



Civil Air Patrol Squadron Leadership School

Instructor Guide



HQ CAP/ETS
April 1999

FOR PAGE 83

SECTION 8

CONCEPT: Aerospace Education (AE)

APPROXIMATE TIME: 2-3 Hours (2 hours minimum requirement)

SUGGESTED PRESENTER: Aerospace Education Officer

OBJECTIVES:

Students will be able to:

1. Explain the aerospace education mission.
2. List the mission staff associated with this mission.
3. Explain to another senior member how to become involved in the aerospace education mission.

MATERIALS:

- CAPR 280-2, *Civil Air Patrol Aerospace Education Mission*
- CAPR 52-16, *Cadet Training Program*
- *Aerospace Dimensions* textbook and *Teacher's Guide*
- *Aerospace: The Journey of Flight* textbook and *Instructor's Guide*
- CAPP 215T, 215S, 215M, *Aerospace Education Officer*
- CAPP 15, *The Aerospace Education Officers' Handbook*
- *Aerospace 2000* (order through HQ CAP/ETA)

INTRODUCTION

The Public Law 476 states that the objectives and purposes of CAP were "to provide an organization to encourage and aid American citizens in the contribution of their efforts, services, and resources in the *development of aviation* and in the *maintenance of air supremacy...*" and to "provide *aviation and education training*, especially to the senior and cadet members..."

PURPOSE/RATIONALE

In this lesson, we will take a close look at CAP's aerospace education mission, the mission staff involved, and how you can become involved in the mission. You will hear from your aerospace education officer who will present you with an aerospace lesson and inform you on how to become involved in the mission.

INFORMATION

The aerospace education officer should present an aerospace education lesson of their choosing. This lesson should excite student interest in the field of aerospace education. "Hands-on" lessons or demonstrations are recommended for this session. This will be many students' first introduction to a CAP internal aerospace education lesson. The aerospace lesson should last no more than 30 minutes. Some topics might include weather, airplanes, balloons, rockets, or spacecraft. Many other interesting topics are covered in Volumes 1 thru 5 of *AE 2000*. The purpose of performing this activity is not the activity itself, but to constructively show how AE can easily be implemented at the grassroots level of CAP and especially how it can stimulate cadet interest in CAP.

****** TO RECEIVE CREDIT FOR THE SLS AN AEROSPACE ACTIVITY COMPONENT
MUST BE INCLUDED.******

LECTURE (approximately 1 hour)

The Internal Program

A. *AE 2000* Award Program

B. Cadet

1. 1. Outlined in CAPR 280-2, CAPP 15, and CAPR 52-16
2. *Aerospace Dimensions (Phase I & II cadets)*
 - a) *Student Guide*
 - b) *Teacher's Guide*
3. *Aerospace: Journey of Flight (Phase III & IV cadets)*
 - a) *Student Guide*
 - b) *Instructor Guide*
 - c) Encampments and flight orientations
 - d) Aerospace events discussion (recommended to last at least to minutes during each unit meeting)

C. Senior Members—AEPSM

1. Aerospace Education Program for Senior Members (AEPSM)
 - a) *Aerospace: The Journey of Flight*
 - b) Charles E. Yeager Aerospace Education Award
2. Aerospace education officer specialty track
 - a) Show the pamphlets
 - b) Briefly explain the contents
 - c) Members who receive a master rating in aerospace education receive the Crossfield Award

II. External Program—Presents aerospace education to the public

A. National Congress on Aviation and Space Education (NCASE)

1. Annual educational symposium sponsored by CAP
2. Premier aerospace education conference
3. Provides forum for aerospace education leaders to speak out on aerospace education issues
4. Provides forum for aerospace education teachers to teach other teachers.

B. Aerospace education Workshops (get sample AE packet from HQ CAP/ETA)

1. Supports aerospace education workshops in school systems and colleges
2. Provides educators with basic knowledge of aerospace and are conducted as part of an educational institution's course of study

