Preface

This publication provides reports on developments in Earth-based radio technology with applications to several programs. In space communications it reports on activities of the Deep Space Network. In geodynamics it reports on the application of radio interferometry at microwave frequencies for geodynamic measurements. In the field of astrophysics the Deep Space Stations individually and in pairs as an interferometer have been applied to direct observation of celestial radio sources.

Each succeeding issue of this report will present material in some, but not necessarily all, of the following categories:

Radio Astronomy
Radio Interferometry at Microwave Frequencies

- Goedetic Techniques Development
- Spacecraft Navigation
- Orbiting Very Long Baseline Interferometry

Deep Space Network

- Description
- Program Planning
- Advanced Systems
- Network and Facility Engineering and Implementation
- Operations
- Spacecraft Radio Science
- Planetary Radar

In each issue, there will be a report on the current configuration of one of the seven DSN systems (Tracking, Telemetry, Command, Monitor and Control, Test Support, Radio Science, and Very Long Baseline Interferometry).

The work described in this report series is either performed or managed by the Telecommunications and Data Acquisition organization of JPL.