Network Control Center

STDN DAILY REPORT
FOR GMT DAYS
02, 03, 04 AND 05 AUG, 2001

Part I. Operations

02 AUG

A. SN Anomalies - None

B. ISS Anomalies - None.

C. GN Anomalies:

1. WGS/TRACE Support 02/2222-2232Z

LEO-T System failed to track TRACE spacecraft. At the time for the system to start tracking operations, message displayed was " Ant failed to reach AOS Position". Post-pass data Sim for TRACE was nominal but antenna is not exercised during simulation. Cause of the anomaly is unknown. CDS ID # 19407

LEO-T 10 Min. Svc/Data Loss (Recov unknown)

2. PF1/EO-1 Support 02/2341-2347Z

Data overwritten. This problem was attributed to the operator trying to help in troubleshooting the EO-1 commanding problem. During the pass, a member of the PF1 troubleshooting staff switched from the primary to the backup firewall system at the site. The EO-1 MOC reported they were having trouble re-establishing connections after the switch. PF1 personnel then disabled and then re-enabled the connections and re-enabled the streams. Re-enabling the streams of data began to overwrite the current data collected to that point, losing the earlier data. All data was recovered by the MOC on the next pass.

CDS ID # 19414

11M 2335-2347Z 5 Min. 33 Sec. Svc/Data Loss (Recov)

D. The launch of J0218LS DELTA II/GENESIS for 02 August 2001, DOY 214/1627:09-1629:09Z has slipped due to weather at KSC. The new launch date and window is 03 Aug. 2001, DOY 215/1623:53-1625:53z, with 04 Aug. 2001 DOY 216/1623:40Z as a back-up.

E. TDRS-3 STATIONKEEPING MANEUVER WAS NOMINAL.

03 AUG

A. SN Anomalies:

1. STGT/ERBS Support 03/2319-2323Z

Return service late acquisition resulted in a 3 minutes 27 second service and data loss. Mutual interference is the suspected cause. TTR # 23989

TDW SSA2F/R 2318-2349Z 3 Min. 27 Sec. (Recov)

B. ISS Anomalies - None.

C.GN Anomalies:

1. PF1/QST Support 03/0301-0313Z

TFEP Froze during pass. About 3 minutes into this support, the 4K data was dropped. The ground station did not lock-up to the 262K or 2M data streams. The antenna successfully autotracked the spacecraft throughout this pass with good signal strength. Post-pass it was discovered that the TFEP computer froze. An operator reset this computer prior to the next scheduled pass. CDS ID # 19413

11M 0258-0313Z 12 Min. 30 Sec. Svc/ Data Loss (Unknown) if recoverable.

2. WGS/SAMPEX Support 03/0304-0315Z

LEO-1 Antenna failed to set up for support. System was schedule properly however the system failed to update the PRC file with the new schedule. Antenna did not track pass. CDS ID # 19408

LEO-1 11 Min. Svc/Data Loss (Recov unknown)

3. PF1/QST Support 03/0618-0634Z

4K downlink not received during pass 11054, 11056, 11057. During the passes 11054 and 11056 the 4K data stream was not received. The DOC operator performed normal trouble shooting procedures which did not correct the problem. All the 262K and 2M data were received and delivered. Prior to the 11057 pass, PF1 personnel recycled the Downlink combiner and the telemetry receivers. At the start of the pass the 4K stream was not being received. PF1 personnel re-set all the connectors to the patch panel which corrected the problem. CDS ID # 19415

11M 0936-0949Z 12 Min. 16 Sec. Svc/Data Loss
11M 1114-1128Z 1 Min.32 Sec. Svc/Data Loss

4. SGS/EO-1 Support 03/1558-1612Z

X-band recording not included in ATS schedule. EO-1 MOC notified after X-band AOS and they tried to re-dump the data when the automated sequence was over. POCC managed to capture 31 of 45 files. 14 files were lost due to lack of time. CDS ID # 19411

11M 5 Min. Svc/Data Loss (Non-Recov)

5. WGS/QST Support 03/2317-2332Z

2MB data did not get to the PTP or the Metrums. Prior to support, did an in-house SRT. Everything appeared to be normal. All data syncs locked to the in house turnaround. Software engineering was performing activities on master 2, so the operator did not enable the PTP and assumed that since the data syncs locked that the PTP was configured. Upon start of 2MB dump the data syncs locked but the PTP did not. While troubleshooting the problem discovered that the bottle plugs for the 2MB data had been removed. Installed bottle plugs but was too late to capture the 2MB data. The missing plugs fed the PTP and the Metrums so no 2MB data was recorded. CDS ID # 19421

11M 2 Min. 30 Sec. Svc/Data Loss (Recov)

04 AUG

A. SN Anomalies:

1. STGT/UARS Support 04/1636-1640Z

Station ADPE failure resulted in 6 Min. 14 Sec. service and data loss non recoverable. TTR # 23990

TDW MAF/R 1636-1704Z 6 Min. 14 Sec. Svc/Data Loss

B. ISS Anomalies - None.

C. GN Anomalies:

1. AGS/QST Support 04/0233-0246Z

PTP1 failed to lock on the 2mbps data from Quikscat. The PTP did not collect any data. Inspection of the database showed no data collection. The PTP symptoms were clock polarity changing normal to inverted, sockets opening and closing autonomously and two of the streams showed normal lockup. The Science data stream never showed lockup. CDS ID# 19420

