAP teams in this division should register using their entire organizational charter/name, such as CAP RMR-CO-30 **AND/OR** CAP CO Spring Cadet Sq. NOTE that CAP is always entered first.

2-In the Middle School Division, CAP teams are embedded in all other middle school teams. Thus, CAP does not automatically earn a slot at the national competition in this division. CAP teams with cadets who are in middle school should register as a CAP Middle School team. IF a middle school cadet does not have a Middle School CAP team to which he/she can be assigned in his/her Group, approval for the middle school cadet to be added to a high school All Service Division CAP team has to be sought and gained from the CAP NHQ AFA Liaison at afa@capnhq.gov. CAP teams in this division should register using their entire organizational charter/name, such as CAP RMR-CO-30 **AND/OR** CAP CO Spring Cadet Sq. NOTE that CAP is always entered first.

CyberPatriot Summer *CyberCamps* are available for any unit/Group/or Wing to conduct. Find out more about CyberPatriot summer camps at https://www.uscyberpatriot.org/special-initiatives/afa-cybercamp-program/program-overview.

CAP has a cyber familiarization course conducted as a National Cadet Special Activity (NCSA) and held each summer. Info about CAP's cyber programs is found at https://www.gocivilairpatrol.com/static/media/cms/Educational_Products_Flier_with_NEW_9E746CD77F282.pdf.

All CyberPatrtiot training materials, competition information and timeline, and CyberCamp information are found at www.uscyberpatriot.org.

2. AFA's StellarXplorers Program

The AFA's **StellarXplorer** (STLX) program for CAP has a registration fee which is funded by individual squadrons/units. At this time, CAP does not have an agreement with the AFA StellarXplorers (STLX) office to waive CAP fees- simply because the STLX program is not set up as the CyberPatriot program is set up (CyberPatriot has a separate All Service Division, which automatically allows at least two CAP teams to advance to the national finals). STLX, at this time, has only one division- open to All Services, schools, and youth organizations, which does not automatically give CAP any slots to attend the national finals.

There are no specific rules from the STLX office that guide how any CAP team is formulated. There are no rules for or against CAP "composite" teams in a Group, as is so for CyberPatriot. The only guidance, at this time, is that this is a high school program, so CAP cadets would need to be in grades 9-12 to participate in this program.

StellarXplorers inspires and attracts teams of two-six high school students to pursue studies and careers in STEM through a challenging, space system design competition involving all aspects of system development and operation with a spacecraft/payload focus. The teams are each lead by a Team Director, with optional Team Mentors.

STLX uses Systems Tool Kit (STK) by Analytical Graphics to conduct this national competition. This should be especially interesting to CAP cadets due to the fact that CAP has integrated STK in its AE programs for many years. CAP's AE page for STK activities is found at https://www.gocivilairpatrol.com/programs/aerospace-education/programs/systems-tool-kit/.

All competition information is found at www.stellarxplorers.org.

Model Rocketry Program and Advanced Rocketry

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. 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. 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. After completing the hands-on part and obtaining the approval of the QSM or AEO, the cadet is ready to move on to the next phase. After successful completion of Phase III, 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, educate your cadets about rockets, and emphasize STEM-related curriculum. 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 Phases IV and V. The program's Phase IV covers mid-power rocketry, and the program's Phase V discusses high-power rocketry. When a cadet progresses through the phases, 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 Phase V, as well.

An associated rocketry competition that should be mentioned is the Team America 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 outside of Washington D.C. for the national competition. For more information on TARC, go to www.rocketcontest.org.

AE STEM Kit Program

In 2012, the Air Force STEM Outreach Coordination Office provided funds to CAP to perpetuate science, technology, engineering, and mathematics (STEM) opportunities for CAP cadets and other K-12 youth in schools and youth organizations who work with CAP AE members nationwide. To initiate the program, CAP's AE department developed the CAP STEM Kit program. The CAP AE and AE volunteers established 5 kits, developed curriculum, secured vendors, and began distributing the kits to CAP members in the spring of 2013.

The AE STEM Kit program has continually grown and now has 15 kits. We've also added more curriculum, tip sheets, and vendors. Almost all of the CAP squadrons have received at least one of the kits, with a huge number of squadrons having received two or more different kits. Most of the kits are non consumable and can be used repeatedly. Throughout the life of the program, the AE STEM Kit

program goal has remained the same- to generate enthusiasm among cadets and K-12 youth for STEM-related subjects and careers through a program supplying STEM resources for hands-on, inquiry-based learning. As we continue to move forward, new kits will be added, old kits will be modified, and curriculum will be revised. The AE STEM Kit program is an ever-evolving program; always growing, improving, and striving to produce the next generation workforce of STEM experts. For more specific information, including how to order kits, go to chapter 4 of this pamphlet.

Systems Tool Kit (STK)

STK, developed by Analytical Graphics Inc. (AGI), is the leading off-the-shelf 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 a STK license. The license is a daily license and must be downloaded every day, 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 a wonderful opportunity for cadets and senior members to learn more about satellites and satellite missions. Additional information about STK and satellites is available on our AE website at www.gocivilairpatrol.com/ae. (NOTE: The AFA's StellarXplorers program/competition uses STK, and so if your cadets wish to take the STK level to a competition level, please see AFA's STEM Programs for CAP on earlier in this chapter.)

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 motivate them to share their aerospace experiences and information with their students. The program requires involvement and coordination between CAPn AE, CAP wings and squadrons, wing commanders and the teachers.

The TOP Flight program can provide a flight for any CAP educator member, either AEMs or regular uniformed members who are educators. The program can be used to recruit teachers into CAP, but the teachers must join our organization 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 educator member.

Originally, the program was designed to include an aerospace workshop that provided aerospace

materials, information and hands-on activities for the teachers, followed by flying in a CAP aircraft, either the same day, the next day or even at a later date. However, the program has evolved into simply flying teachers, usually one or two at a time. If you schedule a larger group of teachers to fly at the same time, please consider conducting either a workshop or conducting some hands-on activities 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 a wonderful 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 flying.

Whenever an AEM contacts CAP AE to inquire about a TOP Flight, CAP AE replies by email, being sure to include the wing Director of AE on the email. The wing DAE is the main point of contact for the TOP Flight program. The DAE will either contact the teacher or find someone living near the teacher to become the point of contact. That person will coordinate the flight details with the teacher, including finding a pilot or pilots to support the mission. Any senior member generating a TOP Flight needs to contact CAP AE to verify that there are funds to support the teacher flight mission before they get too far into the planning.

Once a pilot has volunteered to fly the teacher, the pilot needs to enter the mission into WMIRS. The National Operations Center (NOC) will contact AE to ensure the money exists to support the flight. Once that occurs, the NOC will contact the wing commander to obtain the commander's permission to use the wing resources for this mission. A TOP Flight mission is entered as a "C" mission in WMIRS. For additional information, go to the AE website at www.gocivilairpatrol.com/ae.

4. AEX Award Program and AE STEM Kits

AEX

The AEX Award Program is CAP's hands-on aerospace and STEM activity program for cadet and senior members. It is educational and enjoyable and reinforces many of the important laws, principles and ideas associated with aerospace and 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. A fiscal year runs from October 1 through September 30. So, regardless of when you start, you must be completed before September 30. If the requirements are completed within the specified time limits, the unit and each participant will receive a certificate. The two-hour field experience can be spent in a variety of ways. For example, time may be spent launching rockets, going on a field trip to a local airport, or visiting an aerospace museum. Engaging in additional aerospace and STEM activities adding up to at least two hours is also acceptable for the two-hour field experience.

Any of CAP's AE curricula can be used to meet the requirements but not all of the activities need to be from CAP AE books. There are other excellent sources for aerospace activities. As long as the activities revolve around aviation, space, cyberspace, or any area of STEM, the activities will count toward AEX completion. However, if you are unsure as to whether a particular AEX lesson (not from CAP books) is acceptable, email HQ CAP/AE at aex@capnhq.gov.

AEX is a wonderful program for all ages! Even though each of the CAP AE books was written for a particular audience, the activities can be adjusted for different age groups.

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

How to register:

- Aerospace Education Officers (AEOs), Assistant AEOs, Unit Commanders and Director of Aerospace Education (DAEs) have permissions to apply for the AEX Program.
- Registration is required for each year (1 Oct. – 30 Sept.) you choose to participate.
- Applications for AEX are completed on-line in CAP's eServices. Under Aerospace Education, click on *AEX*. Then, *Apply for AEX.*
- Fill in all blanks. Information that is "grayed out" may not be changed.
- Members can order *AEX II: Vol. 1 and 2* and *AEX for Senior Members* activity books at the bottom of the application.
- A confirmation email will be received once the application has been submitted. If an email isn't received, the application did not go through. Make sure to click "submit."

