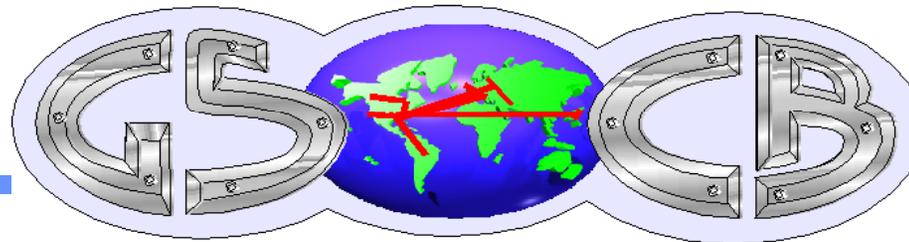




S133E010453

INTERNATIONAL SPACE STATION



GROUND SEGMENT CONTROL BOARD



NACAIT Status

(Network And Communications Analysis and Integration Team)

Network Support Group Meeting March 31, 2011

MTFanders/DD

281-483-6069

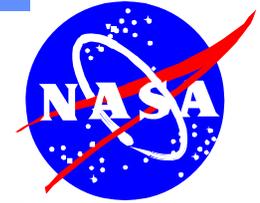
Michael.T.Fanders@nasa.gov



NACAIT Status

NSG March 31, 2011

INTERNATIONAL PARTNER GATEWAY/INTERFACE STATUS



- **CSA**
 - ◆ Full Up Space Station Remote Manipulator System (SSRMS) Support
 - ◆ Freezing video issues being tracked (NISN TT#8712183 dated Feb '10)
 - ◆ NSR36008 decoder replacement

- **JAXA**
 - ◆ Gateway upgrades (ATM to IP)
 - ◆ Hardware and new circuits installed. Regression tests started.
 - ◆ HTV OCS – HTV-2 launched, berthed, departed and reentry
 - ◆ HTV-3 January 20, '12
 - ◆ Earthquake impacted JEM/HTV support on March 11, '11
 - ◆ March 21, '11 resumed 24 hour support from SSIPC
 - ◆ Full redundant/diverse services restored



Space Station Integrated Promotion Center (SSIPC)





SSIPC





SSIPC

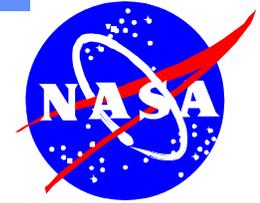




NACAIT Status

NSG March 31, 2011

IP GATEWAY STATUS (Cont)



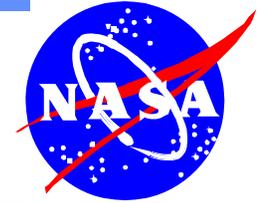
- **ESA**
 - Full Up Columbus Lab Operations
 - ◆ ATV-2 (Johannes Kepler)
 - ◆ Launched and docked. Undock: June 10, '11 (Possible June 20/21st)
 - ◆ ATV-3 (Edoardo Amaldi): February 29, '12
- **ASI – Gateway at JSC, Comm Nodes at MSFC/POIC and KSC/SSPF**
 - ◆ On-going operations to Permanent Multipurpose Module (PMM)
 - ◆ SSP135 MPLM engineering support
 - ◆ Gateway is also Prime command/telemetry path for Swift spacecraft
 - Launched November '04
 - <http://heasarc.gsfc.nasa.gov/docs/swift/swiftsc.html>
 - Swift MOC at Penn State University; Ground Station at Malindi, Kenya
 - ◆ Gateway modification to support upcoming NuSTAR
 - Launch NET February '12
 - <http://www.nustar.caltech.edu/>
 - NuSTAR MOC at UC Berkely; Ground Station at Malindi, Kenya
 - ASI/NASA IDP signed, sealed, and delivered
 - Network connectivity in-work



NACAIT Status

NSG March 31, 2011

IP GATEWAY STATUS (Cont)



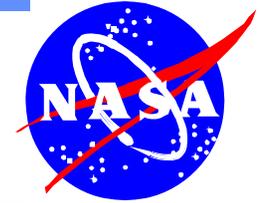
- **RSA - RSvG Mission and Administration Re-architecture Project:**
 - ◆ Houston Support Room (HSR) restructuring completed
 - ◆ Mission services redesign in work



NACAIT Status

NSG March 31, 2011

COTS Visiting Vehicle Status



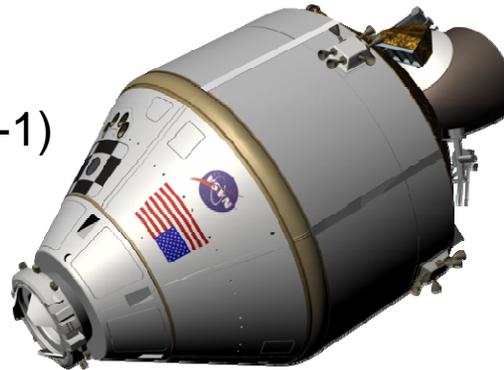
- **MCC-X/SpaceX-Dragon** (www.spacex.com)
 - ◆ Launches (launches TBV)
 - C1: Successful
 - Falcon 9 Orbit insertion and Dragon separation/splash down
 - C2: July 15, '11
 - ISS Fly-by
 - C3: October 8, '11
 - Dragon capture by SSRMS and berthed to Node 2 Nadir
 - Note: probable C2/C3 combination flight
- **MCC-D/Orbital-Cygnus** (www.orbital.com)
 - ◆ Launch – NET December '11
 - Cygnus capture by SSRMS and berthed
 - ◆ RF Compatibility – July '11
 - ◆ NPRD Annex B, Revision A being finalized
 - WLPS dump data requirements
 - NSR34905 in-service awaiting end-to-end test



Future Requirements?



- MCC-21
- Commercial Crew
- Orion Flight Test (OFT-1)



- Multi-Purpose Crew Vehicle (MPCV)