Network Control Center

STDN DAILY REPORT
FOR GMT DAYS
04, 05, 06 AND 07, JANUARY 2001

Part I. Operations

04 JANUARY

A. SN Anomalies:

1. TERRA Support 04/0214-0217Z

The POCC reported a negative acquisition reason unknown. One forward reacquisition was transmitted by the POCC but was unsuccessful. STGT CSC-1 transmitted a forward reacquisition and the event acquired lock at 0217Z. TTR # 23399

0213-0238Z TDS SSAR-2 3 Min 32 Sec Svc/Data Loss (Recov)

B. ISS/ECOMM Anomalies

1. ISS Supports 04/1645-2359Z

The POCC reported that there User Performance Data (UPD) were dropping out during the events. 12 events were impacted. No data loss was declared. The anomaly is under investigation. TTR # 23403

C. GN Anomalies

1. AGS/TRACE Support 04/1145-1154Z

AGS reported that PAC #1 data buffer hung and the TPCE sent shutdown for R/T. AGS also received several error messages. An attempt to shut down the Packetizer manually was interrupted by another error message. After the Packetizer was rebooted the file on the data buffer had a size of –1. All data was recorded and will

played back from tape. TTR # 23402 CDS # 17800

TOTS 9 Mins. service loss

2. AGS/TRACE Support 04/1640-1641Z

Approximately 1 minute before LOS and 7 degrees elevation, the antenna lost autotrack . The antenna was immediately taken out of autotrack and recovered. All commanding was done, all science data was done, no data loss was reported. The AGC levels at this time were about 11 or 12. TTR # 23404
CDS # 17801

1632-1641 TOTS 1 Min Service loss

3. AGS/FAST Support 04/1906-1913Z

RT connection to project failed to set-up. TPCE came back with error message, "Received a null response to command "Activate setup by data." from VLSI TOTS2. A non-null response was expected. Returned the following error message in response to Activate setup by command: 2timeout on response from VLSI %d !!. (Error code: 1) State machine failed to execute VLSI command." Antenna drove off at AOS to -8 degrees el. Removed from autotrack and put back in, re-made connections to project before AOS+2m. TTR # 23405 CDS # 17802

1911-1942Z TOTS 7 Mins. service loss

4. AGS/SNOE Support 04/2008-2019Z

Shortly after AOS SMOC reported seeing large nulls in the spacecraft receiver AGCs that resulted in the inability to command. They also reported experiencing dropouts in the receive telemetry. Post pass investigation found that the ephemeris being used was from day 001. It is unclear at this time why the system failed to down load new vectors at the day change from 003 to 004. The problem was cleared by downloading the updated vector set from the wallops front end.
TTR # 23411 CDS ID# 17807

11 Min. Service/Data loss Non-recoverable

D. TDRS-6 West maneuver was nominal.

05 JANUARY

A. SN Anomalies:

B. ISS/ECOMM Anomalies :

1. ISS Supports 05/0026-2359Z

The POCC reported that there User Performance Data (UPD) were dropping out during the events. 42 events were impacted. No data loss was declared. The anomaly is under investigation. TTR # 23407 & 23407A

C. GN Anomalies:

1. WGS/SNOE Support 05/0424-0435Z

The POCC unable to get commands to the spacecraft. The problem appears to be a equipment problem at the POCC and not at Wallops. TTR # 23412 CDS ID # 17808

11 Min. Service loss only

2. WGS/IMP Support 05/2055-0342Z

Due to a hydraulic leak the antenna was down for repair at the start of the support. Antenna was not back in service until 2230Z. Imp commanding was rescheduled from 2200-2230Z to 2300-2330Z. TTR # 23414 CDS ID # 17810

1 Hour 35 Minutes Service/Data Loss Non-recoverable

06 JANUARY

A. SN Anomalies:

1. TERRA Support 06/0435-0450Z

The POCC reported that commands were not getting to there spacecraft, reason unknown. TTR # 23416

275 SSA1R 15 Min. Service Loss only

2. TERRA Support 06/1605-1630Z

TERRA POCC reported a late acquisition, reason unknown. This anomaly is under investigation by the POCC. TTR # 23420