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.
- As each activity is completed, go to eServices and enter the data on the AEX Award Report. Be sure to "save" after entering each activity.
- 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."
- 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. Make sure to click "submit."
- The HQ AE staff will send individual certificates to the unit and each participant.
  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 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 above.

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 and plaques at the school.

THE AE STEM KIT PROGRAM

The AE STEM Kit program is a free program available to our units and educator members to introduce science, technology, engineering and math (STEM) topics to CAP youth located across the nation. The STEM Kit Program includes a variety of topics and concepts that promote STEM-related subjects and careers while supplying STEM resources for engaging, inquiry-based learning.

The goal for the AE STEM Kit Program is to generate enthusiastic learners willing to engage in activities outside of their normal circle. The AE STEM Kit Program has been successful in integrating hands-on activities that motivate cadets to work independently gaining more knowledge on specific STEM concepts. With this in mind, the AE staff is continually revising, upgrading, and adding to the STEM Kit Program with new kits and curriculum. A list and a brief description of the STEM Kits can be found at https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/available-kits-for-selection/.

All kits come at no cost to the recipients and are designed to enhance the educational curriculum and programs of CAP units and teacher's classrooms. The AE STEM Kit program allows for AEOs to apply for one kit order at a time in the eServices/Aerospace Education/CAP STEM Kits section. Depending on the number of cadets in the unit, the AEO may receive more than one of the kits so that cadets can work together in small groups. The AE STEM Kits will arrive directly from the specific vendor to the recipients at the end of the following month after the kit application is submitted. The STEM Kits include curriculum and/or tip sheets that have been developed by CAP members and CAP AE to aid in the implementation of the kits. These resources can be modified for use or AEOs can add other resources to enhance the cadets' experience.

After receiving the kits, units will need to spend at least six hours working with the kit and associated curriculum. To aid in the teaching of AE STEM Kits, Learning Communities have been developed and placed in eServices on the Learning Management Systems page. Everything you need for completing your STEM Kit is included in the Learning Community. You can find the Learning Communities by logging into eServices, clicking on Online Learning and clicking on Learning Management System. Scroll down until you see STEM Kit. Here you will find documents, materials, books, pre/post tests, and certificates you, as the AEO, will need to complete this kit.

Have your cadets take the online Pre-Test before starting the kit. After you complete the kit, have your cadets take the online Post-Test. Hopefully, we will see a big difference in the scores from the Pre and Post Tests. The data we receive from these tests, as well as online evaluations from kit recipients, is used for annual reporting to the AF STEM office and CAP's national leadership that will better position us to maintain and sustain the CAP STEM Kit program. We truly believe that these kits, along with the curriculum and hands-on lessons, are providing cadets and students with meaningful learning experiences. We are very optimistic that the data, evaluation reports, and feedback we gather will show others what fantastic AE activities and events are happening in our squadrons.

After spending at least six hours working with each kit, AE STEM Kit recipients should complete the online evaluation found in eServices at the CAP STEM Kit section. If interested, another AE STEM Kit application may be submitted after the completion of the online evaluation.

Then, in order to provide the cadets and students with completion certificates for each kit, each kit certificate can be found, personalized, and printed at https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/stem-kit-certificates/. You can also find certificates in the Learning Communities.

Most of the kits are introductory programs designed to interest and excite the recipients. It is hoped that senior members with subject matter expertise will connect and offer assistance, instruction, and guidance. In addition, it is hoped that you will reach out to any organization noted in the AE STEM Kit curriculum guides to obtain even more subject matter expertise to further enhance the STEM Kit experience for your cadets. If you have questions about a particular AE STEM Kit, email HQ CAP/STEM at stem@capnhq.gov.

Who can order (includes three categories):

- *AEO* category: 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* category: CAP educator members, to include both senior members who are educators, as well as AEMs in classrooms, youth organizations, museums, and libraries
- *CAP Member who is an AFJROTC Instructor* category: AFJROTC instructors who are either CAP Senior Members in a unit or an AEM

How to order a CAP STEM Kit:

- Applications for the AE STEM Kit Program are completed online in CAP's eServices/Aerospace Education/CAP STEM Kits.
- Fill in all boxes in each of the three tabbed sections (information that is pre-printed in gray may not be changed). Ensure you click "Submit" after all information is inserted.
- A confirmation email will be received once the application has been submitted. If an email isn't received, the application did not go through, so go back and try again and ensure you click "Submit."
- The application will be sent to the commanders for approval, after which, the application will be sent to the STEM Kit committee for processing.

What happens after an application has been submitted:

- The AE STEM Kit committee meets once a month at the beginning of the 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 all recipients that their application has been approved and sent to the vendor.
- The associated curriculum will be sent from CAP NHQ to the applicants.

- Kits will be sent from specific vendors to the applicants, usually to be received by the end of the month, after each order is sent to the vendor. If there is a vendor delay or back order, the recipient will be notified by the AE staff.
- If your kit has not arrived within a six-week period after notification from the AE staff, please notify stem@capnhq.gov.

How to complete the AE STEM Kit Evaluation:

- After using the kits for at least 6 hours, please poll your cadets to determine the level of resultant interest in STEM careers related to the particular STEM Kit. Categories are: much higher; somewhat higher; much the same; no interest. (You will use this information in #8 of the STEM Kit evaluation.)
- Go to eServices/Aerospace Education/CAP STEM Kits/Evaluation to begin your kit evaluation. Any gray areas may not be changed.
- NOTE: A list of any pending STEM Kit evaluations will appear, if any other STEM Kit applications were made in the past, OR, if you applied for a STEM Kit in another eligible category, such as CAP Member Who is an Educator; or CAP Member Who is an AFJROTC Instructor. These pending evaluations need to be completed prior to ordering another kit.
- After you have completed the first two tabbed sections of the evaluation, then, please go to the third tabbed section, Attachments, and upload at least one good photo of your cadets participating in the particular AE STEM Kit activities. 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 have already given permission for their photograph to be used; other youth with whom you may have worked will need to have media release approval prior to using their photos.) You may also attach any pertinent document as another attachment in the third tabbed section.
- Once the entire evaluation is complete, please remember to click on Submit to ensure your evaluation is received and stored in eServices. (Without this submission, your AE STEM Kit usage cannot be used as part of the Quality Cadet Unit Award criteria.)
- A confirmation email will be received once the STEM Kit Evaluation has been submitted.

You are now ready to complete, print and present online AE STEM Kit certificates to participants. You are now ready to place your next order for an AE STEM Kit.

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:

- 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 demonstration as an outreach program.
- Partner with an aviation and/or space museum to conduct 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 kits as possible to all applicants. We also strive to be good stewards of the money that is allocated to the AE STEM Kit Program. In order to accomplish these goals, we ask that when special activities arise and 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 use of its resources.

5. AEMs, ACE, and TOP Flights

AEROSPACE EDUCATION MEMBER (AEM)

The Aerospace Education Membership category is a special membership for formal and informal educators, schools and organizations that support and promote aerospace and STEM education. An AEM must be a US citizen or a permanent resident in order to join.

This membership category is open to any reputable individual in a (public, private, or homeschool) classroom, 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 or serve in an authorized position within CAP, but they are eligible to receive all of the free curriculum and resources from CAP AE.

There is a one-time $35 membership fee. Each year, an AEM receives a free renewal if he/she desires to and selects how he/she will continue using the CAP AE products. The AEM must reply to the annual free renewal email in order to receive the free renewal.

Benefits of AEM membership:

- 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 will receive paper copies of curriculum for the grade levels they currently teach. They may elect to use the electronic versions. All AE materials are available 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

- Apply for K-12 grants through the Air Force Association grants program
- Participate in the grades K-6 Aerospace Connections in Education (ACE) Program

Many AEMs take advantage of the opportunity to participate in these programs. There are many other privileges and benefits of being an AEM. These are covered on the AE website at www.gocivilairpatrol.com/ae.

How can someone join as an AEM?

The quickest and easiest way for an AEM to join 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 the AEM prefers to pay by check, they will need to complete a paper application and send it to address provided on the application. The paper application is found online at this link. (This includes when an entire school is joining as AEMs and the memberships will be paid for by school check. Each educator will need to complete the 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.)

