

A Guide

TO AVIATION AND SPACE EDUCATION



FAI AVIATION AND SPACE EDUCATION
COMMISSION (CIEA)



Fédération Aéronautique
Internationale

MSI – Avenue de Rhodanie 54, 1007 Lausanne, Switzerland

Tél. +41 (0) 21 345 10 70 - FAX +41 (0) 21 345 10 77

E-mail: members@fai.org - Web: <http://www.fai.org>

Aims and Objectives

The Aviation and Space Education Commission (CIEA) has a responsibility to work within the FAI towards these goals:

- To create a greater public awareness and understanding of aviation and space activities and the benefits they offer. This is especially important for the young people.
- To encourage increased participation in air sports as well as all of aviation.
- To promote international goodwill, cultural understanding and friendship through aviation related activities.

The CIEA places great emphasis upon capturing the interest of young people. They represent the future of aviation and notably that of air sports. Today's youth face an unparalleled number of alternatives, all of which are competing for their attention.

The task of encouraging teachers and their students to learn about aviation and space must be shared by all aviation interests including the National and Local Aero Clubs as well as the Air Sport Disciplines.

If a young person is fired with enthusiasm about aviation and space, this can spread to family and friends. Also, individual attention by mentors and the availability of role models can be a significant influence in a young person's continuing interest in aviation.

This guide is designed as an introduction to aviation and space education and provides an overview of the CIEA programs available.



Photo Courtesy of the National Soaring Museum, USA

Defining

AVIATION AND SPACE EDUCATION

Aviation and space flight, and the technological spin-off from them, now reach into the lives of the entire population of the world. Their impact is global, and everyone needs to know something about them.

EDUCATION AND TRAINING

"Aviation and Space Education" is developing general knowledge about aviation and space. This is in contrast to aviation and space "Training" which is developing the specialised knowledge and skills required for work within the aviation or space fields.

The FAI's emphasis is generally directed towards private flying and air sports. However, the CIEA recognises that the young person needs to acquire the basic concept and an understanding of the interrelationship between aviation and space flight.

SCOPE OF AVIATION AND SPACE EDUCATION

A wide and diverse range of topics are encompassed with aviation and space education. Teachers usually need assistance to determine which are suitable to fit their specific curriculum. Often a club type activity outside the classroom is preferred.

The basics of flight is frequently the starting point for teachers. The integration of aviation and space concept into many of the traditional subject areas is quite common. These include history, geography, biology, transportation, mathematics, meteorology, economics, art, communications, other sciences, astronomy and even more.

The scope of aviation and space activities presents an excellent vehicle for exploring the spectrum of careers available.

INTRODUCING AVIATION AND SPACE EDUCATION

Once teachers are oriented to aviation and space education they usually find that bringing related topics into the classroom creates an enthusiastic atmosphere for learning.

The rapid advancement in computer technology and the Internet has added a new dimension to teaching. These resources are very compatible with contemporary aviation/space education.

Many National and Local Aero Clubs and Youth Programmes offer academic and hands-on experiences in aviation such as building and flying model aeroplanes. For these organisations the work may offer some enhancement. For others, the CIEA can provide sufficient information to establish an initial basis in aviation and space education.

The CIEA Programme of Assistance

The CIEA has several programs available which may be of value in a follow-on contact with teachers, youth programme leaders and others having an interest in establishing or expanding an education activity.

A brief description of the CIEA programmes follow:



YOUNG ARTISTS CONTEST

The CIEA sponsors an annual International Young People Aviation Art Contest with a specific theme. All National Aero Clubs are invited to hold national contests and submit their winners for final judging in three age categories.

GUIDELINES FOR YOUTH INVOLVEMENT IN AIR SPORT COMPETITIONS

The championship events of the various Air Sport Disciplines offer a unique opportunity for young people to become involved in an aviation activity. The CIEA has published guidelines which are available to the championship organisers.

FAI RECOMMENDED MUSEUM PROGRAMME

This programme recognises those museums that have an established aviation or space education program available to the public and especially young people.

INTERNATIONAL YOUTH PROGRAMS

The CIEA is working with the International Air Cadet Exchange Association to expand the number of countries participating.

