A Clearinghouse Need for Aviation Education

Frank G. Mitchell
many of us that a gathering of the aviation education professionals, representing as many major aviation and aerospace organizations as possible, would be an extremely valuable experience. Shelly Snyder, GAMA’s Manager of Aviation Education, organized the meeting on behalf of the GAMA Aviation Education Subcommittee whose members also attended the conference. "We all were very pleased with the attendance and the high level of participation. I think everyone enjoyed meeting their counterparts from a wide range of organizations and the presentations gave us a number of important issues to consider," she said.

According to Mitchell and Snyder, the successful symposium may set the standard for future events. "We are seriously considering making this gathering an annual event. In fact, we are polling the participants of the conference about their interest in attending others in the future," Mitchell. GAMA is a national trade association headquartered in Washington, DC, representing 33 American manufacturers of general aviation aircraft, engines, avionics, and related equipment. GAMA’s members also operate fleets of aircraft, fixed based operations at many airports, and pilot training facilities across the U.S.

For more information on GAMA’s aviation education programs, contact Shelly Snyder at 202-393-1500.

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During April the FAA, NASA, and the Civil Air Patrol will again sponsor the National Congress on Aviation and Space Education. This congress is significant in that it will be the 24th annual meeting which consists of general session speakers, field trips, and small group exchanges on aviation/aerospace subjects. Most important, the congress appears to have established its ongoing role as the major national educational event of the year.

GAMA has been represented in the congress with one of the display booths, and even though our role at the congress is small, we have found tremendous interest from participants in teaching materials on aviation subjects. In fact, over 1,000 sets of GAMA materials have been distributed to teachers and educators at each congress in recent years.

The issue, which I submit in the form of a question, is: In view of the success of the congress, do we need to do anything else at the national level to promote aviation education in the nation’s schools?

My answer is yes, in the sense of providing an ongoing channel of communicating with formal education. I believe we have a definite gap in this area at the national level, and to close that gap we should establish a national clearinghouse in aviation education to work more effectively with the formal field of education, particularly at the elementary and secondary levels.

There are a number of national efforts ongoing today in addition to the congress, and they are primarily those programs dealing with the FAA, CAP, NASA, and Young Astronauts organizations.

All very valid efforts but loosely coordinated mainly through the annual congress program agenda. The difficulty is that the brief time duration of the congress meeting doesn’t allow for any serious planning coordination with formal education.

In addition, there are other efforts in various stages of activity that are national in scope including the national 4-H club organization, Aviation Exploring Division of the Boy Scouts, Public Affairs Office of the Secretary of the Air Force, the NASAO Education Foundation, ADMA, AEA, EAA, UAA, AIAA,
GAMA, Aviation Education

and probably several more.

Each one is properly promoting its own specific effort within its area of influence. This isn't bad, but it does point to a void at the national level. The fact is, there is no one organization today that looks at the nation's total aviation and space education situation and attempts to identify material, programs, and activities that are successful and then distribute information about these success stories not only to people in the field but also to those in other parts of the world of education. In addition, at the national level several other needs exist that could be met by a clearinghouse type of organization such as:

1. Development of leadership talent in aerospace education,
2. Curriculum research and development in the field,
3. Regular contact with major educational organizations, and
4. Research information which would advance the acceptance of aerospace education.

One effort that was initiated over four years ago by representatives of several organizations from both the private and government sector which showed promise to become a national clearinghouse was the aviation and space education forum (U.S.A.F.). The original purpose was to establish a national repository of information and sources. Then some type of access system would be established to provide a service to schools, teachers, and professionals in the field. Even though the FAA provided support for coordinating the resources, the concept has been on hold for lack of funding.

It is true that there are a couple of national aviation education newsletters and a new research type journal reporting developments on the national scene, but they are all limited in coverage, and they don't concentrate on the major educational organizations.

In the 1970s GAMA was successful in identifying over 125 colleges and universities throughout the nation which were willing to devote some space and faculty time to setting up an aerospace education resource library. The idea developed into reality with some seed money for materials and support from GAMA, but fell apart when GAMA was unable to sustain the effort out of annual budgets. The FAA has continued that effort today on a more selective basis.

