

## ABSTRACT

### **A Data Handling and Linking System for all of NASA's Near Earth Space Missions**



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A modularized data handling and linking system is evolving that will meet all of NASA's low earth orbiting space needs. The system is comprised of three major subsystems: (1) Data management (three networks; 300 Mbps to 20 Mbps, 20 Mbps to 3 Mbps, and 3 Mbps to 125 bps); (2) RF (antennas and microwave components); and (3) antenna control. Representative system components, approximately 70% of a total system, have been tested operating through the NASA Tracking and Data Relay Satellite System in May 1987.

The modularized concept and data bandwidth transitions of the data management subsystem utilizes recently developed flight components along with developmental models that results in a system that is cost effective with a high level of performance and reliability. The system concept with performance data of key components will be presented.