Encouragement is also given to the various aviation organisations which are providing a first flight and other aviation experiences to young people. Of note is the international effort of the Experimental Aircraft Association's Young Eagle Program.

CIEA RESOURCE MATERIALS PROGRAMME

The *CIEA Guide to Aviation and Space Education* is designed to provide the National and Local Aero Clubs and others, with a brief introduction to the subject and the available CIEA Programmes.

The *Aviation and Space Education Instructional Aids* is a resource file that includes background briefs and worksheets which are representative of the topics commonly considered in aviation and space education.

The file consists of individual sheets which can be reproduced, customised or supplemented to meet the unique requirements of an individual country.

Selected Text Materials are representative of those available, usually at little or no cost. Most can be forwarded upon request, providing a subject area or specific topics are identified, along with the age of the students.

INFORMATION AND CONSULTATION SERVICE

This is a service available to the National Aero Clubs and Air Sport Commissions to assist them in developing aviation/space education projects and programmes (if on-site assistance is desired, reimbursement of travel expense is necessary).

An informal catalogue of Internet Web sites with suitable aviation and space education information is maintained. Many of these sites have available curriculum material which can be downloaded. There are frequent changes in the sites which makes a published directory impractical at this time.

The CIEA has several web pages in the FAI Home Site (<http://www.fai.org/education>) with ongoing additions.

THE NILE GOLD MEDAL

This award is made annually to recognise an individual or organisation that has made a substantial contribution to the advancement of aviation and space education. Nominations may be sent by FAI Member Organisations to the FAI Office prior to 1 March each year. The Nile Gold Medal is awarded at the FAI General Conference which is generally held in October.



The Success Path To Aviation and Space Education

It is acknowledged that school officials and teachers are already challenged with overburdened curriculums. This situation frequently does not allow a formal aviation course to be offered. Most often aviation and space topics are integrated into existing classroom subjects or are the focus of clubs.

Experience has shown that teachers, youth leaders and students often have a latent interest in aviation and space. This hidden interest can frequently be brought to a conscious desire to learn more through a personal participation experience. This may be a special work-shop, visit to an airfield or a museum tour. Certainly an orientation flight becomes an exciting experience.

Many National and Local Aero Clubs along with the Air Sport Disciplines are inviting outside visitors to their aviation events. The onetime exposure can be memorable, but there must be some follow through if the initial enthusiasm of an individual is to be sustained.

Young people tend to be naturally curious and when motivated, can be very open to learning, but remember that they will have a different perspective of aviation than those with long experience.

Studies have indicated that "hands-on" activities along with fast paced information is needed to offset the short attention span so characteristic of today's young people. Many are already conditioned to "information on demand" from the use of computers. It is necessary to consider these factors when planning activities for youth.

Benefits Of Aviation and Space Education

- Aviation and space is a highly motivational subject area for children. The wonders of flight along with the exciting achievements being made challenge the imagination.
- The nature of aviation and space activities admittedly depends upon striving for excellence in science and technology. Is also promotes the development of creative and logical thinking skills along with the teamwork concept in problem solving.
- Career exploratory opportunities are an integral part of aviation/space education.
- Teachers using aviation/space education in their class can favourably influence large numbers of students over a long period of time.
- Enthusiastic young people tend to have a multiplier effect as they actively share their interest in aviation with family and friends.
- School clubs and youth groups can use aviation to offer constructive activities such as model flying and visits to aviation facilities. Excellent information and support materials are available. These experiences often form a foundation that will motivate young adults to join an Aero Club and become involved in the challenge of air sport. Many discover that they want a career in aviation.
- Aviation education projects can contribute towards an informed and interested public which is an important factor in the continued welfare of all aviation activities including the air sports.



For More Information Contact:

FEDERATION AERONAUTIQUE INTERNATIONALE
MSI – Avenue de Rhodanie 54, 1007 Lausanne, Switzerland
Tel. +41 (0) 21 345 10 70 - FAX +41 (0) 21 345 10 77
E-mail: members@fai.org - Web: <http://www.fai.org>