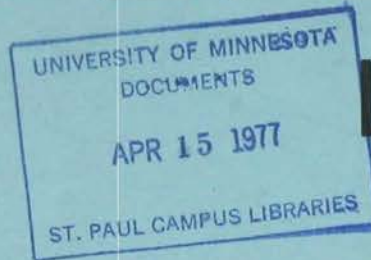


MN 2000
FH M-239

FLYING

4-H M-239



LEADERS' GUIDE

AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF MINNESOTA

4-H AEROSPACE PROGRAM LEADERS' GUIDE (Flying)

Objectives

1. Create an awareness in youth of the basic concepts of space science and aeronautics.
2. Develop in youth interest and awareness of the impact of the aerospace program on society.
3. Provide youth the opportunity to develop skills and to explore areas of interest in the aerospace program.
4. Provide youth with the opportunity to explore various aerospace careers.
5. Help youth realize the growing interdependence of people through aerospace developments and related fields.
6. Provide experiences in aerospace science that will enhance the responsible growth of the individual so as to lead to productive citizenship.

YOUR JOB AS A LEADER

The Challenge

Your responsibility as a leader is both a challenge and an opportunity. Yours is a key position in the 4-H program. If you enjoy working with young people, you will find the time spent with the aerospace program most rewarding. You'll find great satisfaction in watching boys and girls develop new knowledge and skills under your guidance.

Today's generation has accepted the importance of aerospace. This acceptance, however, has caused many changes in the social, economic, and political environment of the entire world. These changes provide an opportunity for educational institutions to create learning experiences within the many segments of aerospace education and its related sciences.

The 4-H aerospace program provides an opportunity for youth to become interested in and aware of aerospace experiences. These experiences lead to further development of the individual's interest, skills, and career goals. This development enhances the responsible growth of the individual leading to a productive citizen in society.

A successful leader is the person who has the confidence of the group; keeps ahead of them, yet seems always with them and understands their viewpoint; is tolerant, patient, and sympathetic in working with them. He recognizes work well done in such a way that young people are encouraged to do even better; makes friendly suggestions instead of displaying authority; and provides situations that will afford them larger responsibilities as they become more experienced. Each boy and girl is an individual with his own background, personality, talents, experience, and aspirations.

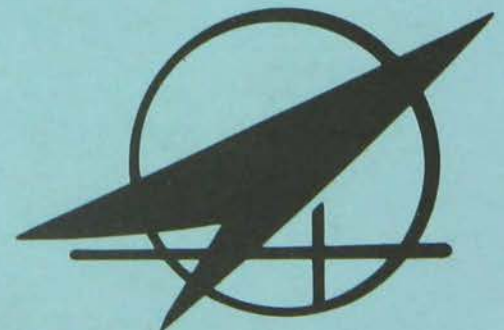
Your own activity will be varied as you:

- help members plan their own programs
- attend their meetings
- give guidance to their training
- help plan tours and field trips
- help members have fun

You don't have to do the job without help. There are others in your community who will be glad to assist. In addition, older club members can serve as teen leaders and junior leaders.

GETTING ORGANIZED

The first step is to get several individuals interested in flying. These individuals could: meet together to form a formal 4-H club, be part of an existing 4-H club, join together merely for a special interest group, or serve as individuals with a leader for assistance. The informal activity of a few persons can serve as a basis for getting more members interested.



4-H AEROSPACE PROGRAM

This archival publication may not reflect current scientific knowledge or recommendations.
Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>

When the individual members are enrolled in your club or group, you must keep in mind the primary purpose of the meeting is to develop skills. Any good organization will function best when there is some activity that will keep the group together above and beyond the primary purpose of the club. Club meetings should be well planned. The first ones will set the pattern for the future success of the group. The prospective leader, parent, committee, or other interested persons should assist in planning the first meeting and making sure that it becomes an exciting experience for all involved.

Some basic ideas for planning a get-acquainted meeting and later ones include:

- * Arrange for a suitable time and place for the meeting.
- * Invite families, prospective members, and parents.
- * Check plans with others concerned.
- * Announce the meeting at community gatherings, schools, on radio and posters, in newspapers, or by invitation.
- * Outline the meeting carefully. This will be a key meeting and will set the example for following meetings.
- * If you are not experienced in working with youth, get help from experienced 4-H club members and leaders or an extension agent, if possible.
- * If you are organizing a 4-H club, briefly review what 4-H club work is, what the 4-H member does, the role of the parent, leader, and extension agents. If this is a special interest group only, it would still be best to know what each member should do and what the parents and others can do to assist.
- * Explain the value of having the group involved in flying. Discuss using projects that fit the needs, interests, time, ability of the individuals. Encourage them to take on no more than what they feel they can adequately handle.