In the 1950s and 1960s, several forms of a national aerospace education council were organized to provide teacher information communications and to sponsor meetings based on membership dues. Again, a lack of adequate funding caused a breakup of the various efforts. Later AIA helped start the Aviation Space Magazine which was to become the voice for aerospace education developments, but the concept was later changed and it fell victim to a dependency upon subscription dues for survival.

The history of these efforts suggests there is a continuing need to establish a coordinating source for current information on aerospace education. Efforts along this line have been successfully established at state and local levels. Several states such as California and Kansas have for many years had state level coordinating committees or commissions on aerospace education. The Virginia Department of Aviation has established an aerospace education department at the new Virginia Aviation Museum on Richmond International Airport.

If there is a coordinating need at the national level, why can't one be established? The quick answer is lack of funding. But funding is available from a variety of sources if a proper plan is developed. It would also help if the clearing house didn't try to do too much in the beginning. What is really needed is leadership from a core of organizations which will devote some time and effort to finding the right combination of funding sources and staff support.

There are many aviation and aerospace organizations that could supply valuable help. In fact, one or more of the existing university institutions involved in aviation education could become a focal point for broad industry support in developing a basic clearinghouse for future growth. Something along the lines of the ERIC system established at colleges and universities a number of years ago might be feasible.

A research report on aviation education written in 1970 by Sanborn Aviation Associates said in conclusion, "There must be education on the broadest scale. Government officials and the general public must be educated to the role of the air transports system as a national resource." The study pointed out that unless a major educational effort was established, future growth of the industry was limited. It also stated that a first order of
business was exposure to and acceptance by the educational community on a formal basis. This report was written during a time of peak effort by industry in aerospace education. The problem was that government and industry programs had been used by only a small percentage of the nation's 30,000 high schools and over one million elementary schools.

I submit that a national clearinghouse could lay the foundation for greater exposure and acceptance. That type of effort can be developed by focusing the resources of all the major aerospace organizations involved into a national plan that is consistent and sustaining. The challenge is much more involved today than just providing a teacher with a picture of an airplane. We must adopt valid educational procedures if we are going to be able to take concrete steps to ensure our future growth and properly educate the public.

AVIATION EDUCATION: UNIVERSITIES AND SCHOOLS NETWORKING

Peggy Baty

In the spring of 1990 the Aviation Education Committee of the University Aviation Association (UAA) conducted a study of its members to determine their current involvement, if any, with elementary and secondary schools. The purpose of the study was to determine:
1. Current status of networking by UAA member institutions
2. Role of UAA in helping its members who wanted to network
3. Future plans or strategies for increased efforts

The survey was mailed to 85 institutional members of the UAA. Forty one surveys were returned producing a return rate of 48%. A basic overview of the survey results follows.

**Question #1**
Is your aviation department/program currently involved in working with elementary and/or secondary schools in your area to promote aviation education?

**Answer**
85% responded yes

**Question #2**
Please check all activities listed below that describe your involvement:
1. Workshops/courses for teachers, grades K-6
   A. 20% yes
2. Workshops/courses for teachers, grades 7-12
   A. 27% yes
3. Summer programs for young people, grades K-3
   A. 2% yes
4. Summer programs for young people, grades 4-6
   A. 12% yes
5. Summer programs for young people, grades 7-12
   A. 29% yes
6. Teacher aviation/space resource center
   A. 27% yes
7. Faculty who visit and speak in elementary and secondary classrooms
   A. 73% yes
8. College students who visit and speak in elementary classrooms
   A. 54% yes
9. Involvement with local science fairs (host, judge, etc.)
   A. 34% yes
10. Coordinated aviation education efforts with local organizations such as Civil Air Patrol, Experimental Aircraft Association, Ninety-Nines, Boy Scouts, Girl Scouts, etc.
    A. 56% yes
11. Ours of university aviation facilities
    A. 68% yes
12. Faculty/staff who serve on state aviation education organizations
    A. 46%
13. Individuals who work with local high school guidance counselors
    A. 59%
14. Individuals who work with local/state career days in area schools
    A. 78%