11M 13 Min. Svc/Data Loss (Non-Recov)

2. SGS/EO-1 Support 04/1501-1540Z

When the tape was loaded in Recorder#1, the recorder display stated the tape was Write protected. Err MSG on SCC: "324 Tape Write Protected". Even though the tape was NOT protected, the tape was in "Record". No visible faults on the tape. Operator tried to reload the tape from SCC but was unable to control the Recorder since the software had a busy time trying to begin record. Recorder#3 (backup) begun record for a few seconds but stopped. Err MSG on SCC: "228 IRIG B sync loss". Operator was not able to restart recording from SCC. After re-powered both recorders, reload of the tapes, the recorders stayed in "Positioning Mode". CDS ID 19422

11M 1503-1518Z 12 Min. Svc/Data Loss (Recov unknown)

3. SGS/EO-1 Support 04/1501-1750Z

Recorder#1 faulted, unable to control it from SCC. This is an extension of CDSID# 19422 concerning the problem we had with Recorder #3! When the problem with Recorder #1 occurred, a new pop-up window came up every two seconds and covered the main GUI on the SCC. The pop-up error MSG window partly covered the area where the x-band data channels are displayed. Therefore we didn't observe that Channel no 1 (EO1) had been disabled. The Demodulator had hung and that's the reason why we got the error MSG "228 IRIG-B sync loss". After support we re-powered Demodulator and Bit-sync and that solved the problem. CDS ID # 19423

11M 1503-1518Z

05 AUG.

A. SN Anomalies:

1. STGT/TRMM Support 05/1800-1814Z

Station equipment anomaly due to MDP failure to configure both chains the HPA's started ramping and the forward service link did not process. Recovery of the forward chains followed by the return restored service. TTR # 23991

171 SSA1F/R 16 Min. 23 Sec. Svc/Data Loss (Recov)

B. ISS Anomalies - None.

C. GN Anomalies - None.

1. SGS/QST Support 05/1852-1908Z

After AOS is was discovered that the Master module 06 (connected to PTP 1, card 2) got the clock absent. This lasted through out the support. Limited troubleshooting was carried out during the support concluding that the card had hung up. After LOS the PTP 1 was shutdown and the power cord was pulled out. Testing after proved that the card was in working order and a proper restart did the trick. CDS ID # 19424

11M 3 Min. Svc/Data Loss (Non-Recov)

D. The TITAN IV/B-31 Spacecraft was Launched from KSC at 06/07:28:00; 091Z

Part II. Testing Anomalies

A. SN Test - None.

B. GN Test

1. QUIKTOMS I&T #4C Fully Integrated Ground Data System Test	01/1155-02/0020Z	AGS/MGS/WGS/ SGS/FDF/QMCC/ TSOC/NCC/NISN/ WOTIS

Objectives:

A. Verify the ground data system's integrated ability to receive, record, store, process, forward and display real-time (RT)/playback (PB) data, tracking and command data in the CCSDS formats from the ground tracking stations, via RF equipment and links and in accordance with the test requirements defined in Section 6.2.4.7 of the Test Information Sheet (TIS).
B. Verify the ability of the WOTIS to support scheduling requests from the QMCC and provide automated scheduling products to the QMCC; straw man schedule and operational schedule.
C. Verify the NISN ability to provide QuikTOMS project voice and data circuits.
D. Verify the ability of the GN/USN stations to support the QuikTOMS PCM/BPSK/NRZ-M (400 ksps) modulation on the S-band 2275.000 MHz RF downlink, and the NRZ-S/BPSK (16 khz)/PM, modulation on the 2094.896 MHz uplink.
E. Verify the ability of the GN/USN stations to transfer the quietism 400 kbps downlink telemetry data to the QMCC. Verify the ability of the QMCC to receive and process site provided real-time and stored data.
F. Verify the ability of the QMCC to process and transmit QuikTOMS 2 KBPS commands to the stations and receive and process command verifications, echo blocks.
G. Verify the ability of the FDF to provide the WSG with stations ephemeris data and to receive and process site provided tracking data.

Results: Objective Partially Met

Remarks:

WOTIS successfully scheduled and provided ephemeris data for all events. One AGS and one SGS event was actually scheduled outside the COBE AOS to LOS view periods, which caused the station antennas to run away. The station operators noted and recovered from this problem.

MGS, SGS and WGS successfully sent simulated S-band real time telemetry to the QMCC and performed an FTP post pass

transfer of the same telemetry data. AGS had telemetry problems with both scheduled events. MGS, SGS and WGS successfully received and verified commands from QMCC.

AGS had command problems with both scheduled events. MGS, SGS and WGS successfully performed a simulated QuikTOMS track, based on the COBE orbital parameters and sent post pass tracking files to FDF for analysis. AGS had tracking problems with both scheduled events.
The QuikTOMS TD will issue a detailed and separate report on the QMCC data processing and transfer success.
The FDF Analyst will issue a detailed and separate report on the received tracking data.
This test is scheduled to be repeated on August 3, 2001.

. The TARS system is presently down. This report will be entered in TARS when the system is restored to service.

Part III. Equipment Status Changes - None.

$ = Changed ETRO
** = New Items

Part IV. Scheduled Activities:

TILT U. S. Coast Guard Expedition 06/1140-1640Z

Part V. Forecast Changes - None.