Appendix C

Intergovernmental Meeting of Space Technology Experts

One of the seven proposals for multilateral cooperation that the United States presented at UNISPACE '82 was an intergovernmental meeting of experts in the use and management of space technology. Scheduled to be held just prior to the February meeting of the Scientific and Technical Subcommittee of COPUOS, its aim was to assemble as many representatives as possible from the world's space programs in order to discuss the current state of space technology and to present the many opportunities that exist for bilateral or multilateral cooperative ventures in space.

On February 4, 1983, NASA and Columbia University cosponsored the first such meeting, held at Columbia's School of International and Public Affairs. About 100 representatives from 40 countries and international organizations attended. About 15 developing countries were represented at the gathering. Although they had been invited, the Eastern Bloc countries were conspicuously absent, a fact that was lamented by speakers from several countries during the 2 days. Translation (French, Spanish, English) was provided, and the meeting was transcribed for future distribution. Copies of most speakers' papers were available during the meeting. Most of the time was scheduled with formal presentations; however, the organizers encouraged informal meetings and made several small meeting rooms available for this purpose.

Although it is impossible to evaluate the long-term effects of the meeting so soon after it was held, the presentations were generally of high quality and designed to illustrate the potential for cooperation. Representatives from industrialized countries, developing countries, and the United Nations (U. N.) presented :alks. The meeting's emphasis was on technology; although political issues were raised and discussed, technical matters dominated the discussion.

The meeting ran smoothly and was generally successful in giving the United States an opportunity to -each other countries in an informal multilateral orum. According to the organizers of this meeting, uture meetings could continue to focus on technical matters of interest to the world community; issues with i high percentage of political content could also be dis--ussed as long as this meeting did not usurp the prerogatives of COPUOS. No decision was reached on he advisability of holding another such meeting.

The agenda, meeting place and timing of this experimental meeting were arranged by NASA and Columbia University. If future meetings are held, the international community must decide who will organize them, set the agenda and pay for them.

Developing Country Questions and Needs

During the conference, participants raised the following questions, among others:

1. **What cooperative opportunities are available and how can countries obtain timely information about them?**

   This question was raised more than any other at the meeting. Each country follows different procedures for cooperative projects and announces them by different means. Although the U.N. attempts to keep abreast of these projects, it is not always aware of every opportunity.

2. **What instructional programs are available, and what channels does an individual follow to participate?**

   Not only do inidividuals and agencies in the various countries need to know what is available, they also need to know how to take advantage of the opportunities. It was suggested that 2-week workshops are not long enough, except to give individuals with previous training, instruction in the latest equipment and techniques.

3. **How can** current knowledge be transferred to potential users **in developing countries?**

   In addition to information on training and cooperative projects, developing countries also need timely access to data that could be of economic use (e.g., land remote sensing data or data on photoplankton distribution in the oceans).

4. **Developing countries need operating funds as well as initial capital for projects,**

   In many cases, it is not enough to carry out a demonstration project because the country may not have the resources to continue, even if the new technology is cost effective.

5. **Science programs can be an excellent means to involve individuals in space technology.**

   Although basic science projects do not necessarily lead to applications, they help develop the skills and infrastructure needed for applications programs.

6. **In developing courses of instruction, who determines the course syllabi?**

   Some courses are inappropriate for students from developing countries because they presuppose too much technical knowledge or equipment. Language problems present barriers, especially if the student is expected to learn a foreign language while studying within his or her own country. Several participants made the point that both problems can be overcome if the coursework and language study are well planned, and include advice from the participating countries.

7. **Perceived need for a service must preceed programs to use it.**

   This was counted essential for satellite technology to prosper in a given country. Several cases were reported where the lack of perceived need within the developing country resulted in a situation where substantial data were accumulated in-country by various programs and not used (e.g., remote-sensing data for mapping).

8. **Have we been over-optimistic about the potential to transfer technology to developing countries?**

   Here again, the distinction was made between demonstration projects and continuing use of the technology. Several participants expressed doubt about the speed with which new technology could be integrated into the social and economic structure of a developing country.