

PREFACE

The NASA Propagation Experimenters (NAPEX) Meeting is convened each year to discuss studies supported by the NASA Propagation Program. The reports delivered at this meeting by program managers and investigators present our recent activities and future plans. Representatives from the satellite communications (satcom) industry, academia and government who have an interest in space-ground radio wave propagation are invited to NAPEX meetings for discussions and exchange of information. This forum provides an opportunity for peer discussion of work in progress, timely dissemination of propagation results, and close interaction with the satcom industry.

NAPEX XX took place at the Wedgewood Resort in Fairbanks Alaska on June 4-5, 1996 and consisted of the welcome, opening remarks, and three sessions. Steve Townes, the manager of the Space Communications Technology Program at JPL, welcomed the participants on behalf of our NASA sponsor, Ramon DePaula, commended the close interaction between the program and industry, and called for even closer partnership and sharing of resources. R. Bauer, ACTS Experiments manager, and N. Golshan, the new JPL technical manager for the Propagation Program, made the opening remarks, recognizing the outstanding services of outgoing Propagation Program manager Faramaz Davarian and commenting on the historic opportunity to leverage the ACTS propagation campaign to serve the propagation needs of proposed Ka-Band systems.

Session 1, entitled "ACTS Propagation Study: Background, Objectives, and Outcomes," was chaired by L. Ippolito of Stanford Telecom. Session 2, "Propagation Studies for Mobile and Personal Satellite Applications," was chaired by R. Bauer of LeRC and provided the latest developments in measurement, modeling, and dissemination of propagation phenomena of interest to the mobile, personal, and aeronautical satcom industry. Session 3, "Propagation Research Topics," was chaired by C. Mayer of the University of Alaska at Fairbanks, and covered a diverse range of topics including space/ground optical propagation experiments, plans to revise the NASA propagation effects handbooks, the expanded NASA Propagation Web Site, and existing propagation databases.

The ACTS Miniworkshop was held on June 6 and consisted of a technical session in the morning and a plenary session in the afternoon. The morning session was chaired by F. Davarian of Hughes Space and Communications and covered updates on the status of the ACTS Project and the Propagation Program, engineering support for ACTS propagation terminals, and the ACTS Data Center. R. Crane of the University of Oklahoma and D. Rogers of Communications Research Center chaired the plenary session.

The success of the meeting owes a lot to the speakers and session chairs and the active participation of all attendees. I have been to many NAPEX meetings and ACTS workshops, but this is the first time I have organized one. I am

touched by the warm and collegial reception from the participants in the NAPEX meeting and ACTS workshop; I look forward to serving the Propagation Community. I would like to express my gratitude to my predecessor, Faramaz Davarian; to Bob Bauer, my counterpart at LeRC; and to Steve Townes, my programmatic manager at JPL, for advice and support during this transition period.

I would like to express my thanks to Professor C. Mayer of the University of Alaska at Fairbanks for hosting this meeting, and for arranging a visit to see the ACTS Propagation Terminal and the SAR facility at the University of Alaska at Fairbanks. Last but not least, I would like to thank Mardy Wilkins of JPL for meticulously taking care of many administrative details of the meetings, and Roger Carlson and Louise Anderson of JPL Technical Information Section for coordinating the publication of this document.

The next ACTS Workshop will be held at the Marriot Suites, near Washington D.C.'s Dunes Airport, on November 19 and 20, 1996. Julie Feil of Stanford Telecom has graciously agreed to be the local host. The next NAPEX meeting will take place in late May/early June of 1997; the exact time and location will be announced by December 1996.

—N. Golshan