**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.*

Recruiting AEMs:

AEMs play a significant role in CAP accomplishing the aerospace mission. Therefore, DAEs and AEOs must be familiar with the AEM program. It is a great program for expanding your aerospace 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 bring CAP and your community closer together. 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 are making a difference in the lives of students all across the country. In addition, those teachers teaching 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 (to assist, as is requested, in their learning environments, and to bring cadets to the school to help introduce the Cadet Program to 5th/6th graders and above).

A PowerPoint presentation on the AE website will provide an overview of the benefits of AEM membership. For more information about AEMs as well as find an AEM informational flier and the PowerPoint presentation to use in presentations to prospective AEMs, go to:

https://www.gocivilairpatrol.com/programs/aerospace-education/join-as-an-aem/.

AEM 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 spam our renewal emails, so it would be helpful for all AEMs to provide a secondary email on their application to ensure they receive the free renewal email.

What if an AEM's membership has expired?

Once the AEM's membership has expired, the educator is unable to renew using the email link. An email will need to be sent to ae@capnhq.gov. The AEM will be sent a renewal form to complete and membership services will renew their membership if it is within 18 months of expiring. After 18 months, an AEM will need to rejoin and pay $35. They will keep the same CAP ID.

How do I know when my AEMs are expiring?

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

To locate expiring 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 provide the AEMs who will expire in the next 90 days.

How to find AEMs in your Wing?

In eServices, go to *Member Reports*. Find **Aerospace Education** and select the **AEM Listing (w/names)** report. This report will provide names and contact information. Under *Dates,* be sure to select "*Return All Dates"* in order to see all AEMs.

AEROSPACE CONNECTIONS IN EDUCATION (ACE)

The ACE Program is a unique program for CAP educator members working in grades K-6 in schools, home schools, museums, and youth organizations. The program is designed for both formal and informal educators to implement during the school day, as an after-school program, or as a museum or youth organizational 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; aligned with national academic standards; and 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.

As funding is available, teachers 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 and educator members in their squadrons. They are also requested to support ACE classrooms by assisting with ACE lesson implementation, organizing class field trips, serving as aerospace speakers, or making a presentation at the school with the end-of-program ACE certificates.

Specifics about this program can be found at www.gocivilairpatrol.com/ace

For more information, contact ace@capnhq.gov.

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 motivate them to share their aerospace experiences and information with their students. The program requires involvement and coordination between CAP/AE, CAP wings and squadrons, Wing Commanders, pilots, and the teachers. A CAP pilot, in order to fly teachers, must possess an FAA Commercial Pilot Certificate and a Class II Medical Certificate.

The TOP Flight program can provide a flight for any CAP teacher member, either AEMs or regular uniformed members who teach. The program can be used to recruit teachers into CAP, but the teachers must join our organization first and obtain their CAP ID # before they fly. The program can also be a retention tool, as a great benefit of being a CAP teacher member.

Originally, the program was designed to include an aerospace workshop that provided aerospace materials, information and hands-on activities for the teachers, followed by flying in a CAP aircraft, either the

same day, the next day or even at a later date. However, the program has evolved into simply flying teachers, usually one or two at a time. If you schedule a larger group of teachers to fly at the same time, please consider conducting either a workshop or conducting some hands-on activities 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 a wonderful 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 flying.

Whenever an AEM contacts CAP AE to inquire about a TOP Flight, CAP AE replies by email, being sure to include the wing Director of AE on the email. The wing DAE is the main point of contact for the TOP Flight program. The DAE will either contact the teacher or find someone living near the teacher to become the point of contact. That person will coordinate the flight details with the teacher, including finding a pilot or pilots to support the mission. Any senior member generating a TOP Flight needs to contact CAP AE to verify that there are funds to support the teacher flight mission before they get too far into the planning.

Once a pilot has volunteered to fly the teacher, the pilot needs to enter the mission into WMIRS. The National Operations Center (NOC) will contact AE to ensure the money exists to support the flight. Once that occurs, the NOC will contact the wing commander to obtain the commander's permission to use the wing resources for this mission. A TOP Flight mission is entered as a "C" mission in WMIRS. For additional information, go to the TOP Flight page on the AE website.

6. AE Awards

This chapter contains information about and the criteria for CAP's awards – aerospace education and other awards and decorations that pertain to the AE program. This chapter should answer any question you have about these awards, including when and how to submit nominations for them. 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 form or package 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.

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

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

The AEX Award Program is discussed in chapter 4. However, we still want to mention a little bit about the award. To receive the AEX award, unit participants must complete 6 activities and a 2-hour AE Activity within the fiscal year they received the AEX books. A fiscal year runs from 1 October through 30 September. So, any time you receive the books after 1 October, you have until 30 September to complete the requirements. Upon completion of your activities, go to eServices and enter the data on the completion form. The CAP AE staff will send individual certificates for the cadets. Only one award can be earned per year. Even if your unit doesn't complete 6 activities within the fiscal year, these activities are a great way for the cadets to learn more about aerospace and have fun doing it.

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

Teachers who are AEMs, as well as Senior Members who are also classroom educators, can register in eServices to participate in the AEX Program. CAP squadron members can also assist AEMs in preparing and teaching AEX for students in the classroom. To successfully complete the AEX Program and be eligible for the award, teachers must perform six activities, plus a 2-hour additional activity. After conducting the activities, they will go to eServices and complete the report form, listing the activities.

CAP AE will be notified and will send certificates to the teacher and the 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: For those K-6th grade educators who are participating in the ACE Program, they will not be eligible to receive credit and certificates for both ACE and AEX.)

See Chapter 4 of this pamphlet for additional information on the AEX Program.

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

The Yeager Award for Senior Members is self-paced and is based on the CAP text, *Aerospace: The Journey of Flight*. 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 on their computer. Completion of the Yeager award is automatically placed in the member's record at NHQ. After successful completion of the Yeager test, members are authorized to wear the Yeager ribbon.

Yeager ribbon

AE Badge – For Senior Members

Upon earning the AE specialty track technician rating, 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. A miniature AE badge is also available and can be worn as a lapel pin on the blazer uniform or civilian clothing. See CAPP 50-2 Aerospace Education Specialty Track Guide, for additional information.

AE Badge

A. Scott Crossfield Award – For Senior Members

Upon successful completion of the AE specialty track Master Rating, the AEO is eligible for the A. Scott Crossfield Award. To receive the certificate, the commander must complete the Master Rating checklist and send it to Membership Services (CAP/DP). DP will then send the Crossfield Award certificate to the requestor. See CAPP 50-2, Aerospace Education Specialty Track Guide, for additional information. See the grid below to see the relationship of the AE Specialty Track Ratings with the Yeager Award, Crossfield Award, and AE Badge.

A. Scott Crossfield Ribbon

See Attachment 3 of this pamphlet for the Senior Member Professional Development Progression and Awards. Notice how AE ratings assist members in the Davis Ribbon and the AE Badge.

Rating	Davis Ribbon	Yeager Ribbon	Crossfield Ribbon	AE Badge	
Technician					basic badge
Senior	add Bronze Star				add Bronze Star
Master	add Silver Star				replace with Gold Star

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 fourteen criteria, which encompass both internal and external programs in AE. See CAPR 50-1, Attachment 5 for more details.

Aerospace Education Mission Award – For CAP Wings

The AE Mission Award identifies the best wing in aerospace education in each region. The AE Mission Award is based on information contained in the wing's annual AE Activity Report. The contents of the activity report will be evaluated in these AE mission areas; staffing, internal programs, external programs, AE Plan of Action (AEPOA) and the AE Activity Report. Details regarding the deadlines for submission of the Wing AE Activity Report can be found in CAPR 50-1, Attachment 2. Region commanders, with the assistance of their region AE staff, will determine their respective winner.

NOMINATED AE AWARDS

Nominated AE awards fall into two categories: national AE awards and awards that can be given at various command levels for 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 and award. CAP doesn't give awards; they are earned!

National AE Awards:

- Frank G. Brewer Civil Air Patrol Memorial Aerospace Awards
- Civil Air Patrol Aerospace Officer of the Year Award
- Civil Air Patrol Aerospace Education Teacher of the Year Award
- Air Force Association (AFA) Aerospace Education Cadet of the Year Award

Deadlines

Submission deadlines for national AE awards are found in Attachment 2 of CAPR 50-1 and 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, as well as interview and write the nomination papers. CAPP 39-3 will be most helpful. Seek help with editing the papers. Find a squadron or wing member who has written previous nominations. NOTE: It is not what the person has done, but it is how the person's performance is projected in writing that determines if selection committees agree this person is deserving of an award.

