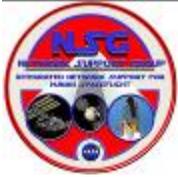


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# MOVE-GSFC

September 2010



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# Agenda

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- MOVE-GSFC-1 status
- VDS and VSS status
- MOVE-GSFC-2 design and implementation



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## MOVE-GSFC-1 status

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- Transition complete!
- Software Status
  - MOVE-GSFC-1: Release 1.5.5
  - MOVE-GSFC-2: Release 1.5.6
  - Software release 1.6.0 will be installed on both MOVE-GSFC-1 and MOVE-GSFC-2 when available
- Circuit installation to support remote keysets for NASA HQ PAO and HST LMB in progress



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## VDS and VSS Status

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- All VDS and VSS functions have been transitioned to the MOVE-GSFC-1 system
- MOVE has been thoroughly tested and meets all mission critical requirements
- All VDS keysets have been removed
- No failback available



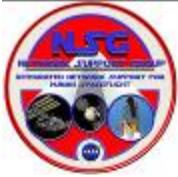
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## MOVE-GSFC-2

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- MOVE-GSFC-2 Purpose
  - Provide a test bed capability
    - To test new software releases
    - To evaluate new capabilities as GSFC is the lead center for the MOVE project
  - Provide a contingency capability to continue mission operations in the event MOVE-GSFC-1 is unavailable
- Delta CDR will be presented to receive funding and authorization to proceed
- Target to complete implementation 4QFY11 based on receiving funding and ATP NLT 9/30/10



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# Concept Description

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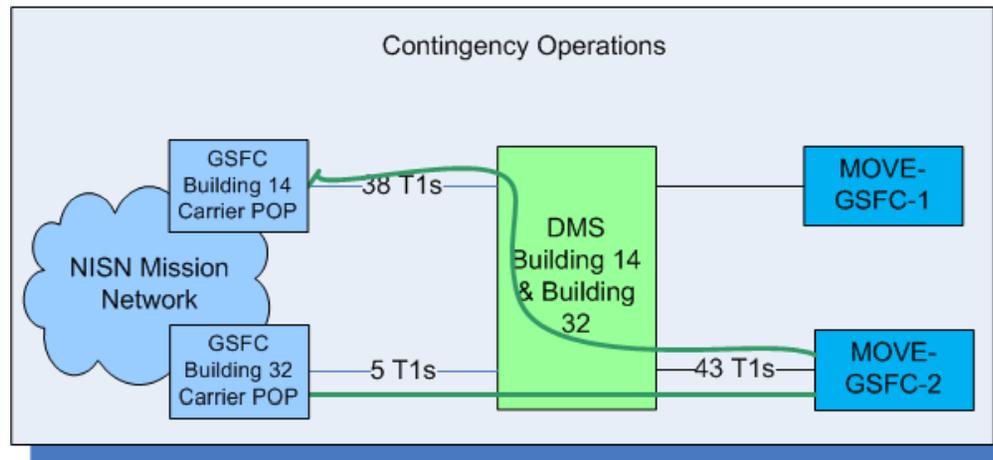
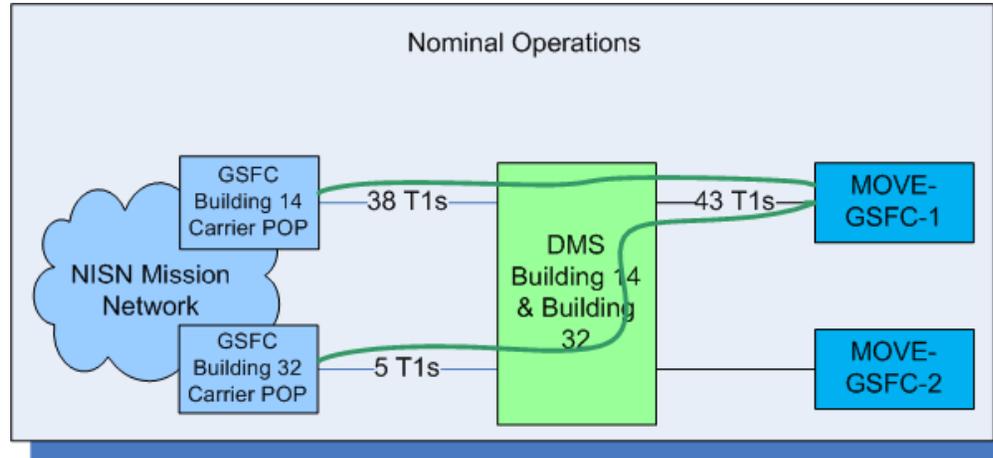
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- Incorporate capability offered by the replacement DMS to enable all wide area (NTR) T1s to be interfaced to either MOVE-GSFC-1 or MOVE-GSFC-2
  - Phase 1
    - 5 T1s containing voice services will be remapped to break out at the Building 32 POP
      - NSR 35565 generated to obtain Carrier cost estimate. Pending ATP.
  - Phase 2
    - Remaining T1s will be interfaced through DMS
- Extension of original concept that included **1** wide area T1
- Dual homed keysets identified in transition plan will be interfaced to MOVE-GSFC-2
- When contingency is activated, NNSG will send a Network Advisory Message and GSFC users will be notified to log onto active switch



