

CAP Unit Aerospace Education Excellence Award Program 2005



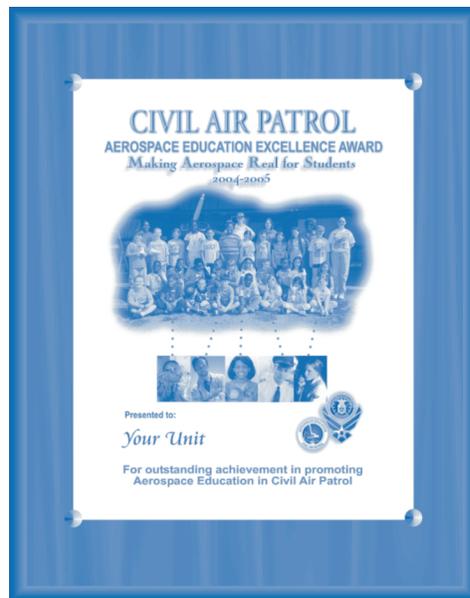
Application Booklet

AEX UNIT AWARD

AEX AWARD PROGRAM

The Award

Units can earn the Aerospace Education Excellence (AEX) Award.



This beautiful 11-1/2" X 14" walnut-type plaque with a top quality, first-of-its-kind award certificate would be a proud tribute to your unit's Aerospace Education program.

The Rules

The term "Unit Commander" refers to any commander at any organizational level of Civil Air Patrol from Flight through Region.

Participating commanders and their Aerospace Education Project Officer must agree in writing to complete the program (see "**THE AGREEMENT**" on the next page).

This program must be completed between October 2004 and September 2005. You may now choose when you want to participate in AEX. All six activities must be selected from the **AEX Activity Book(s)** that will be mailed to you when National Headquarters/LMA receives your **AGREEMENT**. All booklets will be mailed when your completed agreement is received. All activities will be reported using the enclosed one page reporting form (electronic reporting is available).

In addition to the six activities, one **AEROSPACE EDUCATION (AE) DAY** of no less than two hours duration must be completed at some time during the twelve-month period. Note: The normal six activities cannot be used to satisfy the additional AE Day requirement. The content of the AE Day is left to the unit commander's judgement. Activities such as airport tours, aviation/space museum visits, rocket launches, ground school training classes, orientation flights etc., are acceptable.

National Headquarters, Civil Air Patrol
Aerospace Education Division
105 South Hansell Street, Building 714
Maxwell Air Force Base, Alabama
36112-6332

Phone: 334-953-5004

FAX: 334-953-4235

E-mail: aex@cap.gov

<http://www.cap.gov>

AEX UNIT AWARD



AGREEMENT FORM

Send this form to National Headquarters / LMA to participate in this year's Aerospace Education Excellence Program.

Remove this page from the booklet, fill out, fold and mail. The address is pre-printed on the back.

Did your unit sign up for the **Aerospace Education Excellence Award** program last year?

_____ Yes _____ No

Did you complete the program?

_____ Yes _____ No



COMPLETION CERTIFICATE

Cadet and senior members who complete the program will receive a very nice certificate to recognize their efforts. Please indicate the number needed when you send in your one page reporting form.

THE AGREEMENT

Charter Number _____

Wing _____

Email _____

Unit Name _____

Address _____

City _____

State _____ Zip Code _____

As Unit Commander, I agree to work in partnership with my Aerospace Education Project Officer to implement the AEX Award Program. Our signatures below certify our commitment to the program and our commitment to enhancing the aerospace education mission of Civil Air Patrol.

Please send us the **AEX II, and AEX II Volume II** activity books so that we may plan our program.

Signature of Unit Commander

Signature of Unit Aerospace Education Project Officer

Date _____

NOTE: Activity books will be mailed out shortly after your agreement form is received at National Headquarters.

**National Headquarters, Civil Air Patrol
Aerospace Education Division
105 South Hansell Street / Building 714
Maxwell Air Force Base, Alabama 36112-6332**



.....Fold Here.....

Aerospace Education Excellence Award Program

Place
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NATIONAL HEADQUARTERS, CIVIL AIR PATROL
Aerospace Education Division
105 South Hansell Street, Building 714
Maxwell Air Force Base, Alabama 36112-6332

AEX UNIT AWARD

AEX AWARD REPORT

Charter Number _____

Wing _____

Unit Name _____

Address _____

Email _____

ACTIVITY 1

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

ACTIVITY 2

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

ACTIVITY 3

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

ACTIVITY 4

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

ACTIVITY 5

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

ACTIVITY 6

Title of Activity _____

Number of Personnel Participating _____

Date of Activity _____

2-HOUR AEROSPACE EDUCATION DAY

Date _____

Location _____

Number Participating _____

Theme _____

Please send me _____ AEX
completion certificates

Send this report to:
National Headquarters, Civil Air Patrol
Aerospace Education
105 South Hansell Street
Building 714
Maxwell AFB, AL 36112-6332
or you may...
FAX to: (334) 953-4235 or
Email to: aex@cap.gov



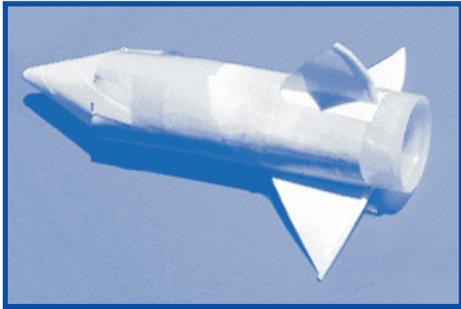
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Aerospace Education Division
105 South Hansell Street, Building 714
Maxwell Air Force Base, Alabama 36112-6332

AEX Activity Three from AEX II Vol I - THE FIZZY FLYER



Objective:

This "Fizzy Flyer" is designed to be an entry-level aerospace education lesson. It is a rocket that is easy to build, cheap to operate and fun for children.