CAPF 120 – Nomination Packet Cover Sheet

To submit a national AE award nomination packet, a cover sheet must be attached to the packet. This form assures proper command routing and review. **This cover sheet is CAPF 120**. It is to be used only as a cover sheet. It is used only as a cover sheet for nominated national AE awards. The rest of the nomination packet requirements for the award should be documented on the appropriate form found in Attachment 2 of this pamphlet.

➢ 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 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*. 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 at each level, with the assistance of their AE staff, will determine their winners. CAPF 50-1 is available online and as an attachment in this pamphlet. Brewer Awards are not made posthumously. Be sure to meet the time deadlines noted in CAPR 50-1, Attachment 2.

The four Brewer Award categories are:

Category I – CAP Cadet

- Nomination must be for activities during the previous or last fiscal year only.
- Aerospace achievement or activity should be significant — more than earning the Mitchell award or completing CAP training requirements.
- 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 fiscal year only.
- Aerospace achievement or activity should be significant – more than earning the Yeager award or completing CAP training requirements.
- 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 III – Individual/Organization (non-CAP member)

- Nomination should be for continued contribution over several years.
- Aerospace achievement or activity should be significant.
- 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 a period of more than 20 years.
- Nominee should be a CAP member.
- Aerospace achievement or activity should be consequential and noteworthy.
- Recognition is for significant contributions to the aerospace field.

The first three categories are awarded every year. However, 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 live up to 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 are received.

Nomination Package Requirements:

The nomination packet consists of the cover sheet (CAPF 120) and CAPF 50-1. Do not forget to use CAPF 120 as a cover sheet only for the nomination. Nominations should be completed on CAPF 50-1 to detail the AE actions performed by the nominee. 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. A sample of CAPF 50-1 can be found on the AE website at www.gocivilairpatrol.com/ae and as an attachment to this pamphlet. Brewer award winners also are recognized at the region level. The DCS/AEs are responsible for providing the CAP Certificate 50 to the regional award winners.

➢ 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 Annual Conference.

Purpose:

The Civil Air Patrol Aerospace Education Officer of the Year Award is a national AE 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 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 nominees must be supported by a professional or personal letter of 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.

Nomination Procedures:

Squadron and Group nominations must be received by the Wing Director of Aerospace Education. The Wing DAE, in coordination with the Wing Commander, will convene a committee and make the selection. 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 and make the selection. Region nominations must be received by NHQ/AE by 15 March. (Packages should be sent to NHQ CAP/AE, 105 South Hansell Street, Maxwell AFB, AL 36112.)

Nomination Package Requirements:

Do not forget to use CAPF 120 as a cover sheet! The other three requirements are: **1.** One-page overview describing why nominee deserves this award; use Justification block on nomination form, CAPF 50-2; **2**. One-page letter of recommendation by person nominating the individual; and **3.** Two-page photograph collage with an additional one-page description of activities, field trips, special events, etc. that depicts: creativity in developing and using aerospace materials for the promotion of aerospace in the squadron, group, wing, and/or region; and cadet, senior, or community involvement and activities that foster an appreciation of aerospace education and its role in our society. **Optional:** Three extra 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 50-2 is used to nominate the AEO of the Year. You can find CAPF 50-2 in the appendix of this handbook, or you can download the form from CAP's website at www.gocivilairpatrol.com/ae.

- **CIVIL AIR PATROL AEROSPACE EDUCATION TEACHER OF THE YEAR AWARD**

CAP AE Teacher of the Year Award recognizes a CAP member who is a certified K-12 teacher promoting aerospace. This award will be presented at the summer CAP National Annual 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 certified K-12 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 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 the first week of May in order to make plans to attend the CAP 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 AEMs: Two copies of the nomination package (10-page maximum) can be sent directly to the appropriate Wing DAE or to NHQ CAP/AE, 105 South Hansell Street, Maxwell AFB, AL 36112, not later than 15 January. Nomination packages received by NHQ/AE will be forwarded to the Wing for selection. **For Senior Member teacher nominations:** Two copies of nomination package (10-page maximum) are 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 send 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 Package Requirements:

1. One-page overview describing why nominee deserves this award.

2. One-page letter of endorsement by nominee's school principal or other educational leader.

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

4. 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 extra 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 in Appendix of this publication or the form can be downloaded from CAP's website at www.gocivilairpatrol.com/ae

➢ AIR FORCE ASSOCIATION'S (AFA) AEROSPACE EDUCATION CADET OF THE YEAR AWARD

The Air Force Association 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. Use CAPF 120 as a cover sheet and CAPF 50-4 to make the nomination, and follow the directions on the form. This form is available as an attachment to this pamphlet or found in CAP's web 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 level will be the POC for this award. By January 15, 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.) NOTE: If a region does not have an AFA award nominee, a runner-up Brewer Cadet of the Year nominee can be sent for this award, with appropriate information being attached to

the nomination package. A CAP/AE team will convene a selection committee for final award determination.

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.

This award is separate from the Brewer Cadet AE award and CAP's National Cadet of the Year award. Thus, this gives a third opportunity for a CAP cadet to be recognized nationally. Nomination packages should contain the completed nomination form, 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 beyond the nomination form.

The award is presented at the AFA's National Air and Space Conference and Technology Exposition, typically held in September in Washington, D.C.

Contact afa@capnhq.gov for more information. Full information is found at www.gocivilairpatrol.com/afacapcadetaward

OTHER NOMINATED AWARDS

AEOs usually think of only the national AE awards, but here are awards that can be given at various command levels for outstanding AE performance. CAPR 39-3 is the regulation that describes the medals, and awards. These may be awarded to cadet and/or senior members. The regulation establishes the requirements to qualify for them, explains the administrative procedures involved and prescribes how the medals and ribbons are worn. **CAPF 120 must be completed in full. It is not just used as a cover sheet as it is in the nominated AE awards. (See Page 42).** Review CAPR 39-3 to learn of the requirements of the following awards: Distinguished Service Medal, Exceptional Service Award, Meritorious Service Award, Commander's Commendation Award, and CAP Achievement Award. Various command levels are required for specific awards. AEOs are eligible for these awards. Investigate CAPR 39-3 and consider who might deserve such an award.

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 polices.

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	Presented for 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	X
Region		X	X	X	X
Wing				X	X
Group					X

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

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

7. Budgeting, Donations, and Grants

One of the most crucial aspects of CAP performance is the process of financing the activities that are necessary for accomplishing the various CAP missions, particularly the AE program. The fiscal guidance regulations are currently numbered CAPR 173 - 1 (Finance) and CAPR 173 - 4 (Fundraising and Donations). Much of routine, day-to-day financial transactions are being handled by the Wing Banker Program, which manages most of the documentation and record keeping requirements. This has taken the complexity out of general finance procedures, and helps meet compliance requirements for routine transactions, such as dues application and check writing.

It is a good idea for each unit to have a budget for accomplishing desired goals. Some, but not all, Wings require this important element of financial planning. Your budget will give you a framework on which to base your fundraising efforts, which, in turn, can help your unit meet its activity interests. Also, submitting a budget to be considered with all the other fiscal requests will help call attention to your overall program.

FUNDRAISING

Often the realm of fundraising and donations for CAP is anything but routine. There is a regulation regarding fundraising and donation procedures, however. (CAPR 173-4) Adhering to this regulation will keep your efforts out of difficulty. It clearly delineates what is allowed and what is specifically prohibited and includes examples of activities which have proven successful for some units. It also acknowledges state and local restrictions on certain activities, as well as CAP regulation.

The most important rule to remember for your unit is that the Wing Commander must be involved and aware of your fundraising project. He/she will have to give permission in writing for you to proceed. There are many things that are allowed but none can be conducted without this written permission. The letter may be communicated electronically or by mail. 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 any activity that fits within the regulation and state and local ordinances.

There is a piece of advice, however. Do not issue the request for permission too close to your event so that the Commander does not have adequate time to respond. As a matter of courtesy, give at least a couple of weeks' notice to allow for any questions to be clarified or any other issues to be resolved. You might consider letting the Commander know at the time you begin serious planning of your event. In the case of fundraisers that are regularly held (such as a food booth at an annual air show) the process may be a bit simpler and quicker.