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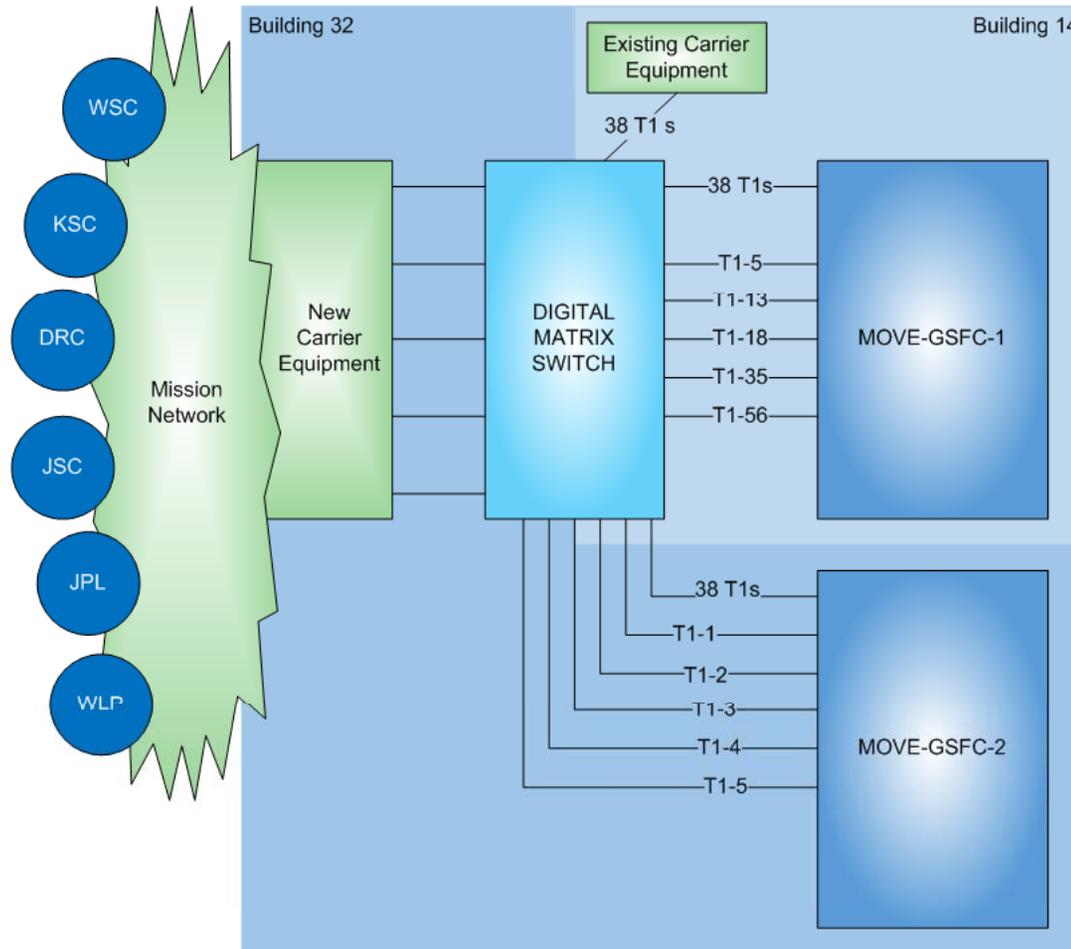
# MOVE-GSFC-2 Ops Concept (Phase 2)