On follow-up meetings, planning is very important. Discuss club activities, events, meetings, tours to be taken, and what the members will do. The group members should be involved in planning future meetings and activities. In a special interest group, the members may be interested only in learning to fly and then later flying. To be most effective, the group should include other activities that are related to flying and will broaden the outlook and the education of the members.

TEACHING AND SUPERVISING

You can use a variety of methods to teach the member. Choose the one that is suited to the subject and allows the members to participate actively in the learning process. If you arrange for an outsider to teach at a meeting, be sure he understands that boys and girls learn more by doing something than just sitting and listening. It is easier to obtain teaching help if you can give the person you ask a concise outline for the job, including the degree of learning desired by the club members.

As you lead, you also must be aware and create an awareness in your members of the safety necessary in flying. Maintain a "Safety First" attitude in flying. Without good safety built into this system, your program will be in trouble. You must maintain constant supervision of your members throughout all phases of their learning about flying. Encourage all members to practice good safety habits while learning.

ACTIVITIES

Many activities, from the first experience with an airplane to the actual flying, will enhance learning. The wide range of activities possible in flying provides a chance for every member to experience real achievement and success.

The imagination and ability of the group will determine the activity possibilities. Above all, the members must be offered an opportunity to organize and carry out the activity without depending on others.

Field Trips — Field trips or tours may be taken to airports, military airbases, aircraft manufacturers, and flying installations.

Demonstration Days — Provide club members with opportunities to demonstrate to others the skills they have learned.

Exhibit Events — Static or action displays provide the club member the opportunity for recognition. These need not always be competitive.

Special Events — Parent days, observation flights, cross-country planning radio skills with tape recorder are only a few events that will help the member learn.

Other activities include research programs. Designing special purpose wind tunnels, pictures, or special skill demonstrations. This is limited only by the member's imagination and ambition.

The club could begin to establish a library of assorted materials dealing with rockets. These are available from many sources such as:

Career Information:

Federal Aviation Administration, 800 Independence Ave. S.W., Washington, D.C. 20590

Reference Material:

Flight Instructor's Handbook. Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20590

The Federal Aviation Regulations and Flight Standards for Pilots. Aero Publisher, Inc., 329 Aviation Rd., Fallbrook, Calif. 92028. (approx. \$3)

Flight Facts for Private Pilots. Aero Publishers, Inc., 329 Aviation Rd., Fallbrook, Calif. 92028. (Paper covered, \$3.50)

The Student Pilot's Flight Manual. Wm. K. Kirshner, Iowa State University Press, Ames, Iowa 50010.

Demonstration Aids for Aviation Education. Office of General Aviation Affairs, Aviation Education, Federal Aviation Admin., Wash., D.C. 20590.

Teaching Guide for An Aerospace Communications Laboratory. The Office of General Aviation Affairs, Federal Aviation Admin., Wash., D.C. 20590. Pamphlet No. GA 20-18-8R.

The Private Pilot's Handbook of Aeronautical Knowledge. Supt. of Documents, U.S. Government Printing Office, Wash., D.C. 20590. (Price \$2.75)

Aviation Series (Weather Service). (Complete set 75 cents)

1. Flying Weather Forecast
2. Ice on Aircraft
3. Jet Stream
4. Turbulence—Its Causes and Effects
5. Mountain Wave
6. Storm Detection Radar
7. Thunderstorms
9. Flying Weather Information
10. Ceiling
12. Tips on Weather VFR Flight
13. Fronts
17. Severe Weather Forecast
18. Altimeters—How the Readings Are Affected by Temperature

Available from Superintendent of Documents, Government Printing Office, Washington, D.C. 20590.

Career Opportunities Booklets (several titles) General Aviation Manufacturers Association, Suite 1200-A, 1025 Connecticut Ave., N.W., Wash. D.C. 20036.

Pictures, Pamphlets and Packets for Air/Space Education. National Aerospace Education Council, 806 15th St. N.W., Washington, D.C. 20005. (50 cents)

Audiovisual Materials:

Films, filmstrips, slides, and other material lists may be available through:

- a. County Cooperative Extension Office (4-H Agent).
- b. State Department of Aviation (or Department of Aeronautics).
- c. College, university, vocational schools, high school instructional materials centers, audiovisual centers, or libraries.
- d. Federal Aviation Agency, Office of General Aviation Education, Washington, D.C. 20590.
- e. Local fixed-base airport operators.
- f. National Aerospace Education Council, 310 Shoreham Building, 806 15th Street N.W., Washington, D.C. 20005.

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