Basic Goals for Revised NASA Propagation Handbook

- Combine Scope of the Previous Two NASA Handbooks into a Single Comprehensive Document
- Eliminate Duplication
- Provide a More Cohesive Structure for the Reader
  - Offer Several Levels of “Entrance” into Handbook
- Include Tailored Propagation Analysis Procedures For Specific Types of Satellite Applications
Prior Editions
Above 10 GHz Handbooks

- **First Edition**  ORI Technical Report TR 1679
  R. Kaul, R. Wallace, G. Kinal
  *March 1980*

- **Second Edition**  NASA Reference Publication 1082
  L. Ippolito, R. Kaul, R. Wallace
  *December 1981*

- **Third Edition**  NASA Reference Publication 1082(03)
  L. Ippolito, R. Kaul, R. Wallace
  *June 1983*

- **Fourth Edition**  NASA Reference Publication 1082(04)
  L. Ippolito
  *February 1989*
Prior Editions
Below 10 GHz Handbooks

- **First Edition** NASA Reference Publication 1108
  W. Flock
  *December 1983*

- **Second Edition** NASA Reference Publication 1108(02)
  W. Flock
  *December 1987*
Basic Structure of Handbook

Three Sections

SECTION 1 BACKGROUND
Provide Overview of Propagation Effects, including Theory and Basic Concepts, Propagation Measurements, Available Data Bases.

SECTION 2 PREDICTION

SECTION 3 APPLICATIONS
Section 1 Background
- Six Major Subsections: 118 pages

Section 2 Prediction
- Six Major Subsections: 226 pages

Section 3 Applications
- Eight Major Subsections: 43 pages
- 387 pages
Handbook Highlights
Status and Future Plans

- Handbook Delivered to JPL October 23 1998
- Electronic Versions on-line
  - JPL
  - Stel
- On-going Peer Review
- Plan for Modifications and Enhancements
  - Revise current Edition
    - Corrections, Minor Changes
  - Develop Sixth Edition
    - Enhancements, Updated Models, New Areas