The second critical issue to remember is that there will be no Air Force involvement in CAP fundraising. CAP and Air Force are to be kept as separate entities. No wearing of the Air Force style CAP uniform is allowed except by cadets, under certain circumstances. Any promotional matter should clearly identify CAP as a distinct organization from the Air Force.

Fundraising is a specialized art, so much so that some individuals do this for a living. If your unit or Wing is blessed with one of these talented and knowledgeable people, by all means take advantage of

any help or information they can give you. It is highly recommended that such individuals be involved in Wing and local unit funding activities.

Do not forget to include the Wing Legal Officer. This is particularly important as the date for your event comes closer to "it's a go." The legal officer can double check your plans and assure that no small oversight will cause a problem. Between the professional fundraiser and the legal officer, your event should be well within the requirements of the applicable laws and CAP regulation.

DONATIONS

Donations can be created by targeted solicitation campaigns. Sometimes all that is needed is to educate potential donors as to the process involved. It often helps to assure potential donors that CAP is a [(501(c)(3)] organization and therefore any donation would be eligible for a deduction from income. In other words, for tax purposes, donations to CAP are considered to be charitable contributions.

Donations can cross a wide range of items and activities. Items such as computers, motor vehicles, mobile home trailers (with the intent that it be used as meeting space for a CAP unit, for example), boats or aircraft require a donation receipt (CAPF 164), but may also require additional IRS documents. Check with the finance officer or Wing legal officer. There are rules regarding the disposal of such donations. Check CAPR 173-4. Donations of property (land) also have special applicable rules and are regulated as to their possible disposal. (See above) Donations of money and bequests of funds are treated as above and require a donation receipt.

In that they are often unplanned and unscheduled, donations are still a welcome contribution, but require a set of procedures that need to be followed. Any donation valued at $250 or more requires a donation receipt. Under certain circumstances, that valuation may drop to $75. CAPR 173-4 Attachment 1, Donation Receipt, Form 164.

CAP units may accept donations through a Combined Federal Campaign (Federally based) or United Way Campaign, usually community based. The need here is to make the group aware of CAP in general or particularly a local unit and that they are tax-exempt. This has proven profitable for some units. So, unit representatives should plan on making presentations to these groups as their fall season develops.

GRANTS

There are literally hundreds of corporate, foundation and community sources which offer formal grant procedures. Many of these entities prefer to support the promotion of youth and educational opportunities. STEM has become a popularly supported topic. Often there is a natural fit between the grantors and the goals of AE in CAP. Most, if not all, grantors require a well written application, monitoring of how funds are handled during the grant period, and a follow up report. Obtaining grants is not difficult if the unit has a talented writer and someone to closely monitor the process throughout the project.

The rules for obtaining grants are relatively simple. Be very specific in your request. Keep it as narrow as possible so the proper focus remains in place. Follow all the grant guidelines to the letter. These are not suggestions. These are ironclad expectations of the granting group. Be persistent but polite. Answer

any follow-up questions promptly. At the conclusion, even if the grantor does not require a summary document, write a thank you letter.

Some community corporate groups are known to be generous with organizations such as CAP. Be careful not to over-solicit such a company. A community relations person, CAP public affairs officer, etc., should be included to coordinate grant applications and assure that this overload is not happening. It is one thing to receive a grant request from a local squadron but to have requests from several local units may close off the resource to all.

It is recommended that anyone involved in unit funding refer to CAPR 173-4 Section C. This portion of the regulation very specifically lists what is not permitted for any funding effort. It also lists specifically allowed fund raising activities. As such, it is a terrific reference to help all safely navigate this sometimes complex area.

AFA/CAP Grants

Since 1996, the Air Force Association has provided funding to CAP to provide quarterly $250 grants to CAP units and CAP educator members to promote aerospace and STEM education.

CAP units can apply for grants in the summer (due 30 June) and winter (due 31 December).

CAP members who are educators can apply for grants for their educational programs in the spring (due 31 March) and fall (due 30 September).

Grant information follows:

- Grant winners are eligible to receive one grant every other year.
- Grants are for $250.
- Grants must be used for aerospace/STEM education-related items/activities such as books, videotapes, equipment, programs, field trips, and experiential days and events.
- Grants may not be used for uniforms, honor guard, or color guard activities, nor may they be used for individual member flying instruction.
- Grant recipients must file a follow-up report with HQ CAP/AE on how the grant contributed to their AE program. The report allows CAP to show AFA how their money is being spent and helps to show appreciation for their support of CAP's aerospace/STEM education programs.

Grant application and end-of action activity report forms are found at www.gocivilairpatrol.com/afaunitgrants- specifically, unit grants and educator grants.

Applications and follow-up reports with digital photos should be sent to afa@capnhq.gov.

8. AE Plan of Action (AEPOA)

The AE Plan of Action is the yearly plan for conducting aerospace education.

Your AE Plan of Action is a map for future aerospace education activities the unit hopes to accomplish during the upcoming fiscal year. The plan should include the high-priority aspects of your aerospace education program which require your attention to accomplish.

AE duties and responsibilities are listed in CAPR 20-1 (I) and CAPR 50-1. How you accomplish these duties is up to you, but these are important responsibilities for CAP aerospace positions and will help you fulfill your AE mission.

When completing the AE Plan of Action, appreciate you are only one person and although we want you to stretch we do not want you to break. Make your plan achievable. For example, if you have already accomplished one of the requirements such as achieving your master rating, the AEO has already completed the Yeager achievement or the unit has an active Rocketry program these do not need to be placed in the Fiscal Year Plan of Action.

The AEPOA can help you manage an effective AE program. It should be a dynamic and flexible document that you refer to many times during the year. If you develop a good plan and then execute it, you will have an effective AE program.

Each squadron, group (if applicable), and wing should develop a plan of action. Although an AEPOA is not required at the region level, an informal plan should be developed to employ region resources, if required, to help all subordinate commanders successfully accomplish the CAP AE mission.

The AEPOA is a great tool for helping a squadron or a group accomplish its aerospace mission. Planning all your AE activities for the year helps you organize your time and allows you to prepare in advance.

At the squadron level, the AEPOA is developed by the AEO and signed by the unit commander. The AEOs should discuss the AEPOA with their commanders during the development phase to obtain opinions and garner their support.

At the group level, the AEPOA is developed by the AEO and signed by the group commander after receiving inputs from the squadron AEOs.

At the wing level, the AEPOA is developed by the Wing Director of Aerospace Education (DAE) and is signed by the DAE and the wing commander after receiving inputs from squadron/group AEOs. The wing DAE collects and organizes their inputs and then can plan the wing's aerospace activities for the year. A wing DAE can also analyze potential squadron needs and ascertain if wing resources are available.

The tool you use is what makes your program more effective and successful.

The process starts with the squadron aerospace education officer completing AE Plan of Action. Squadron AEO's may want to add action items that carry a positive impact on the squadrons AE program such as Specialty Track growth, using AEX and STEM programs. The unit POA is provided to the Group (in Wings with Groups), and then to the wing or straight to the wing (in wings without groups).

WHAT HAPPENS NEXT

The group AEO or wing DAE reviews the individual squadron AEPOAs looking for comments like:

1. Squadron AEO will attend an AEO School or Squadron AEO will advance in the in the specialty track, the squadron AEO will complete the astronomy AE STEM Kit.
2. The squadron will strive to meet the criteria to earn AE Squadron Achievement Award. Please refer to CAPR 50-1, Attachment 5.

Although these are only examples of what a squadron may include in their online AEPOA and the Above and Beyond section, the steps to be taken by the next higher (group or wing) aerospace education officer would be the same.

1. The Group AE officer will review all the Squadron Plans of Action submitted online by the AEO and unit commander and design their AEPOA responding to the needs of the units in their group/wing, benefiting a single unit and group/wing wide needs.
2. The Group AEO will develop their own Plan of Action for the needs they see in the group or for themselves. For example:

a. The Group AEPOA may include an individual training plan, mentoring plan for unit AEO's or develop a unit visitation schedule.

b. The Group Plan of Action will be submitted to the Wing Commander and notify the wing DAE.

Wings with Groups:

The Wing DAE will review all group POAs submitted by the group AEO and unit commander, formulating a wing AEPOA responding to the needs of the units in their wing, benefiting a single group or wing wide needs.

a. The wing DAE will develop their own Plan of Action for the needs they see in the wing or for themselves. For example:
    i. The DAE may host a mission conference inviting only the group AEOs.
    ii. The DAE may develop a mentoring program for the state using members who have developed specialties in using the AEX or STEM materials.
b. The Wing AE Plan of Action will be submitted online to the Region Commander and notify the Region DCS/AE.

