



Human Space Flight (HSF) Documentation Status/Plan

10/20/11

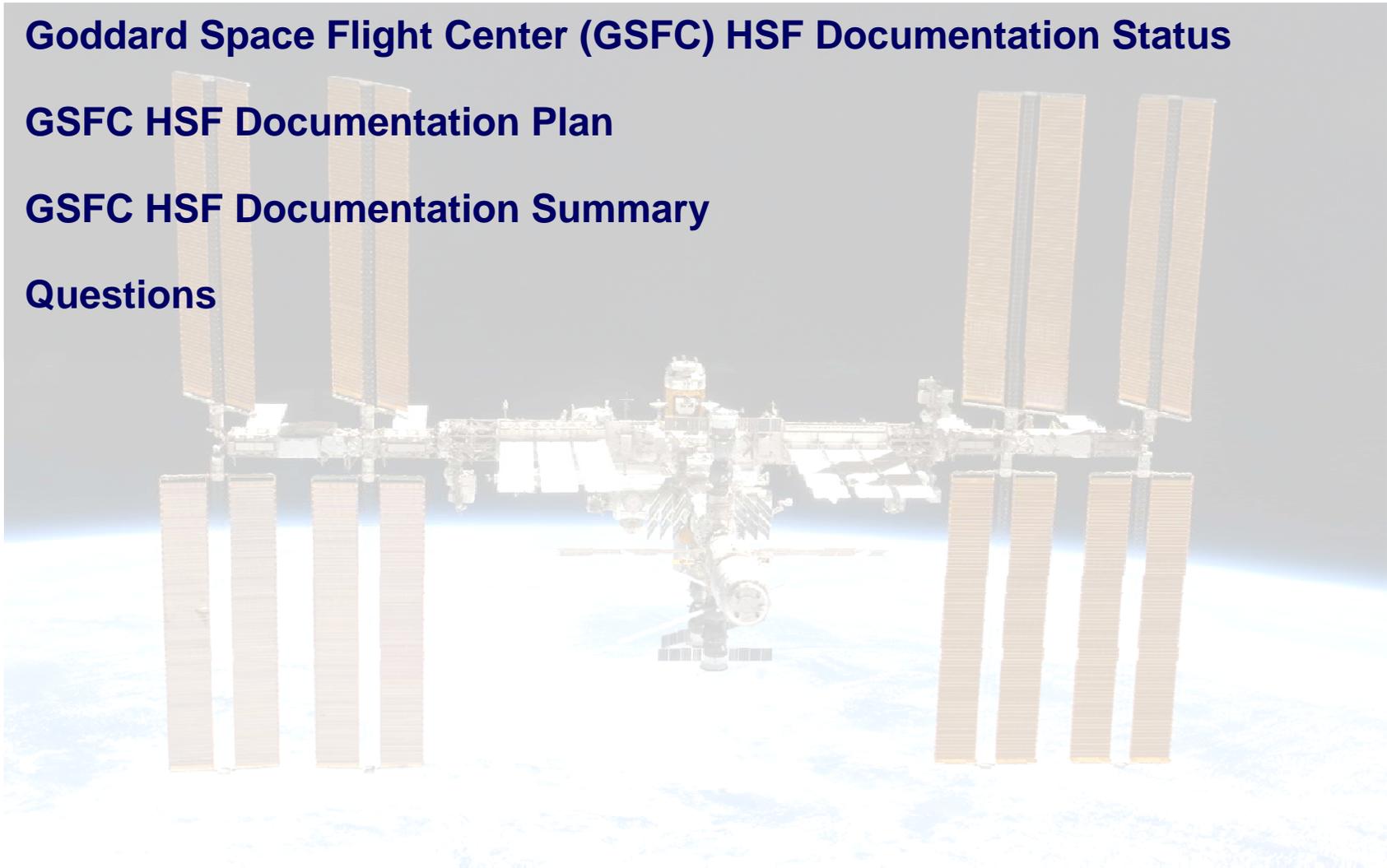
E. Daniel – GSFC/HSF
Presented by: J. May – GSFC/HSF





Agenda

- **Goddard Space Flight Center (GSFC) HSF Documentation Status**
- **GSFC HSF Documentation Plan**
- **GSFC HSF Documentation Summary**
- **Questions**





GSFC HSF Documentation Status



- Documents published since the last Network Support Group (NSG) (March 31, 2011)
 - Network Operations Procedures for Space Network (SN)/Near Earth Network (NEN) Television, 450-NOP-TV/DS, Revision 2, DCN 001
 - Procedures updated to reflect current operations support requirements and updates to terminology
 - Network Operations Support Plan for the Space Shuttle Program, 450-NOSP-Space Shuttle, Revision 2, DCN 001 (now obsolete)
 - This DCN included the incorporation of changes such as: change Network Command Processing System (NCPS) to Command Telemetry Processor (CTP) at DFRC and Command Programmable Telemetry Processor (Command PTP) at WGS, delete coverage of AFSCN RTS sites, add Dual TDRS Launch support procedures, add coverage of STS SITE COORD 2 (Test) and B/U KSC/JSC voice capability during pre-launch
 - ISS VHF-1 Support Summary and Soyuz VHF-2 Support Summary Forms, 09/19/11
 - EXCEL spread sheets with instructions are available on NGIN





