ISS Payload Telemetry and Command Flow
Distributed Payload Operations
Supported ISS Customer Distribution

- Indicates Location With One or More Payloads Supported Including
  - Remote Principal Investigator (RPI) Sites
  - International Partners and International Participants
  - NASA Telescience Support Centers (TSCs)
Telescience Resource Kit

• TReK is a suite of software applications that provide local ground control system functions.

• The TReK software runs on a PC under the Windows 2000 operating system.

• The initial cost of a TReK solution is less than $3500.
  – Initial cost includes a commercial PC and commercial software products.
  – Initial cost does not include network connectivity costs.
  – Yearly maintenance costs will include hardware and software upgrades.
Telemetry Capabilities

* Receive, Process, Record, Forward, and Playback Telemetry Packets
* Display, Record, and Monitor Telemetry Parameters
* Extract Telemetry Parameters from Recorded Data Files
* View Incoming Telemetry Packets (Hex/Text Format)
* View/Record Telemetry Processing Statistics
* Telemetry API
* Telemetry Database
Command Capabilities

* Command Build/Uplink
* Command Updates
* Command Responses
* Command Session Recording/Viewing
* Command Track
* Command Statistics
* Command API
* Command Database
Training/Testing Capabilities

- TReK includes two training tools that can be used to simulate telemetry and command services. These tools require no external interfaces so they can be used for stand-alone training purposes and testing.

- TReK includes a full set of documentation (user guides, step-by-step tutorials) and on-line help.
Point of Contact

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