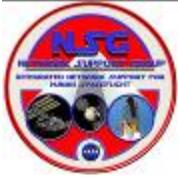




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# MOVE-GSFC-2 Remapped Voice Services

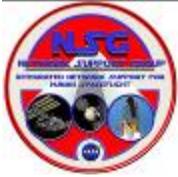




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# MOVE-GSFC-1 Port 5

ID	Description	ID	Description
GWSC-06400	TDRS-2 WEST COORD	GWSC-06415	GSFC/MSFC COORD (WSSH/WSGT/KSC/MSFC/GSFC)
GWSC-06401	TDRS-6 GN COORD	GWSC-06417	EDOS COORD LOOP
GWSC-06402	MDM ORDERWIRE	GWSC-06419	ISS OPS
GWSC-06403	SURGEON 1 (WSSH/JSC/KSC/GSFC)	GWSC-06409	WEATHER A/G VHF (0221)
GWSC-06404	ISS TN COORD	GWSC-06412	TRACK COORD 1 (0223) (Prior to WSSH Landing)/MPS COORD (At Handover)
GWSC-06405	SITE COORD (WSSH/JSC/KSC)	GWSC-06414	PURGE NET (0215)
GWSC-06406	MISSION AUDIO (WSSH/GSFC)	GKSC-62201	STS SUPPORT AS REQUIRED
GWSC-06407	MISSION COMM COORD (L&L)	GKSC-62202	STS SUPPORT AS REQUIRED
GWSC-06408	DOD COORD	GKSC-62207	STS SUPPORT AS REQUIRED - (AE) SPACECRAFT 1/THEMIS TEST OPS
GWSC-06410	LANDING FIELD PRIME 1 (O222)	GKSC-62209	SUPPORT AS REQUIRED
GWSC-06411	LANDING FIELD-PRIME-2 (0223) (Prior to WSSH Landing) - PRSD (At Handover)	GKSC-62210	STS SUPPORT AS REQUIRED - (AE) SPACECRAFT 2/THEMIS ENG
GWSC-06413	ISS SITE COORD	GKSC-62212	SUPPORT AS REQUIRED



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# MOVE-GSFC-1 Port 13

ID	Description	ID	Description
GDRC-61007	IP/GC-1 (T/L)	GKSC-61713	SUPPORT AS REQUIRED
GDRC-61008	EMCC-FLIGHT DIRECTOR (M)	GDRC-61009	CONVOY COMMANDER
GDRC-61011	EMCC-TRACK COORD	GDRC-61010	EMCC/A/G UHF
GDRC-61012	EMCC - LANDING FIELD PRIME-2	GDRC-61013	
GDRC-61018	MISSION COMM ORDERWIRE (STS MISSIONS)	GDRC-61016	COOLING NET
GDRC-61019	MCDTV COORD (Multi Channel Digital Television)	GDRC-61017	PURGE NET
GKSC-61704	SUPPORT AS REQUIRED/EMCC FLIGHT DIRECTOR	GKSC-61700	A/G-1 (OIS 212)
GKSC-61705	GSFC/MSFC COORD (WSSH/WSGT/KSC/MSFC/GSFC)	GKSC-61701	A/G-2 (M) (OIS-219) - MILA EXTENDS TO XY ON GCN 3
GKSC-61708	PRIME OPS 1 (STS-125)	GKSC-61702	PURGE NET (WSSH/WSGT/JSC)
GKSC-61709	DELTA LAUNCH COMMENTARY	GKSC-61703	COOLING NET
GKSC-61712	DELTA LAUNCH COORD		



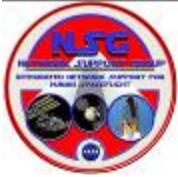
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# MOVE-GSFC-1 Port 18

