INTERNATIONAL CONFERENCE ON LOW-COST PLANETARY MISSIONS

The first International Conference on Low-Cost Planetary Missions was held at APL on 12–15 April 1994. The conference was sponsored by the International Academy of Astronautics (IAA) with multinational cosponsorship of NASA, the American Astronautical Society, the Centre National d'Etudes Spatiales, the European Space Agency, the Institute of Space and Aeronautical Science (University of Tokyo), and the Space Research Institute of the Russian Academy of Sciences. One hundred twenty-two papers were accepted and presented either orally or during poster sessions. There were 345 registered participants; this favorable attendance reflects the widespread and growing interests in affordable planetary projects. In addition to the U.S. participants, 54 representatives came from the following countries: Austria, the Czech Republic, France, Germany, Ireland, Italy, Japan, the Netherlands, the Republic of China, Romania, Russia, Sweden, and the United Kingdom.

The conference originated in 1992 when IAA representatives recognized the accomplishments of the Laboratory in the area of small spacecraft and suggested that it would be most appropriate that the first conference on the subject be held at APL. Laboratory and Space Department management acceded to this suggestion and began planning. The conference was arranged such that all participants would be together in the same hall to ease extensive interaction. This idea proved very worthwhile. The lively panel discussions and audience participation showed the merits of not segregating participants by areas of expertise as is frequently done at similar meetings.

The theme of the conference was that significant science can be accomplished relatively quickly and inexpensively by the use of small spacecraft in planetary missions. Such spacecraft offer the potential for increased access to space and also contribute to sustaining a vital scientific community by affording more opportunities for direct investigator involvement.

Scientists, engineers, and administrators were brought together at the conference to exchange information and present new ideas about how small planetary missions might be accomplished. Eight technical sessions ranging from top-level program summaries to detailed designs of small spacecraft technologies were held. The panel discussions addressed specific missions, management and cost cutting, the miniaturization of instruments and spacecraft, and risk assessment. It became eminently clear that "business as usual" for future space missions would be unacceptable.

This IAA conference is addressed in the accompanying *Science* article (reprinted with permission, © 1994 by the AAAS). The Laboratory's role in NASA's Discovery missions being developed for "smaller, faster, cheaper" planetary exploration is highlighted. Low-cost programs such as Clementine and Near-Earth Asteroid Rendezvous (NEAR) are discussed. The NEAR program is considered a model for the new cost-conscious approach where managers and engineers work as a team to ensure efficiency from system conception to flight.

John Dassoulas
IAA Conference Cochairman

Barbara (Bobbie) Athey
IAA Conference Coordinator

(Left to right) Stamatios Krimigis (Head, APL Space Department) talks with fellow cochairmen Arnoldo Valenzuela (IAA) and John Dassoulas (APL) during a conference break (NEAR satellite model in background).

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(1) Stamatios Krimigis (left) and Gary Smith (Director, APL) (right) escort Daniel Goldin, NASA Administrator, into the Kossiakoff Center. (2) Daniel Goldin receives a warm welcome from the international delegation. (3) Gary Smith shares some comments on APL's current space programs with Daniel Goldin. (4) Eugene Shoemaker (U.S. Geological Survey) presents keynote address on the forthcoming comet Shoemaker-Levy encounter with Jupiter. (5) Wesley Huntress, Associate NASA Administrator for Space Science, delivers the luncheon address on the first day of the conference. (6) Conference participants capture scientific data on World Wide Web. (7) Sessions included both oral and poster presentations. Poster sessions were well attended. (8) Luncheon speaker Roald Sagdeev (University of Maryland) (right) shares a moment with Gerhard Haerendel (Max-Planck-Institut) (left).