Online Journal of Space Communication

Volume 1
Issue 1 *Issue #1: Education and Training (Winter 2002)*

Article 1

January 2002

Issue 1: From the Guest Editor

Randall Johnson

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The year was 1919. World War I was over. Aviation, which had proven its worth in the military arena, was being rapidly developed in Europe as an emerging platform for delivering the mail, while in the United States aviation was being allowed to languish. U.S. Secretary of War Newton D. Baker was concerned that "a vitally necessary industry" would go undeveloped. He charged the newly formed American Aviation Mission to visit England, France and Italy to learn how these nations were organizing to use aviation for communication.

When the seven men returned, they were unanimous in their belief that commercial applications of aviation would prove the long term value of this technology. Their report noted "for the first time in the world's history, the stage is set for a close international cooperation in the development of a great art at the very threshold of its era of commercial utility." The American Aviation Mission recognized that stimulating commercial development of such an industry required not only government support, but an educational infrastructure, and recommended that the U.S. government encourage universities "throughout the country to establish departments of aeronautical science."

Over time, in the United States and elsewhere, governments got behind the establishment of national aviation industries. Key to their success was the role universities and schools played in providing scientists, engineers, and pilots but governments and industry turned to universities for basic and applied research as well. Academia continues to be a critical component of the aeronautical industry.

As the frontiers of flight extend beyond earth's atmosphere, space has emerged as a new platform for communication. Space flight found its origins in the military, and like aviation has moved towards practical commercialization. Satellite and space communication can be expected to follow a similar pattern. Development of these applications will also require strong support from the universities of the world to insure their continued growth and utility, and without a strong research agenda they cannot prosper.

What curricula are important? How should they be organized? What should be taught, researched and developed to insure a strong foundation for the development and growth of this new industry? What is the blueprint for space education? Where does research fit? How can government agencies and universities form partnerships? How can academic institutions collaborate across national boundaries? What do you consider to be the most important questions,

challenges, opportunities? Please join with us as we raise these issues and discuss them in this new Online Journal of Space Communication.

"That we of today are conceivably no more qualified to judge as to the scale and development of the aircraft of ten years hence than were we of even five years ago able to foretell the achievements of today."

American Aviation Mission Report: 1919

Space Education Workshop
Thursday, March 27, 2003
Washington, DC.

Over the past two decades the number of U.S. college students in engineering has decreased by some 100,000. In the next decade a quarter to a third of the most highly skilled positions in the space industry worldwide will become open due to retirements. Further the cost of education and the cost of advanced degrees are both spiraling upward. To address these problems in space education and training for the future, a high level workshop on space education will be held in Washington, D.C. on Thursday, March 27, 2003 at the George Washington University.

To prepare for this major workshop a questionnaire has been developed and coordinated among the project's many backers in an attempt to get wide input on perceived problems and issues. This survey was also designed to obtain better data as to the areas where future recruitment needs are currently greatest and also identify possible innovative solutions to the many problems in college-level space education today. Follow on workshops may also address problems in secondary education as well.

Please take 10 minutes to fill out the short 2 page survey (download survey in MS-Word or PDF format) and also indicate if you would like to be invited to attend this workshop (which has a limited attendance list due to the size of the meeting facilities). We need your name, title, institution, address, telephone, email and date of your reply if would like to receive an invitation. We will try to accommodate all respondents up to the first 75 of those posting their survey forms on a first come, first serve basis.

The all day workshop will have a number of breakout sessions to address specific issues such as tele-education, training systems and on-line shared software and virtual lab facilities and disciplinary and interdisciplinary issues in many aspects of space education. A number of the leading people in the field have been invited to give plenary speeches including NASA Administrator Sean O'Keefe, Embry

Riddle Aeronautical University President George H. Ebbs, and Space Foundation President Elliot Pulham as well as other leading aerospace industry leaders.

At this time the sponsors and supporters of this by invitation only event continues to grow daily. The organizations that have committed financial resources and/or agreed to provide substantive support to the circulation and analysis of the questionnaire include the following:

Sponsors and Supporters: NASA, Embry Riddle Aeronautical University, The Arthur C. Clarke Institute, George Washington University, Society of Satellite Professionals International, American Astronautical Association, the Space Foundation, Satellite Industry Association, the University Space Research Association, International Space University, Ohio University, PBI Media, Arianespace, General Dynamics and Intelsat.

For more information contact the Space Education Workshop organizers:

Joseph N. Pelton
Email: joepelton@verizon.net

Professor Randy Johnson
Email: johnsrd@auburn.edu

Don Flournoy
Email: don.flournoy@ohio.edu