C. Aerospace education in local schools

1. Promotes teacher aerospace education efforts
2. Provides materials and resource people
3. Supports assembly programs

III. Aerospace Education Awards (See CAPR 280-2)

A. Aerospace Education Mission Awards

1. Points are earned in four major areas: staffing, internal program, external program, and plan of action
 2. HQ CAP/ETA annually determines national top three wings in aerospace education and regional top wings in aerospace education
- B. Frank G. Brewer – Civil Air Patrol Memorial Aerospace Awards
1. Recognition is given to individuals and organizations who have made outstanding contributions, out of selfless devotion, to the advancement of youth in aerospace education.
 2. CAP cadet
 - a) Must have earned the Billy Mitchell Award and must be a current CAP member
 - b) Nomination should include strong justification, which supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection
 3. CAP senior member
 - a) Must be a current CAP member
 - b) Nomination should include strong justification, which supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection
 4. Individuals – Nominees include any of the following who performed a noteworthy aerospace achievement or made significant contributions to the aerospace field over a continuous period of up to 10 years
 - a) Educators
 - b) State aviation officials
 - c) Fixed-base operators
 - d) State superintendents of public instruction
 - e) Members of the Armed Forces
 - f) Members of Congress
 - g) Other individuals
 5. Organizations—Nominees may include any of the following that have contributed significantly to the aerospace field over a continuous period of up to 10 years. Those eligible include: elementary or secondary schools; colleges, or universities; airlines; aircraft industries; flying schools; governmental agencies; associations; other organizations
 6. Anniversary award
 - a) Presented every 5 years (2000, 2005, etc)
 - b) Nominees may include any of the following who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field for a period of more than 20 years: CAP members; educators; state aviation officials; fixed-base operators; state superintendents of public instruction; members of the Armed Forces; members of Congress, and other individuals
- C. Crown Circle for Aerospace Education Leadership Award

1. One of the highest honors bestowed in the field of aerospace
2. Nominees considered by Congress Planning Committee
3. Anyone can submit a nomination to HQ CAP/ETA
4. Nominees can include any of the following who have demonstrated performance in outstanding leadership in aerospace education over an extended term at a high level and great quality, and **may** be either current or retired employees or associates of any of the Congress sponsors, supporters, or affiliates: individuals, organizations, associations, colleges or universities, school systems, governmental agencies, industries, etc.

D. A. Scott Crossfield Aerospace Education Teacher of the Year Award

1. Recognizes and rewards aerospace education teachers for outstanding accomplishments in aerospace education and for possessing those outstanding attributes expected of American educators
2. Award consists of \$1,000 cash and membership in the Crown Circle
3. Presented at National Congress

IV. Ways that senior members can become involved in the aerospace education mission

- A. Qualify and work in the aerospace education officer specialty track
- B. Complete Aerospace Education Program for Senior Members (AEPSM)
- C. Participate in National Congress on Aviation and Space Education
- D. Conduct, promote, and attend aerospace education conferences and workshops
- E. Volunteer as instructor/teacher/mentor in CAP composite or cadet squadrons assisting cadets in learning aerospace subjects and passing aerospace exams

Suggested Teaching Strategies/Evaluation

1. It is imperative the student understands that aerospace education is the responsibility of **ALL** CAP members.
2. Stress to the student that Aerospace Education for Senior Members is not just the AEPSM. It is an on-going study and should be included in all aspects of training.
3. Stress to the students the importance of a strong aerospace education program in accomplishing the overall mission of CAP.
4. To check student knowledge of the aerospace mission, conclude the lesson with a question and answer period

Ask students:

What are the two member components of the internal aerospace education program?

How does CAP implement its internal program? What does it involve? Who is the

external AE program target audience? How does CAP implement the external aerospace education program? What does it involve?

Student Guide Material

It is important to review the materials the students are going to be using. The *Student Guide* is to be used as a guided note-taking activity. This guide aids the student in focusing on the instructional material and it also serves as a valuable resource guide for the student. Please allow ample time for the students to complete the guide. The *Student Guide* is correlated to the slide presentation. The students become frustrated when they

are not able to fill in the blanks. It may be necessary to provide a question and answer session at the end of the lesson to provide the students with missing material. To aid this process, you may want to fill in the missing material.

AEROSPACE EDUCATION

The law (PL 476) stated the objectives and purposes of CAP were “to provide an organization to encourage and aid American citizens in the contribution of their efforts, services, and resources in the development of aviation and in the maintenance of air supremacy...” and “to provide aviation and education training, especially to the senior and cadet members.”

The Internal Program

1. AE 2000
2. Cadet
3. Senior

Cadet AE Program

1. Outlined in CAPR 280-2, CAPP 15, and CAPR 52-16
2. Texts are: *Aerospace Dimensions*, for Phase I & II cadets, and *Aerospace: The Journey of Flight*, for Phase III & IV cadets.