TDS SSA2R 4 Min. 58 Sec. data loss Recoverable

3. NCC Anomaly 06/2328-2359Z

While troubleshooting a JSC UPD problem, the slave DNS (Domain Name Server) did not update from the master DNS that resulted in the CCS to stop responding and a loss of POCC GCMR/ODM capability followed. A CCS coldstart was required to restore this capability. One user (HST) lost 1 minute 45 seconds of 32k non-recoverable data due to this anomaly while the remaining users suffered only the loss of GCMR/ODM capability. This problem is carried over to the next Rayday on TTR #23422. TTR # 23421

TM Note: This anomaly was caused by Leap Year Rollover pro NCC TTR # 23370.

B. ISS/ECOMM Anomalies :

1. ISS Supports 06/0022-2359Z

The POCC reported that their User Performance Data (UPD) were dropping out during the events. 43 events were impacted.

No data loss was declared. The anomaly is under investigation. TTR # 23413 & 23413A

C. GN Anomalies :

1. WGS/EO-1 Support 06/0153-0204Z

Antenna elevation halted several times during support. System failed to go to program track. Intermittent data dropouts due to antenna operations. TTR # 23415 CDS ID# 17811

8 Min. 15 Sec. Service/Data Loss Recoverable (Unknown)

2. AGS/EO-1 Support 06/2336-2347Z

Negative acquisition due to DQM I Channel problem at the station. TTR # 23425 CDS ID # 17816

11 Min 16 Sec Service/Data Loss Recoverable

07 JANUARY

A. SN Anomalies:

1. NCC Leap Year Rollover Anomaly 07/0000-0148Z

The slave DNS (Domain NameServer) did not update from the master DNS which resulted in the CCS to stop responding and a loss of POCC GCMR/ODM capability followed. A CCS coldstart was required to restore this capability. 19 Users experienced the loss of GCMR/ODM capability. This is carried over from the old Raday (006) TTR # 23421. TTR # 23422

TM Note: This anomaly was caused by Leap Year Rollover problem at the NCC TTR # 23370.

2. WSGT/LDBP Support 1138-2359Z

At 11:38:50 on day 007/2001 the ongoing LDBP event dropped lock.The console spectrum analyzer was checked and there was no discernable RF present. The POCC called and requested a EB/NO reading. They were advised that there was no return chain lock and a EB/NO reading was not possible. A new vector was requested and one was sent by the LDBP POCC. Lock still not achieved. attempts to achieve reacquisition consisted of a return reacq, expanded user frequency uncertainty request, followed by a second return reacq. Still no acquisition. The POCC stated that this had happened previously and that the flight vehicle on board transponder was suspected to be temperature sensitive. At present they wanted to wait and watch to see if it started up again. TTR 23429

7 events were impacted.

3. STGT/TRMM Support 1341-1401Z

TRMM POCC said they were unable to process Q CH Data. They were receiving I-CH TLM ok. The LMT at STGT was checked and data was leaving STGT. Pacor reported that they were in receipt of the TRMM Q-channel data. Following the investigation at the NCC,The CD MGR reported that TRMM POCC PTP settings were corrupted
the Clock Phase Shift setting was Incorrect. The CD MGR reset the PTP and on the next TRMM event, the POCC advised the Q-channel data was being processed nominally. TTR # 23427

TDS SSAR-2 19 Min 30 Sec Svc Loss

B. ISS/ECOMM Anomalies:

1. ISS Support 07/0052-0054Z

GUAM technicians of an impending outage on all notified WSC three T1 lines between WSC and GUAM due to emergency battery replacement. ISS experienced a late acquisition. TTR # 22423

275 005249-012843Z 1 Min. Service/Data Loss Non-recoverable

C. GN Anomalies :

1. AGS/FAST Support 07/0410-0845Z

Front End Processor failed. The LEO-T scheduler continued to run and set up the remaining equipment and take the tracks. All indication from the TOTS-1 console was normal. A call from the FOT indicated a problem with the data from O/N 17386. Investigation found no data being processed by the FEP. Further investigation revealed problems with O/N 17384 and 17385. The LEO-T system processors were shutdown and restarted to clear the FEP problem. No commands were sent for these supports, as the FEP was down. All received data is on tape at TOTS-1. TTR 23426 CDS ID # 17817