Wings without Groups:

The Wing DAE, will review all the squadron POAs submitted online by the AEO and unit commander, formulating a wing AEPOA responding to the needs of the units in their wing, benefiting a single group or wing wide needs.

c. The Wing DAE will develop their own AE Plan of Action for the needs they see in their wing, or for themselves. For example:
    i. The DAE may include an overall plan for training AEOs, offering an AEO course during the wing conference.
    ii. The DAE may offer a one-day workshop for AEOs and AEMs.
d. The Wing Plan of Action will be submitted to the Region Commander and notify the Region DCS/AE.

Region DCS/AE

The DCS/AE will review all wing POAs submitted to the Region Commander, develop a Region POA designed to aid the wings and mentor the DAE's as needed.

a. Mentor the Wing DAE
    i. Provide activities and administrative duties in areas like Award submissions,
    ii. Offer Region AEO Schools and workshops.

b. The Region AE Plan of Action will be online for the Region Commander. The DCS/AE may also assist NHQ AE in developing programs and projects.

UNIT AE PLAN OF ACTION CHECKLIST:

This checklist is designed to assist the Unit AEO to finish the online eServices Plan of Action. If you have any questions about content or need other assistance please contact your Group AEO or Wing Director of Aerospace Education.

An AEPOA is a map for the Unit's AE program. It displays the direction the unit intends to go in the next several months. A plan may list training objectives for Cadets, Seniors, an Outreach program, participation in a fly-in, or a school event.

The AEPOA is developed by the unit AEO to fit the needs and personality of the Squadron, Group and Wing.

The Above and Beyond document reflects additional activities the unit AEO is planning in the coming fiscal year.

CAPR 50-1 paragraph 10, AE Plan of Action.

Each squadron will develop an online AE Plan of Action in eServices every fiscal year. This plan represents the AE programs and activities the squadron plans to conduct in the upcoming year. Squadrons, groups and wings can add comments in the Above and Beyond sections of their AE Plans of Action. The plan is then reviewed and acted on by the next higher headquarters and then approved by the wing commander.

AE PLAN OF ACTION.

Pre-Report:

- ☐ Verify with your unit commander that you have the duty assignment as the unit's primary AEO and this assignment is correctly displayed in eServices.
- ☐ Select the correct future fiscal year as the planning period:
  - For an AE Plan of Action submitted 11-30-2018 the correct fiscal year is 2019
  - For an AE Plan of Action submitted 11-30-2019 the correct fiscal year is 2020
- ☐ Discuss with the unit commander the future needs of the Squadron, Group, and Wing.

☐ Deadlines for Report Submissions
Submit online not later than the date listed below.

	AEPOA
○ **Wings with Groups**	
Squadron to Group	30 Nov
Group to Wing	31 Dec
Wing to Region	31 Jan
Region to NHQ	28 Feb
○ **Wings without Groups**	
Squadron to Wing	30 Nov
Wing to Region	31 Jan
Region to NHQ	28 Feb

Answers completed automatically by eServices will be highlighted in GRAY

Questions requiring AEO response are in blue

AEROSPACE EDUCATION OFFICER (AEO) PLAN OF ACTION

☐ **Unit AEO confirmed automated response to questions 1 through 5**.

1. The squadron commander has appointed an AEO
2. The squadron commander has enrolled the squadron's primary AEO in the AE Specialty Track - 215
3. The squadron AEO presently holds an AE Specialty Track rating
4. If yes, what is the highest rating the AEO has achieved?
5. The squadron has enrolled in the AEX program.

☐ **Unit AE officer completes response to questions 6 through 9, *an answer is required*.**

6. **The squadron will complete the AEX program.**
7. **The squadron will complete the Model Rocketry program**
8. **The Squadron will order a STEM Kit.**
9. **The squadron will complete the STEM Kit evaluation.**

☐ **Unit AEO reviews and confirms automated response to question 10.**

10. The primary squadron AEO has earned the Yeager Award.

☐ **Unit AE officer completes response to questions 11 through 18**

11. **If no, then the squadron AEO will earn the Yeager Award.** ***Yes or no response required.***
12. **Additional senior members will complete the Yeager Award.** ***Yes or no response is required.***
13. **The squadron will submit AE award nominations.** ***Yes or no response required.***

14. **If yes, how many will be submitted?** ***Estimate the number of awards nominations-=a numbered response is required.***
15. **A squadron member will recruit an AEM?** ***Yes or no response required.***
16. **A squadron member or members will assist or visit schools.** ***Yes or no response required.***
17. **List any other program involvement here.**
18. **A squadron member will share information about the AE mission and products with a community organization.** ***Yes or no response required.***

ABOVE AND BEYOND

19. Above and Beyond. The squadron may perform AE activities above and beyond the listed items. Upload a document describing these additional activities (or a blank document if none).

☐ The Above and Beyond document reflects additional activities the Unit AE Officer is planning to accomplish in the coming fiscal year.

☐ The Above and Beyond document is in Word or PDF format.

- *A document is required to be uploaded – even if the document is blank, states "none" or "NA".* (Do not use N/A or other symbols)

SUBMIT REPORT

NOTE TO COMMANDERS once "approved,"changes can no longer be made to the document. Please verify document is complete and all units have responded prior to approving the final AEPOA.

Squadron AEO

☐ Unit AEO verifies the document has the proper uploads and answers are complete.

☐ Unit AEO advises unit commander AEPOA is ready to submit.

☐ Unit (squadron) Commander approves the POA. Group AEO and/or Wing DAE will be notified AEPOA Squadron XX000 has been submitted.

Group AEO

☐ Group AEO, after following the above checklist questions 1-18, verifies the Above and Beyond section of *their* report complements and aligns with information provided by subordinate units and the activities proposed by Group will assist and complement the squadron programs. The Group AEO may also speak with the Wing DAE to coordinate joint activities.

☐ Group AEO confirms receipt of the Unit Plan of Action, completes the Group -Wing Plan of Action.

- ☐ Group AEO advises the Commander AEPOA is ready to Approve.
- ☐ Group Commander approves the AEPOA and clicks "submit," sending the report to the next higher command.
    - Once the Commander submits, Group AEO should alert the Wing DAE.

Wing DAE

- ☐ Wing DAE, after following the above checklist questions 1-18, verifies the Above and Beyond section of *their* report complements and aligns with information provided by squadrons and Groups, the activities proposed by Wing AE will assist and complement the subordinate unit programs. The Wing DAE may also speak with the Region DCS/AE to coordinate joint activities.
- ☐ Wing DAE confirms receipt of the subordinate unit's AE Plan of Action, completes the Wing Plan of Action.
- ☐ Wing DAE advises the Commander, AEPOA is ready to approve and submit to Region Commander.
- ☐ Wing Commander approves the AEPOA and clicks 'submit,' sending the report to the Region Commander. It is suggested Region Commanders discuss the AEPOA with Region DCS/AE prior to clicking "approve."
    - Once the Commander clicks "Notify Region," the Wing DAE should alert the DCS/AE

9. AE Activity Report

Each squadron will complete the online AE Activity Report in eServices every year. This report records all of the unit's 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 Activity Report contains all the information pertaining to your unit's aerospace education activities during the ending 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.
(Attachment 1 AE Activity Report Checklist)

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 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 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 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 Activity Report and submit to the Wing Commander who approves and submits online for Region Commander review.

Wings without Groups

The DAE will review all group Activity Reports submitted by the AEO.

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

Region DCS/AE

The DCS/AE will review all wing 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 past few years:

- 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 annual Activity Report, we may not discover 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 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.

CAPR 50-1 Paragraph 11, AE Activity Report

"Each squadron will complete the online AE Activity Report in eServices every year. The report records all of the unit's 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."

