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# Human Space Flight Documentation Status/Plan

March 31, 2011

Earl Daniel



# Documentation Status

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- **Documents updated/published since the last NSG (September 2010)**
  - ***Network Integration Center Standard Operating Procedures, 450-SOP-NIC, Revision 2***
    - **Procedures updated to reflect current operations support requirements and updates to terminology; Voice Distribution System (VDS) changed to Mission Operations Voice Enhancement (MOVE)**
  - ***TNOSP for the ISS, SpaceX Dragon Annex, 450-TNOSP-ISS Dragon Annex, Revision 1***
    - **This document on the new commercial resupply Visiting Vehicle spacecraft from SpaceX has been completely rewritten to bring it current with support requirements, add a discontinuous data explanation, update the Integrations Communications Overview diagram, change trouble reporting procedures, revise configuration codes and MDM parameters, update the communications links diagram, update points-of-contact information, and more closely match the format of the GSFC Code 450 NOSP template**



## Documentation Status (cont'd)



- **Documents updated/published since the last NSG (cont'd)**
  - ***Goddard Space Flight Center Human Spaceflight Program Contingency Action Plan, 450-CAP-GSFC-HSF (formerly 451-CAP-GSFC-HSF), Revision 1***
    - This is a complete reissue of the document, incorporating changes such as the following: remove references to the Air Force Remote Tracking Stations (RTS) which no longer support Shuttle or Space Station missions, updates to GSFC organization names in Code 450, update of NISN Callsigns, replace outdated items such as CCMS with NGIN (Next Generation Integrated Network), and STDN with Spaceflight as in Spaceflight Mission Manager (SMM), and add directions on how to access forms in NGIN
  - ***Tracking and Data Relay Satellite System Network Operations Support Plan (TNOSP) for the Space Shuttle, 450-TNOSP-Space Shuttle, Revision 1, DCN 001***
    - Current operations support requirements and delete coverage of AFSCN RTS sites, add Dual TDRS support for Launch procedures, add coverage of STS Site COORD 2 voice loop, update Virtual Spacecraft support procedure, update descriptions of the GSFC Simulation Operations Center (SOC) and Compatibility Test Lab, and add Voice Loop Protocol during SN troubleshooting procedure



## Documentation Status (cont'd)



- **Documents in CCB Review**
  - ***Network Operations Procedures for Space Network (SN)/Near Earth Network (NEN) Television, 450-NOP-TV/DS, Revision 2, DCN 001***
    - **Procedures updated to reflect new Guam TV configuration.**



## Documentation Status (cont'd)



- **Documents in General Review**

- ***Network Operations Support Plan for the Space Shuttle Program, 450-NOSP-Space Shuttle, Revision 2, DCN 001***
  - This DCN includes 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 WPS, 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
- ***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 WPS, 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



## Documentation Status (cont'd)



- **Documents in Local (Team) Review Cycle**
  - ***Network Interface Procedures for Test/Simulation Coordination and Scheduling, 450-PROC-Test/Sim, Original (rewrite of STDN No. 508.27)***
    - Reorganized and brought current with new scheduling procedures and terminology–  
New Technical contact assigned
  - ***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 Science Corporation
  - ***Tracking and Data Relay Satellite System (TDRSS) Network Operations Support Plan (TNOSP) for the International Space Station (ISS), 450-TNOSP-ISS, DCN 001***
    - This DCN 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)



## Documentation Status (cont'd)



- **Documents in Local (Team) Review Cycle (cont'd)**
  - **Automated Transfer Vehicle (ATV) Transponder/TDRSS Compatibility Test Plan, 451-PLAN-ATV/ISS/TDRSS**
    - **DCN 001 to repost document for another 5 years.**



## Documentation Status (cont'd)



- **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 assigned to each document and the Book Manager 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**
  - **Although Space Shuttle Program documentation is slated for deletion in the future, every effort is being made to keep these “living documents” current until that directive is received.**
  - **Emphasis however has shifted to the documentation for the International Space Station and the Visiting Vehicles for the next fiscal year**