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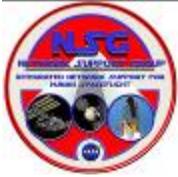
ID	Description
GJSC 58101	LANDING FIELD PRIME-1 (WSSH/WSGT/KSC/JSC/GSFC)
GJSC 58102	LANDING FIELD PRIME-2
GJSC 58103	OPS ACTION 1 (STS-125)
GJSC 58104	ISS TN COORD-1 (FULL PERIOD)
GJSC 58106	SITE COORD (WSSH/WSGT/JSC)
GJSC 58108	NISN COMM COORD
GJSC 58109	IP/GC-1 MH03 (M)
GJSC 58110	GC/NOM
GJSC 58111	MCC COORD1 (STS-125)
GJSC 58105	TV CONFERENCE (DTMFTONE)



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# MOVE-GSFC-1 Port 35

ID	Description	ID	Description
GJPL 61901	ACE COORD LOOP	GJPL 65500	
GJPL 61902	GEOTAIL OPS	GJPL 65501	JPL COORD
GJPL 61903	ACRIMSAT OPS	GJPL 65502	MESSENGER COORD
GJPL 61904	MARS GLOBAL SURVEYOR (Bldg 2)	GJPL 65503	
GJPL 61905	MARS GLOBAL SURVEYOR (Bldg 22)	GJPL 65504	DSN ORDERWIRE (CAN/MAD/JPL/GDS)
GJPL 61906	S/C 6 (CAL MGT)	GJPL 65505	
GJPL 61908	JPL/VAFB COORD/AXAF OPS LOOP	GJPL 65506	
GJPL 61909	SOHO OPS	GJPL 65507	
GJPL 61900	STEREO BACKUP	GJPL 65508	
GJPL-61907	GOES MISSION CONFERENCE	GJPL 65509	



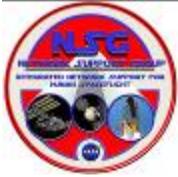
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# MOVE-GSFC-1 Port 56

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Service ID	Description
GWLP-59503	
GWLP-59502	ISS A/G VHF-1
GWLP-59505	
GWLP-59506	ISS IP/GC-1
GWLP-59507	A/G UHF PRIME
GWLP-59509	
GWLP-59513	



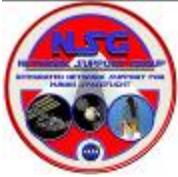
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# Contingency Modes

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- **MOVE-GSFC-1 failure => MOVE-GSFC-2 becomes prime voice switch**
  - Phase 1
    - Limited external connectivity
    - MSFC comm through JSC
    - No connectivity to remote keysets (NASA HQ, NASA HQ SOC, LMB)
    - No connectivity to discrete circuits
    - Reduced keyset connectivity based on dual homed keysets requested by users
  - Phase 2
    - Full NTR connectivity
    - No connectivity to remote keysets (NASA HQ, NASA HQ SOC, LMB)
    - No connectivity to discrete circuits
    - Limited keyset connectivity based on dual homed keysets requested by users
- **Building 14 carrier POP failure => MOVE-GSFC-1 remains prime voice switch**
  - Limited external connectivity
  - MSFC comm through JSC
  - No connectivity to remote keysets (NASA HQ, NASA HQ SOC, LMB)
  - No connectivity to discrete circuits
- **Building 14 failure**
  - Limited external connectivity
  - MSFC comm through JSC
  - No connectivity to remote keysets (NASA HQ, NASA HQ SOC, LMB)
  - No connectivity to discrete circuits
  - Reduced keyset connectivity based on dual homed keysets requested by users



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# Contingency Modes

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- MOVE-GSFC-2 failure => MOVE-GSFC-1 remains prime voice switch
  - Full WAN and local connectivity
- Building 32 carrier POP failure => MOVE-GSFC-1 remains prime voice switch
  - Reduced external connectivity
- Building 32 Failure
  - Reduced external connectivity



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# MOVE-GSFC-2 Dependencies

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- MOVE-GSFC-2 ATP
- Funding available
- Replacement DMS accepted for mission operations by 1/10/11



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# Discussion