AE 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:
  - For an Activity Report submitted 10-30-2018 the correct fiscal year is 2018
  - For an Activity Report submitted 10-30-2019 the correct fiscal year is 2019
- ☐ Unit AEO verifies the unit AE Plan of Action has been completed online and approved by the Unit Commander.
- ☐ Deadlines for Report Submissions

	AE Activity Report
○ **Wings with Groups**	
Squadron to Group	30 Oct
Group to Wing	30 Nov
Wing to Region	31 Dec
Region to NHQ	28 Feb
○ **Wings without Groups**	
Squadron to Wing	30 Oct
Wing to Region	31 Dec
Region to NHQ	28 Feb

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

ANSWERS COMPLETED AUTOMATICALLY BY E-SERVICES WILL BE HIGHLIGHTED IN GRAY
QUESTIONS REQUIRING AEO RESPONSE ARE IN BLUE

UNIT ACTIVITY REPORT

Aerospace Education Officer (AEO)
Report located: https://www.capnhq.gov/preview/eServices.aspx?area=Aerospace_Education

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

On-line questions-

1. **The squadron submitted the online squadron AE POA by 15 October last year.**
2. The squadron commander appointed a primary AEO.
3. The squadron commander is presently serving as the unit's AEO.
4. The squadron has other senior members serving as unit assistant AEOs listed in NHQ database.

Aerospace Education (AE) Specialty Track

On-line questions-

5. The squadron's primary AEO is enrolled in the AE Specialty Track.
6. If not enrolled, is it because the primary AEO has the master rating?
7. If no, what is the highest rating the primary AEO has achieved?

AE Excellence Award Program (AEX)

☐ Unit AEO specifically answers question 9 and verifies answers to questions 8 and 10 are correct.

8. The squadron enrolled in the AEX program.
9. **How many participated in the AEX program, *an answer is required even if the Unit did not complete the program.***
10. The squadron completed the AEX program.

AEX Program information can be located:
http://ae.capmembers.com/programs/aex_for_senior_members/
https://www.capnhq.gov/CAP.MemberReports.Web/Modules/MemberReports.aspx?ae=1

MODEL ROCKETRY PROGRAM

☐ Unit AEO answers questions 11 and 12, *an answer is required whether the Unit did or did not participate or complete the Model Rocketry Program.*

- Model Rocketry program information will be located: https://www.gocivilairpatrol.com/programs/aerospace-education/programs/model-rocketry/

On-line questions-

11. **The squadron completed the Model Rocketry program.**
12. **If yes, how many rocket badges were awarded?**

CAP AE STEM KIT PROGRAM

☐ Unit AEO answers questions 13 and 14, *an answer is required whether or not the Unit participated or completed one or more of the STEM Kits.*

- STEM Kit Program information can be located: https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits/
  - A report can be downloaded on all STEM Kit recipients.

13. **The squadron ordered and received an AE STEM Kit.**
14. **The squadron completed the AE STEM Kit evaluation.**
15. **How many members participated in the AE STEM Kit program?** ***A number answer whether 0 or 100's is required.***

YEAGER AWARD

☐ Unit AEO verifies automated answers to questions 16 through 18.

-

16. The primary squadron AEO earned the Yeager Award.
17. Additional senior members completed the Yeager Award.
18. Percentage of total senior members who have earned the Yeager Award.
    - Question 18 has been completed by e-Services; however, this information may be a month old. Confirmation of the current number Yeager recipients will be located: https://www.capnhq.gov/CAP.MemberReports.Web/Modules/MemberReports.aspx?ae=1 https://www.capnhq.gov/preview/eServices.aspx?area=Command

AE AWARD NOMINATIONS

☐ Unit AEO confirms; Unit Awards Committee (if any) and Unit Commander have submitted AE Award(s) to Group / Wing awards committee.

On-line questions-

19. **The squadron submitted AE award nominations.**
20. **If yes, how many nominations were submitted.**
21. **List nominees and awards for which they were submitted.**

AEROSPACE EDUCATION MEMBER (AEM)

☐ Unit AEO confirms recruitment of AEM(s).

On-line questions-

22. **A squadron member recruited an AEM.**
23. **List the names of AEMs recruited this fiscal year.**
    - A list of AEMs will be located: https://www.capnhq.gov/CAP.MemberReports.Web/Modules/MemberReports.aspx?ae=1

EXTERNAL AEO ACTIVITIES

☐ AEO confirms the Units outreach activities.

On-line questions-

24. **A squadron member or members assisted or visited schools.**
25. **List any other program involvement here.**
26. **A squadron member shared information about the AE mission and products with a community organization.**
27. **List the community organizations you assisted.**

ABOVE AND BEYOND

This uploaded document shares information not already included in the first 27 questions. Above and Beyond provides a look at how your Unit is achieving AE *beyond* what is expected by regulation.

On-line question-

28. **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*).**

☐ The unit AEO verifies the Above and Beyond section of Unit Activity Report has accepted the uploaded document. *A document is required to be uploaded – even if the document is blank, states "none" or "NA."*

☐ The Above and Beyond document is in **Word, Excel or PDF format**.

☐ The Above and Beyond document may include photographs of activities.

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

NOTE TO COMMANDERS: Once "approved," changes can no longer be made to the document. Please verify document is complete and all units have responded prior to approving the final AE Activity Report.

Squadron AEO

- ☐ Unit AEO verifies the document has the proper uploads and answers are complete.
- ☐ Unit AEO advises Unit Commander AE Activity Report is ready for approval.
- ☐ Unit (squadron) Commander approves the AE Activity Report. Group AEO and/or Wing DAE will be notified AE Activity Report for Squadron XX000 has been submitted.

Group AEO

- ☐ Group AEO, after following the above checklist questions 1-18, Group AEO and Wing DAE review each Unit report verifies the Above and Beyond section of *their* report includes subordinate unit activities and includes the Group AE activities and notifies the Group Commander the report is ready to be submitted to Wing Commander and DAE.
- ☐ Group Commander approves the AE Activity Report and clicks "approved," which sends the report to the next higher command.
    - Once the Commander submits, Group AEO should alert the Wing DAE.

Wing DAE

- ☐ Wing DAE, after following the above checklist questions 1-18, verifies the Above and Beyond section of *their* report includes subordinate unit activities and includes the Wing AE activities, notifies the Wing Commander the report is ready to be approved and submitted to Region Commander.
- ☐ Wing DAE confirms receipt of the subordinate unit's AE Activity Reports and completes the Wing AE Activity Report.
- ☐ Wing DAE advises the Commander that the AE Activity Report is ready to approve and submit to Region Commander.
- ☐ Wing Commander approves the AE Activity Report and clicks "submit,"sending the report to the Region Commander. It is suggested Region Commanders discuss the AE Activity Report with Region DCS/AE prior to clicking "approve."
    - Once the Commander clicks "Notify Region," the Wing DAE should alert the DCS/AE.

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.

10. Inspections

To assure that CAP resources, funds and personnel are being effectively applied and that CAP programs/missions are efficiently administered, the compliance inspection program was introduced. It had come to the attention of CAP leaders and USAF personnel that there were some irregularities and lack of proper accountability in the management of both funds and certain equipment. The inspection program was introduced because the Air Force wanted complete accountability for how their funding was being used by CAP. It also brings CAP into better alignment with USAF standard procedures. The inspection program remains a Command program and Commanders at each level are responsible for its success. The inspections are conducted by Inspector General (IG) personnel in support of the Commander.

The inspection program has been gradually evolving since its beginning. New grading systems have been introduced from time to time. The make-up of the inspection teams (originally six members plus trainees) has grown leaner due to fiscal limitations. More information supporting the inspection is submitted by computer application prior to the arrival of the team. The time the inspection team is "on-site" has been substantially reduced, due to the streamlining of information. Some inspections are conducted by telephone interviews based on the submitted data, so there is a somewhat reduced requirement for "eyes on, hands on" (EOHO) with actual documents at the time of the inspection. Many programs now have far fewer questions than was the case several years ago.

AE is one of those areas, having reduced the number of questions from fourteen to five. The questions can now largely be answered based on the electronic submission of the AE Plan of Action (PoA) and AE Activity Report. (See Chapters 8 and 9 and the AE web page for details on the completion of these reports.) This is in part why the AE inspection interview may be accomplished by phone.

If you have been involved in an inspection in the past, whether at the Wing level (Compliance Inspection [CI]) or at the squadron level, (Subordinate Unit Inspection [SUI]), the rules of conduct for an inspection have changed, but not the expectation that your unit will be compliant with the Regulations. The grading system has changed as well.

The CAP Regulation governing the inspection process is explained in great detail in CAPR 20-3. It is highly recommended that everyone in your unit who will be involved in an inspection read this regulation and be thoroughly familiar with it. It is relatively short but does clearly explain exactly what to expect during an actual inspection and through the process for clearing any discrepancies. Many of you may also find the Inspection Knowledge Base (IKB) useful. (Find this at capmembers.com at CAP national HQ in the Inspector General module.)