# Documentation Plan



Document	Edition	Current Task			Remarks Book Mgr./Ops Specialist
		Start Review	Due Back	Planned Completion Date	
<i>HSF EMCC Activation and Operations Procedures, 450-CAP-EMCC w/supplement, Revision 3</i> <b>Revision 4</b>	Dec 4, 2009 <b>T</b>	<b>Jun 06, 2011</b>	<b>Jun 24, 2011</b>	<b>Sep 12, 2011</b>	E. Daniel/T. Russell
<i>M&amp;O Manual for the ISS/Soyuz VHF A/G Communications Systems at WSC and WFF, ME-19402, Original</i> <b>Revision 1</b>	Nov 2005 <b>T</b>	<b>May 09, 2011</b>	<b>May 27, 2011</b>	<b>Aug 19, 2011</b>	E. Daniel/P. DeLong
<i>Abbreviations/Acronyms List, 450-LIST-Abbrev/Acrnym, Orig</i> <b>Revision 1</b>	Apr 15, 2010 <b>T</b>	<b>Jul 25, 2011</b>	<b>Aug 12, 2011</b>	<b>Nov 18, 2011</b>	R. Lewis/L. Clark
<i>NOSP for the Space Shuttle Program, 450-NOSP-Space Shuttle, Revision 2</i> <b>Revision 2, DCN 001</b>	Jun 29, 2010 <b>G</b>	<b>Feb 14, 2011</b>	<b>Mar 11, 2011</b>	<b>May 06, 2011</b>	E. Daniel/T. Russell
<i>Network Interface Procedures for Test/Simulation Coordination and Scheduling, 450-PROC-Test/Sim</i> <b>Original</b>	<b>T</b>	<b>Jul 11, 2011</b>	<b>Jul 29, 2011</b>	<b>Oct 28, 2011</b>	ss STDN No. 508.27 E. Daniel/E. Richards
Notes: T = GSFC HSF Team Review    G = General	<i>Review Cycle</i>	<i>C = GSFC 450.1</i>	<i>CCB Review</i>	<i>ss = Supersedes</i>	<i>Red = current effort</i>



# 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>  <b>DCN 001</b>	Feb 23, 2010  <b>T</b>	<b>Feb 14, 2011</b>	<b>Feb 26, 2011</b>	<b>Jun 16, 2011</b>	E. Daniel/F. Pifer
<i>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, Original</i>  <b>Revision 1</b>	Sept 2006  <b>G</b>	<b>Mar 10, 2011</b>	<b>Apr 15, 2011</b>	<b>Jun 24, 2011</b>	E. Daniel/K. Riley
<i>TDRSS NOSP for the ISS, Cygnus Annex, 450-TNOSP-ISS, Cygnus Annex</i>  <b>Original</b>	  <b>T</b>	<b>Mar 14, 2011</b>	<b>Apr 15, 2011</b>	<b>Jul 29, 2011</b>	E. Daniel/T. Banks
<b>Notes:</b>  T = GSFC HSF Team Review    G = General <i>Review Cycle</i> C = GSFC 450.1    CCB Review    ss = Supersedes <b>Red = current effort</b>					



# Documentation Status/Plan Summary

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- **Focusing review efforts over the next 12 months only on documents currently identified in previous slides**
  - List can be modified (with justification) but will mean shifts in other tasks
- **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 input cutoff dates**
- **Each document has an assigned book manager who will collect all suggested updates and review comments and ready each document for Team, General, and CCB reviews (as applicable)**
- **The technical accuracy of each document will be ensured by an assigned subject matter expert from the GSFC HSF Team such as a NOM or SMM**
- **Earl Daniel is responsible for the coordination of all GSFC Human Spaceflight Documentation efforts, contact information as follows:**

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