0410-0429Z 19 Min. Svc/Data Loss (Recov)
0615-0636Z 21 Min. Svc/Data Loss (Recov)
0818-0845Z 27 Min. Svc/Data Loss (Recov)

2. AGS/FAST Support 2137-2139Z

The Project reported a late acquisition due to the antenna auto-tracking RFI/Ground Noise. The antenna was placed in program track and acquire lock. TTR # 23431 CDS ID # 17818

2137-2202Z 2 Min Svc/Data Loss Non-Recov)

D. TDRS-1 Planned Stationkeeping Maneuver was Successfully completed.

Part II. Testing Anomalies

A. SN Test

1. TITAN II/DMSP P-3 TARMAC TEST 04/1700-04/1900Z NCC MOSA/FDF/ NASA-TM/WR/NISN/ STGT/P-3 Pt. MUGU

OBJECTIVES:
To exercise the network for P-3 TDRSS Relay support for the upcoming TITAN II/DMSP launch.

RESULTS: OBJECTIVE PARTIALLY MET

REMARKS:
Objective was partially met. Taped TITAN II telemetry data was good via P-3 and the TDRSS network to VAFB/NASA-TM. However, the WR end customer did not receive the data. The WR end customer was performing internal hardware work and repatching at the time of the test. An internal post-test playback at the WR was performed and eventually the end customer received the data. It was requested by WR that this test be performed again later next week. The rerun of this is scheduled for 011/1700-1850z TDRS-174 (TDW).

B. GN Test

1. AGS and SGS Aqua GSIF Data Interface Test	04/1430-04/1630Z	AGS GSIF/SGS GSIF/ GSFC GSIF/NISN.

OBJECTIVES:
A. Verify the AGS and SGS RF Simulator configuration, cabling and Matrix Switch Interface configuration.
B. Verify the AGS and SGS X-band configuration and capability to send Aqua spacecraft telemetry data to GSIF.
C. Verify the GSIF capability to receive and process the AGS and SGS X-band telemetry data.

RESULTS: OBJECTIVE PARTIALLY MET

REMARKS:
A. SGS successfully sent the simulated X-band telemetry data through the station RF equipment to the GSIP interface. This data was forwarded to the GSFC GSIF and recorded for Level Zero processing.
B. AGS could not send the simulated X-band telemetry data

through the station RF equipment, due to a missing Bit Synch. AGS short-looped the Ampex Sim data to the GSFC GSIF for this test. This data had dropouts at the station, but was successfully forwarded to the GSFC GSIP with the dropouts.

C. A Bit Synch has been shipped to AGS and this test will be rescheduled next week, after installation and checkout of the Bit Synch is complete.

D. The GSIF TD will issue a test report after the Level Zero tape processing is complete.

Part III. Equipment Status Changes:

4. MIL 071: TR30:01, Analog Mag Tape Recorder, R 01061300Z
ETRO: Unknown. 6REKA stops without off button push 01
MILA has two recorders which parts has been used to repair one deck on each recorder. MILA has no spare parts on station to repair recorders. Unable to get parts from manufacture.

5. MIL 072: TR30:02, Analog Mag Tape Recorder, R 01061500Z,
ETRO: Unknown. 6REKA stops without off button push 01
MILA has two recorders which parts has been used to repair one deck on each recorder. MILA has no spare parts on station to repair recorders. Unable to get parts from manufacture.

Part IV. Scheduled Activities:

TDRS-H Post Acceptance ESTL/SSO Characterization Test 08/1500-2200Z

SEA LAUNCH-6/XM-1 Launch Support 08/1605-09/0235Z

EOS/ERPS/SN End to End IP Ops readiness Test 08/1800-09/0300Z

WPS STS-98 OPS Training Exercises with JSC 08/1930-09/0500Z

AGS & WGS EOS/ERPS End to End IP Operational
08/2030-09/0300Z

Part V. Launch Forecast Changes:

1.) H1435LS (SEALAUNCH/XM-1) 08 JAN.2001 T-0 = 2236Z