Aerospace Education Program for Senior Members (AEP SM)

1. Text is *Aerospace: The Journey of Flight*
2. Seniors earn the Charles E. Yeager Aerospace Education Award
Aerospace Education Officer Specialty Track

Members who receive a master rating in aerospace education receive the _____ Award.

External Aerospace Education

Presents aerospace education to the _____.

National Congress on Aviation and Space Education (National Congress)

1. _____ educational symposium sponsored by CAP.
2. Provides a forum for Aerospace _____ and _____ to speak out on aerospace issues and to teach other teachers.

Aerospace Education Workshops

1. CAP supports workshops in _____ and _____.
2. Workshops provide educators with basic knowledge of _____ and _____ are a part of an institution’s course of study.

Aerospace Education in Local Schools

Civil Air Patrol

- Promotes teacher aerospace education efforts
- Provides materials and resource people
- Supports assembly programs

Aerospace Education Mission Awards

- ? Points are earned in four major areas: staffing, internal program, external program, and plan of action
- ? HQ CAP/ETA determines _____ top wings in aerospace education and declares _____ winners

Frank G. Brewer: Civil Air Patrol Memorial Aerospace Awards

Recognition is given to _____ and _____ who have made outstanding contributions, out of selfless _____, to the advancement of youth in _____ activities.

Frank G. Brewer for CAP Cadets

- Must have earned the _____ and must be a _____ CAP member
- Nomination should include a strong justification which supports an outstanding _____ or significant contribution to the _____ during the calendar year preceding the selection

Frank G. Brewer for CAP Senior Members

- Must be a _____ CAP member
- Nomination should include a strong justification which supports an outstanding _____ or significant contributions to the _____ during the calendar year preceding the selection

Frank G. Brewer for Individuals

Nominees should include individuals who have performed a _____ aerospace achievement or have made significant contributions for a period of up to _____ years. Eligible individuals include:

Educators, state aviation officials, fixed-base operators, state superintendents of education, members of Armed Forces, members of Congress

Organizations

Nominees should include any of the following who have contributed significantly to the aerospace field over a continuous period of up to _____ years.

Frank G. Brewer Anniversary Award

- Presented every _____ years. Nominees should include _____ who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field for a period of more than _____ years.

Crown Circle Award

- One of the highest honors bestowed in the field of aerospace
- Nominees considered by _____

- _____ can submit a nomination to HQ CAP/ETA

Nominees for Crown Circle

Nominees can include anyone who has demonstrated performance of outstanding _____ in aerospace education over an extended term at a high level and great _____ and may be either current or retired employees or associates of any of the National Congress sponsors, supporters, or affiliates.

Who is eligible for the Crown Circle Award?

- _____
- _____
- _____
- _____
- _____
- _____

A. Scott Crossfield Award

- Recognizes and _____ aerospace education teachers for outstanding accomplishments in aerospace education and for possessing those _____ expected of American educators
- Award consists of _____ cash and membership in the _____

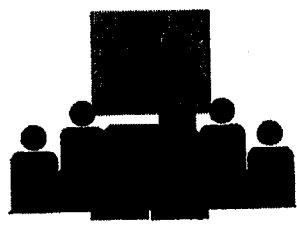
How can senior members become involved in the Aerospace Education mission?

1. _____
2. _____
3. _____
4. _____
5. _____

Copies of Slides

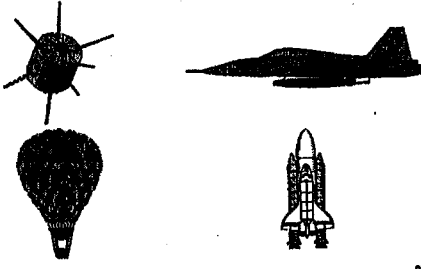
Included in your instructional materials are copies of the slides you will be using as an instructional aid. Review the materials. You may want to add additional slides.

Squadron Leadership School



1

Aerospace Education



2

Introduction

Public Law 476 stated that two of the objectives and purposes of CAP were "to provide an organization to encourage and aid American citizens in the contribution of their efforts, services, and resources in the *development of aviation* and in the *maintenance of air supremacy...*" and "to provide *aviation and education training*, especially to the senior and cadet members...."

