

## PREFACE

The Spacecraft Environmental Interactions Technology Conference was held at the U.S. Air Force Academy, Colorado Springs, Colorado, from October 4 to 6, 1983. The fourth in a series of conferences jointly sponsored by NASA and the Air Force, it summarized technology investigations concerning interactions between space systems and their orbital environments and presented information for use by designers of such systems. The series forms a part of the joint NASA/Air Force technology programs and provides a forum for researchers, technologists, and engineers to exchange results and ideas.

The conference was planned to provide an overview of both spaceflight and ground technology investigations directed toward understanding and controlling interactions of space systems with orbital environments. Its focus included interactions between orbital environments and large, high-power space systems, including the shuttle, and astronaut extravehicular activity, as well as the geosynchronous spacecraft charging technology that was the main focus of the earlier conferences in this series (in 1976, 1978, and 1980). This shift and expansion of focus reflects the changing areas of emphasis in the NASA/Air Force technology programs in the shuttle era.

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