Who is to be inspected? CAPR 20-3 lists Wings, Groups and Squadrons. Groups have not been inspected in the past, but when that is implemented, the experience should be much like an SUI. Patron and Legislative units are currently excluded from the inspection requirement. Regions are excluded because the nature of their operation is so much different from other CAP units. In any case the submission of materials, worksheets, questions asked and evaluation procedures remain standard for all units. Technically an inspector cannot ask additional questions other than those prepared for each discipline, but it is not unusual for clarifying questions to be asked.

Who conducts the inspection? In Wing Compliance Inspections, a team of CAP IG and CAP-USAF IG personnel conduct a joint inspection of each Wing. Prior to a Wing CI, the Air Force sends a team to conduct a Staff Assistance Visit (SAV). This is a helpful step to further prepare for the CI. For SUIs the Wing needs to provide a sufficient number of Inspector General Assistants and Inspection Augmentees (requires a special training class) to conduct the required SUI program inspections. Teams must have at least two members. All unit staff officers should be available or present for the unit SUI.

When will your inspection occur? Wing CIs are conducted approximately every 48 months. This is simply a pragmatic way to deal with all the CAP units. By spacing the schedule over 48 months, it allows for some catch-up time between inspections for team members and still allows all the Wings to be covered in a predictable manner.

The SUI is a review of a unit's program management, mission accomplishment and regulatory compliance. The AE program has been greatly simplified with the availability of electronic filing of the Plan of Action and Activity Report. SUIs are expected to occur every 24 months. Between SUIs, a unit conducts a self-inspection. The questions remain the same as for an SUI. If a unit exceeds 27 months between SUI visits, the Wing Commander must suspend the unit's activities until the SUI can be completed. For the exact schedule of a unit SUI, there is an inspection program plan of action for all the subordinate units each year developed by the IG with the concurrence of the Wing Commander.

What are the questions the unit personnel will need to answer? Currently there are five questions included in an AE inspection. These are usually easily answered on the electronic submission forms for the PoA and Activity Report.

The questions are as follows:

- Has the unit submitted a Plan of Action?
- Is there an external AE program in place?
- Was an Activity Report submitted?
- Is there an internal AE program?
- Is the DAE/AEO enrolled in and pursuing the AE Specialty Track?

Has your unit exceeded the basic program requirements? There is space on the electronic form where such "over and above" activities can and should be noted.

What grades are earned during an inspection? There has always been a struggle to maintain objectivity in the grading system. Many different views of grades have been tried. 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.

Wings and Squadrons as whole units are deemed to be effective or ineffective. An effective unit is observed to have performance or operation that meets 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.

Where can I find the supporting materials for an inspection? First, regulation CAPR 20-3 is the most comprehensive guideline for the inspection process. As mentioned above, the IKB will be helpful both before the inspection and afterward should there be a need to clear any discrepancies. CI and SUI worksheets are available for download at: www.capmembers.com/cap.national.hq/inspector.general/index.cfm. The recommended report format is in the IG knowledge base, but that does not affect most units.

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, you should come through your inspection with flying colors. Do not be afraid to ask others in your unit if you have questions or concerns. Preparation for the inspection process is often a group effort.

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 that have made outstanding contributions, out of selfless devotion, to the advancement of youth in aerospace activities.

☐ Category I - CAP Cadet ☐ Category II - CAP Senior Member
☐ Category III - Individual/Organization ☐ Category IV - Lifetime Achievement

NOMINEE / ORGANIZATION [Last Name, First Name, Initial]				Home Address (Street Number, City, State, Zip Code)
Home Telephone Number	Best Contact Number			E-mail Address
CAP ID Number If current CAP member	Date Joined CAP	CAP Grade	Unit Charter Number	Date Mitchell Award Earned **OR** Date of Yeager Award

JUSTIFICATION [Continue on reverse]:

Nominated by _____ _____
(Printed / Typed Name) (Signature)

Nominator's Relationship to the Nominee _____ _____
Professional Personal

Nominator's Address _____
City State Zip Code

Telephone _____ _____
Business Residence FAX E-Mail Address

CAP FORM 50-1 PREVIOUS EDITIONS WILL NOT BE USEDOPR/ROUTING: AE

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

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/ORGANIZATION: Nominees may include 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 **over a continuous period of up to ten years**.

CATEGORY IV – LIFETIME ACHIEVEMENT: Nominees must be CAP members, who are also, 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 more than twenty years**.

JUSTIFICATION [continued]:

The Civil Air Patrol Aerospace Education 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 #	Date of Yeager Award

Justification (Attach additional sheet if necessary)

Nominated By

Grade, Name, Title	Date

Phone #	E-mail Address

CAP FORM 50-2, JUNE 18 **See Instructions on Reverse** **OPR/ROUTING: PD**

The Civil Air Patrol Aerospace Education Officer of the Year Award

Purpose: The Civil Air Patrol 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 to 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:

1. One-page overview describing why nominee deserves this award. (Use Justification block on nomination form)
2. One-page letter of recommendation by person nominating the individual.
3. Two-page photograph collage with an additional one-page description 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:

Three extra pages of documentation that enhance the nomination package. This may include media coverage of nominee's AE events, special recognition received by nominee or nominee's unit for aerospace performance, etc.

The Civil Air Patrol Aerospace Education Teacher 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

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 additional sheet if necessary)

Nominated By	Title

Nominator's Contact Information *(If other than nominee)*

Phone	E-mail Address

CAP Form 50-3 **See Instructions on Reverse** **OPR/ROUTING: AE**

The Civil Air Patrol Aerospace Education Teacher of the Year Award

Purpose: The Civil Air Patrol Aerospace Education Teacher of the Year Award is a national-level award established to recognize and reward any Civil Air Patrol member who is a certified K-12 teacher for outstanding accomplishments in Aerospace Education and for possessing those honorable attributes we expect from American teachers.

Nomination Guidelines:

5. Any Aerospace Education Member (AEM) or Senior Member of CAP who is a certified K-12 teacher is eligible.
6. Eligible teachers may nominate themselves or be nominated by someone else.
7. 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.
8. The winner will be notified in early May in order to make plans to attend the CAP summer National Conference.

Nomination Package Requirements:

4. One-page overview describing why nominee deserves this award.
5. One-page letter of endorsement by nominee's school principal or other educational leader.
6. Two additional one-page letters from colleagues, students, parents, or others that demonstrate nominee's exemplary teaching performance in aerospace education.
7. 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 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 education

Optional:

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

Nomination Procedures:

Two copies of nomination package (10-page maximum) should be sent to the Wing Director of Aerospace Education, who will ensure the package is reviewed for possible selection at the wing level. In order to be considered, nomination packages must be received at the wing, region and national levels by the deadlines in attachment 2 of CAPR 50-1.

Award Elements:

- Free room and registration to the Civil Air Patrol's annual National Conference
- $1000 cash award and Commemorative Plaque (to be presented at CAP's annual National Conference awards ceremony)

AFA CAP AEROSPACE CADET
OF THE YEAR AWARD

This award recognizes the outstanding aerospace 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 (last name, first name, initial)	Organization
Home Address (Street #, City, State, Zip Code)	Home Telephone
E-mail Address	Best Contact Number
CAP Grade	Job Title

JUSTIFICATION (Continue on reverse if needed)

Nominated by _____

(Print/Type Name) (Signature)

Nominator's Address _____

City State Zip Code

Telephone _____

Business Residence E-mail Address

CAP Form 50-4, Feb 18

RECOMMENDATION FOR DECORATION	DATE

TO: (National, Region, Wing, or Group)	**FROM:** (Originating Organization and Address)

1. RECOMMEND INDIVIDUAL/UNIT INDICATED BE AWARDED:

- ☐ Silver Medal of Valor
- ☐ Bronze Medal of Valor
- ☐ Distinguished Service Medal
- ☐ Exceptional Service Award (Approved by Region)
- ☐ Meritorious Service Award
- ☐ Commander's Commendation Award (Approved by Wing, Region or National)
- ☐ Achievement Award (Approved by Group)
- ☐ Certificate of Recognition for Lifesaving (Approved by Wing or Region)
- ☐ Unit Citation Award

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**

CAP FORM 120, DEC 08 *Previous editions may be used.*

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.

CAP FORM 120, DEC 08 Reverse

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: _____

CAP FORM 164, DEC 14 **OPR/ROUTING: COD**