GSFC HSF Documentation Status (cont'd)



- **Documents published since the last NSG (March 31, 2011) (cont'd)**
 - **Network Operations Support Plan for the Space Shuttle Program, 450-NOSP-Space Shuttle, Revision 3, June 28, 2011 (now obsolete)**
 - Procedures updated to reflect current operations support requirements including: Change Network Command Processing System (NCPS) to Command Telemetry Processor (CTP) at DFRC and Command Programmable Telemetry Processor (Command PTP) at WGS, deleting coverage of AFSCNRTS sites, adding Dual TDRS Launch support procedures, adding coverage of STS Site COORD 2 (test) and B/U JSC voice capability during pre-launch
 - **Human Spaceflight Program Emergency Mission Control Center Activation and Operations Procedures, 450-CAP-EMCC, Revision 4, July 5, 2011 (now obsolete)**
 - Incorporated changes such as: adding Kennedy Space Center (KSC) Forward/Return Link (KFRL) overview diagram and discussion of Forward Link Commanding and the telemetry between the KSC Launch Control Complex (LCC) and the Integrated Network, adding coverage of the Cape Canaveral Air Station (CCAS), deleting coverage of the Remote Tracking Stations (RTS), dropping coverage of 21 SOPS, etc.



GSFC HSF Documentation Status (cont'd)



- **Documents in CCB Review**
 - **Freeze Exemption Request (FER) Form**
 - **Form updated to remove Space Shuttle (STS), include International Space Station (ISS), Visiting Vehicles (VV), and Robotics, and add NIM in approval box. Upon approval, this form will be available (with instructions) via NGIN**





GSFC HSF Documentation Status (cont'd)



- **Documents in General Review**
 - **Very-High Frequency Voice Communications Support Annex to the Tracking and Data Relay Satellite System Network Operations Support Plan for the International Space Station (ISS), 450-TNOSP-ISS, VHF Annex, Revision 1**
 - This Revision includes changing Ground Network (GN) to Near Earth Network (NEN), delete old terms such as ICOM, add mention of new voice loop ISS SITE COORD 2, update the VHF station scheduling support discussion, remove ANTC data, add Network Manager to point of contact, update contact phone numbers, add 20 degree AOS/LOS for WSC, update ISS Assembly illustration, update WGS, WSC, and DFRC station readiness tests, delete coverage of BCTC, update post-pass briefing, update list of test equipment, and revise VHF support summary form
 - **Tracking and Data Relay Satellite System (TDRSS) Network Operations Support Plan (TNOSP) for the International Space Station (ISS), 450-TNOSP-ISS, Rev1**
 - This Revision incorporates changes such as the following: delete coverage of AFSCN RTS support, add procedure for dual TDRS support during Launch to maintain space-to-ground communications redundancy, include WSC Test and Scheduling and notification procedure, and add new voice loops ISS TN COORD 2 and ISS SITE COORD 2 (TEST)





GSFC HSF Documentation Status (cont'd)



- **Documents in Local (Team) Review Cycle**
 - **TNOSP for the ISS, Cygnus Annex, 450-TNOSP-ISS Cygnus Annex, Original**
 - Current operations support requirements for new commercial resupply Visiting Vehicle spacecraft from Orbital Sciences Corporation (OSC)
 - **Automated Transfer Vehicle (ATV) Transponder/TDRSS Compatibility Test Plan, 451-PLAN-ATV/ISS/TDRSS**
 - DCN 001 to repost document for another 5 years – in the works
 - **TNOSP for the ISS, H-II Transfer Vehicle Annex, 450-TNOSP-ISS HTV Annex, DCN 001**
 - Current operations support requirements for HTV-3 Visiting Vehicle spacecraft
 - **Network Operations Directive for Human Space Flight Network Support, 450-NOD/HS, Revision 4**
 - JSC developing package – Show Human Exploration Operations Directorate impact





GSFC HSF Documentation Status (cont'd)



- **Document updates on hold**
 - Network Interface Procedures for Test/Simulation Coordination and Scheduling, 450-PROC-Test/Sim, Original (rewrite of STDN No. 508.27)
 - M&O Manual for the ISS/Soyuz VHF A/G Communications Systems at WSC and WFF, ME-19402, Revision 1
 - Abbreviations/Acronyms List, 450-LIST-Abbrev/Acrnym, Revision 1
- **Documents made obsolete**
 - Refer to Obsolete list – too numerous to list here since Shuttle Fly-out
- **Documents which require updates to remove Space Shuttle data**
 - 450-PROC-Integrated Network Test/Sim – Scheduling/Interface document (to replace STDN No. 508.27)