Background:

For the complete activity, go to page 18 in AEX II.

National Science Standards (NRC)

A: Science as Inquiry

B: Physical Science

- Motions and forces

E: Science and Technology

- Abilities of technological design
- Understandings about science and technology

Unifying Concepts and Processes

Evidence, models, and explanation

Technology Standards

8. Understanding of the attributes of design

10. Understanding of the role of trouble shooting, research and development, invention and innovation, and experimentation in problem solving

11. Ability to apply the design process.

Materials:

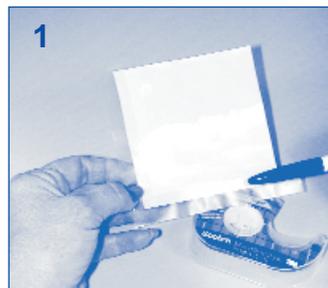
- 1- 4"x4" piece of heavy paper
- 1 cone shaped paper drinking cup
- tape
- scissors
- Alka Seltzer or other effervescent antacid tablet
- 1-35 mm film canister with lid that fits inside lip of canister

Procedure:

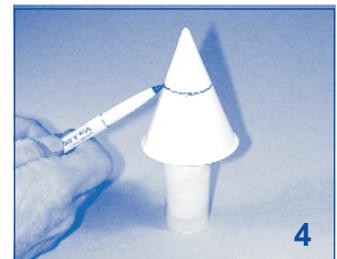
1. Cut a 4"x4" piece of paper and apply tape to two sides of the paper as shown here.

2. Remove lid from canister and tape one edge of the paper to the canister 1/2" from opening.

3. Carefully wrap the paper around the canister to form a tube. Press the remaining taped edge to seal the tube.



4. A common cone drinking cup is placed on the top of the tube. By holding the cone and cup up to the light, you will be able to see the top of the tube inside the cone and mark it as shown.



5. To attach the nose cone, leave little tabs so that you can tape it to the rocket's tubular body. The base of the drinking cup now becomes the rocket's nose cone.



6. You can make 3 tail fins from the remainder of the drinking cup, or from the remainder of the paper from which the tubular body was cut. Put tape on the fin as shown.

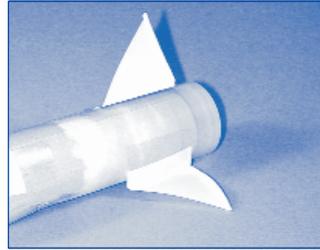


7. The fins are taped to the bottom of the rocket body next to the canister opening as shown. This one was made from the remainder of the drinking cup.



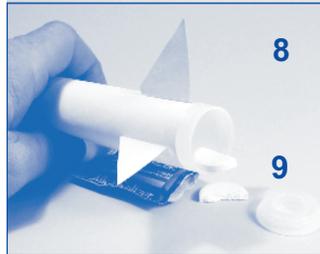
AEX Activity Three from AEX II Vol I - THE FIZZY FLYER (Continued from page 7)

8. Tape 3 fins to the rocket base to make it more stable.

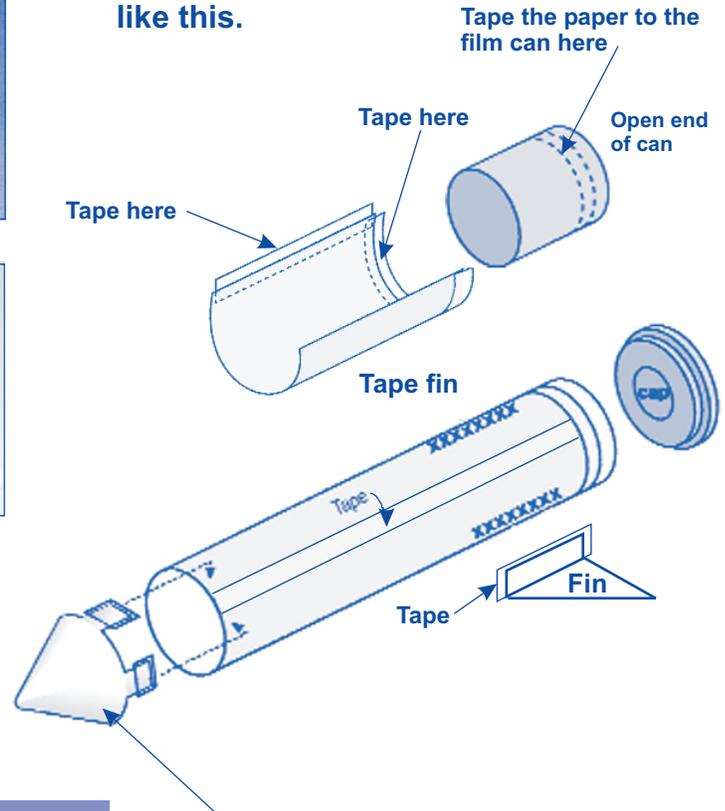


Note: A trash bag on a table or the floor makes a good launch pad and easier clean-up.

9. You are now ready to load the "fuel." Hold the rocket nose down, pour in 1 teaspoon of water and drop in 1/2 Alka Seltzer. Press on the cap and position the rocket on the trash bag and wait. Countdowns are fun, but it's a little difficult to tell when the Fizzy Flyer is going to take off. But that's part of the fun.



Put it together like this.



A cone-shaped drinking cup is marked and cut out leaving small tabs used to tape the cone to the rocket body.

**Cut paper
4"x4"**

**Fold to tape
to rocket body**