3

The Internal Program

- Cadet members
- Senior members

4

Cadet Aerospace Education Program

- > Outlined in CAPR 280-2, CAPP15 and CAPM 50-16
- > *Aerospace: The Flight of Discovery*
- > Encampments and flight orientations
- > Aerospace current events discussion

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Aerospace Education Program for Senior Members (AEPSM)

- > Voluntary program
- > *Aerospace: The Challenge*
- > Charles E. Yeager Aerospace Education Award

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Aerospace Education Officer Specialty Track

- > Three Ratings: Technician, Senior and Master
- > Members receiving the master rating are eligible to receive the A. Scott Crossfield Award. (Details are outlined in CAPM 50-17)

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The External Program

Presents aerospace education to the public.

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National Congress on Aviation and Space Education

- > Annual educational symposium sponsored by CAP
- > Premier aerospace education conference
- > Provides forum for aerospace education leaders to speak out on relevant issues
- > Provides for master teachers to share their expertise

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Aerospace Education Workshops

- > CAP supports workshops in school systems and colleges.
- > Workshops provide educators with basic knowledge of aerospace and are a part of an educational institution's course of study.

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Aerospace Education in Local Schools

Civil Air Patrol

- > Promotes teacher aerospace education efforts
- > Provides materials and resource people
- > Supports assembly programs


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Aerospace Education Awards




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Aerospace Education Mission Awards

- > Points are earned in four major areas:
 - staffing
 - internal program
 - external program
 - plan of action
- > HQ CAP/ETA selects three top wings in aerospace and declares region winners


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Frank G. Brewer

Civil Air Patrol Memorial Aerospace Awards


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Frank G. Brewer

Recognition is given to individuals and organizations who have made outstanding contributions, out of selfless devotion, to the advancement of youth in aerospace activities.


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Frank G. Brewer *for* CAP Cadets

- > Must have earned the Billy Mitchell Award and must be a current CAP member
- > Nomination should include a strong justification which supports an outstanding aerospace achievement or significant contribution to the aerospace field during the calendar year preceding the selection


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Frank G. Brewer *for* CAP Senior Members

- > Must be a current CAP member
- > Nomination should include a strong justification which supports an outstanding aerospace achievement or significant contributions to the aerospace field during the calendar year preceding the selection

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Organizations

Nominees include the following who have contributed significantly to the field over a period of up to 10 years:

- > Elementary or secondary school teachers
- > Colleges or universities
- > Airlines/aircraft industries/flying schools
- > Government agencies
- > Organizations

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Frank G. Brewer *for* Individuals

Nominees include individuals who have performed a noteworthy aerospace achievement or have made significant contributions over a period of up to 10 years.

- > Educators
- > State aviation officials
- > Fixed-base operators
- > State superintendents of public instruction
- > Members of the Armed Forces
- > Members of Congress
- > Other individuals


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Frank G. Brewer Anniversary Award

- > Presented every 5 years (2000, 2005, etc.)
- > Nominees may include any individuals who have performed a noteworthy aerospace achievement or made significant contributions to the aerospace field for a period of more than 20 years


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Eligible Nominees for Anniversary Award

- > CAP members
- > Educators
- > State aviation officials
- > Fixed-base operators
- > State superintendents of public instruction
- > Members of the Armed Forces
- > Members of Congress
- > Other individuals


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Crown Circle for Aerospace Education Leadership

- > One of the highest honors bestowed in the field of aerospace
- > Nominees considered by National Congress Planning Committee
- > Anyone can submit a nomination to HQ CAP/ETA


22



Nominees for Crown Circle

Nominees can include anyone who has demonstrated performance of outstanding leadership in aerospace education over an extended term at a high level and great quality, and may be either current or retired employees or associates of any of the National Congress sponsors, supporters, or affiliates.

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Who is eligible for the Crown Circle Award?

- > Individuals
- > Organizations
- > Associations
- > Colleges or universities
- > School systems
- > Government agencies
- > Industries

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A. Scott Crossfield Award

- > Recognizes and rewards aerospace education teachers for outstanding accomplishments in aerospace education and for possessing those honorable attributes expected of American educators
- > Award consists of \$1,000 cash and membership in the Crown Circle
- > Award includes induction into the National Congress Crown Circle

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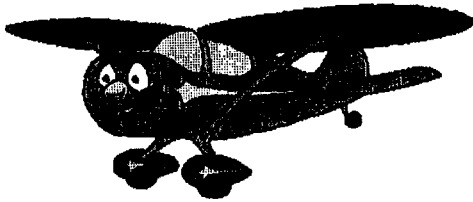
How can senior members become involved in the AE mission?

- > Aerospace education officer specialty track
- > Aerospace Education Program for Senior Members (AEPSM)
- > National Congress
- > Aerospace conferences and workshops

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Questions?



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