FOREWORD

The achievement of operational status of the National Space Transportation System represented a historic accomplishment for the National Aeronautics and Space Administration (NASA), its contractors, and for the United States. To recognize this accomplishment, NASA organized a technical conference focusing on the design and development phase of the Space Shuttle Program. The purpose of the conference was to permit a presentation by key members of the NASA-Industry-Department of Defense team of the outstanding achievements of the program. Toward this end, the conference theme "The Space Shuttle Program: From Challenge to Achievement" was selected.

To provide a comprehensive and balanced program for the conference, the Conference Organizing Committee selected 10 broad, technical topic areas for which papers were invited from individuals who played key technical roles in the success of the design and development program. An extraordinarily fine selection of 91 papers was submitted for the conference representing the contributions of 6 NASA field centers, the Department of Defense, 2 universities, and 27 industrial organizations. Over the 3-day period of June 28-30, 1983, these papers were presented at the Lyndon B. Johnson Space Center in a format of multiple, parallel technical sessions, fully satisfying the "Achievement" portion of the conference theme.

The "Challenge" aspect of the conference theme was provided by Lieutenant General James A. Abrahamson, NASA Associate Administrator for Space Flight, who presented the conference keynote address; and by Dr. Maxime A. Faget, President of Space Industries Incorporated and former Director of Engineering and Development at the Johnson Space Center, who organized and moderated the discussions of a panel of distinguished government and industry executives who presided over the early days of the program. Excellent retrospective presentations were also made by Dr. Glynn S. Lunney, Manager of the National Space Transportation System Program, and by Donald K. (Deke) Slayton, President and Vice Chairman of Space Services Incorporated of America and former NASA astronaut and management official. The complementary combination of technical papers, addresses, and panel discussions provided a satisfying, synergistic package for the more than 1200 conference attendees.

As former Manager of the Orbiter Project, it was my privilege to serve as General Chairman of the Space Shuttle Technical Conference and to recognize and honor the team of men and women responsible for this historic accomplishment.

I am grateful for the help and support of the other members of the Conference Organizing Committee: Elwood W. Land, Jr. (NASA Headquarters); James E. Kingsbury (Marshall Space Flight Center); and Peter A. Minderman (Kennedy Space Center); and to Norman H. Chaffee (Johnson Space Center) who served as Conference Arrangements Chairman.

Aaron Cohen General Chairman

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