GSFC HSF Documentation Status (cont'd)



- **Documents which require updates to remove space shuttle data (cont'd)**
 - **450-CAP-GSFC-HSF – GSFC HSF Contingency Action Plan**
 - **450-NOP-TV/DS – Network Operations Procedures for Television**
 - **450-NOP-001 – Network Operations Procedures for Air-to-Ground Voice Systems**
 - **Approximately one dozen documents remain to be examined**
 - **HSF Memorandums of Understanding/Agreement are now being reviewed to determine status/replacements due to Shuttle Fly-out and new programs**



GSFC HSF Documentation Plan



- **Updates for the next fiscal Year**
 - The following table lists the documents identified for updating during the next fiscal year based on priority, funding, and resources available. The up-coming review cycle is stressed, and the projected final completion date is provided. Also provided are the names of the Subject Matter Expert (SME) assigned to each document and the Book Manager (BM) responsible for coordination of the task
 - Additional backup slides are provided that include a list of all documentation identified as Human Spaceflight Required or Essential
 - Space Shuttle Program documentation was rendered obsolete after STS-135. Other HSF documentation is now being examined to see if updates are required to delete Space Shuttle data and references. Most GSFC HSF documents have been examined, only about one dozen remain to be reviewed



GSFC HSF Documentation Plan (cont'd)



Document	Edition	Current Task			Remarks Book Mgr./Ops Specialist
		Start Review	Due Back	Planned Completion Date	
<i>Tracking and Data Relay Satellite System Network Operations Support Plan for the International Space Station, 450-TNOSP-ISS, Orig</i> Revision 1	Feb 23, 2010 G	Sep 19, 2011	Oct 28, 2011	Dec 16, 2011	E. Daniel/F. Pifer
<i>VHF Voice Communications Support Annex to the TDRSS NOSP for the International Space Station (ISS), 450-TNOSP-ISS, VHF Annex, Original, DCN 1</i> Revision 1	Sep 01, 2006 Feb 01, 2009 G	Nov 07, 2011	Dec 02, 2011	Jan 27, 2012	E. Daniel/K. Riley
<i>TDRSS NOSP for the ISS, Cygnus Annex, 450-TNOSP-ISS, Cygnus Annex</i> Original	 T	Jul 11, 2011	Dec 15, 2011	Mar 16, 2012	E. Daniel/E. Clark
<i>TDRSS NOSP for the ISS, HTV Annex, 450-TNOSP-ISS, HTV Annex, Original</i> DCN 001	Nov 01, 2011 T	Sep 12, 2011	Oct 28, 2011	Feb 29, 2012	E. Daniel/M. Calhoun
<i>ATV Transponder/TDRSS Compatibility Test Plan, 451-PLAN-ATV/ISS/TDRSS , Orig</i> DCN 001	Jul -1, 2004 C	Oct 03, 2011	Oct 28, 2011	Dec 30, 2011	S. Testoff
Notes: T = GSFC HSF Team Review G = General <i>Review Cycle</i> C = GSFC 450.1 CCB Review ss = Supersedes Red = current effort					





GSFC HSF Documentation Plan (cont'd)



Document	Edition	Current Task			Remarks Book Mgr./Ops Specialist
		Start Review	Due Back	Planned Completion Date	
Network Operations Directorate for HSF Network Support, 450-NOD/HS, Rev 3 Revision 4	Dec 13, 2009 T	Sep 16, 2011	Oct 28, 2011	Jan 27, 2012	E. Daniel/R. Marriott
Freeze Exemption Request (FER) Form Revision 1	 C	Oct 03, 2011	Nov 18, 2011	Nov 30, 2011	E. Daniel/M. Blizzard
TDRSS NOSP for the ISS, Cygnus Annex, 450-TNOSP-ISS, Cygnus Annex Original	 T	Mar 14, 2011	Apr 15, 2011	Jul 29, 2011	E. Daniel/E. Clark
Tasks on Hold					To be scheduled
Tasks waiting for Shuttle data removal					To be scheduled
Notes: T = GSFC HSF Team Review G = General <i>Review Cycle</i> C = GSFC 450.1 CCB Review ss = Supersedes Red = current effort					





GSFC HSF Documentation Status/Plan Summary



- Presenting review dates to the network in this forum allows each element advance notice of projected document review work load and expected turnaround dates for each document during the next 12 months
- To meet projected completion dates, it will be very important to receive all suggested updates and review comments by due dates/input cutoff dates
- Tasks currently on hold, or already identified for Shuttle removal updates will be worked in between higher priority tasks as time permits
- Each document has an assigned book manager who will collect all suggested updates and review comments, coordinate incorporation of all comments, resolve any conflicts, and ready each document for Team, General, and CCB reviews (as applicable)
- The technical accuracy of each document will be ensured by an assigned SME from the HSF Team
- Earl Daniel is responsible for the coordination of all GSFC HSF Documentation efforts, contact information as follows

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Questions/Requests

