



International Space Station (ISS)/Soyuz Very High Frequency (VHF) Status Splinter Group Summary





Agenda



- **VHF Network Configuration**
- **Station Support**
- **Proposed Station Proficiency Simulations**
- **White Sand Complex (WSC) Upgrades**
- **Station Equipment Configurations**
- **Station Major Component Equipment List**
- **Documentation**
 - **Tracking and Data Relay Satellite System (TDRSS) Network Operations Support Plan (TNOSP) for the ISS VHF Annex**
 - **Support Summaries**
 - **System Readiness Test (SRT) Report**
 - **VHF Private Communications**
 - **Soyuz SIC and ID**
- **Summary**
- **Backup**



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- **Purpose**
 - **Review stations contingency/emergency communications support**
 - **ISS Service Module (SM) on VHF-1 (139.208 MHz up/143.625 MHz down) contingency communications support**
 - **Soyuz on VHF-2 (130.167 MHz up/121.750 MHz down) emergency communications support only**
 - **Monitor for downlink, report voice to Houston Communications Technician (HCT) and initiate uplink for emergency only**



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- **Discussion Highlights**

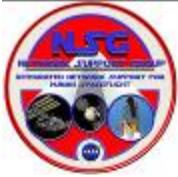
- **VHF-1 uplink radiation restricted pending license renewal (in work by Johnson Space center (JSC) Frequency Manager with approval date To Be Determined (TBD))**
 - **Restriction documented by OPN issued 03/19/12; radiation requires Flight Director (FD) or Network Director (ND) approval**
- **WSC test passes not scheduled below 20 degrees (high noise environment)**
- **All stations (including WSC) available for emergency support to ISS or Soyuz**



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- **Discussion Highlights - continued**
 - **Discussed Proposed Station Proficiency Simulations**
 - **GC submit VHF schedule request annotated “Emergency Communication Simulation Only”**
 - **Pre-pass briefing will advise station(s) pass is a simulation support (transmitter is configured to dummy load)**
 - **WSC Near Earth Network (NEN) Scheduling Office (SO) will schedule the supporting station(s) as “Emergency Comm C/O Simulation only”**
 - **Stations (Dryden Flight Research Center (DFRC), Wallops Ground Station (WGS), and White Sands Complex (WSC)) will not radiate**
 - **Pass will be conducted in accordance with ISS TNOSP VHF Annex H-90 Interface and Pass/Post-pass Activities**



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- **Discussion Highlights - continued**

- **Reviewed VHF Private Communications**

- **Integrated Network elements and VHF stations required to terminate all audio monitoring and recording on prior notice (scheduled support)**

- **Mission Operations Voice Enhancement (MOVE) system reported to have no provision for canceling recording of digital voice**

- **Reviewed Soyuz SIC and ID designations assigned as follows:**

– Russian Soyuz TMA-22M/28S	7928	11999C
– Russian Soyuz TMA-03M/29S	7929	12999A
– Russian Soyuz TMA-04M/30S	7930	12999B
– Russian Soyuz TMA-05M/31S	7931	12999C
– Russian Soyuz TMA-06M/32S	7932	12999D



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- **Action Items**

- **01-Scott Douglas**

- Determine where the VHF configuration transverses MOVE.
- Determine what methods can be used to support VHF Private Conversations (e.g., unmapping paths, deleting recorded files, etc.) Note Wallops and DFRC are excepted.

- **02-Robert Jones**

- Check the DFRC inventory for VHF Test Set spares

- **03-Ken Clark**

- Track VHF Test Set sparing and provide an inventory/status