Boeing Payload Services
Implementation Partner for ISS National Laboratory

Payload Development
(Design, Build, Test, Safety, Verification, Integration)

Boeing will provide Implementation Partner Services to assist with the Payload Development and Integration Process

Catalog of Services

ISS Payload Mission Integration

Strategic

Tactical

Real Time Operations

Post Flight Ops

Launch

Research

Return
Today, Boeing supports NASA for ongoing ISS vehicle and payload systems development and payload integration work.
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Software Toolkit for Ethernet Lab-Like Environment (STELLA)

- For EXPRESS Subrack Payload Developers
  - Operates an onboard Ethernet payload as simply as when it was in the laboratory
  - Hides complex and unique NASA/ISS command, science telemetry, and Health and Status (H&S) protocols and data formats from the payload software (and the payload developer)
  - Flexible and easy to install and configure
  - Demonstrated on ISS EXPRESS Rack 1 May 24 – May 28, 2010
  - Available 4th Quarter 2010

- Ground Lab versus Flight Configurations
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Remote Advanced Payload Test Rig (RAPTR)

- For EXPRESS Subrack Payload Developers
  - Portable computer environment
  - Simulates the end-to-end ISS data architecture for your payload software development and interface checkout tasks
  - Simplified software development via advanced usability features
    - Intuitive Graphics to plot command and telemetry packet flow
    - Advanced Messaging
    - Virtual Data Probes to view packet flow
  - Supports telemetry routing in the “By-Pass RIC” downlink mode (i.e., via Rack Ethernet)
  - Remote tie in capability for payload software integration assistance
  - Available 2011