



**Network  
Control  
Center**

STDN DAILY REPORT  
FOR GMT DAYS  
28, 29 AND 30 JUNE , 2001  
01 JULY 2001

## Part I. Operations

28 JUNE

A. SN Anomalies - None.

B. ISS Anomalies - None.

C. GN Anomalies:

### **1. WGS/SWAS Support**

**28/1325-1339Z**

Following AOS the TOTS-3 system was showing some CRC errors at the beginning of the support primarily on VC2. Project also reported that one of the S/C receivers was showing a low level. CDS ID # 19098

#### **REASON UNKNOWN**

TOTS-3 No data loss declared.

### **2. WGS/TOMS-EP Support**

**28/1558-1605Z**

Following AOS at three degrees the antenna shifted to autotrack. Everything appeared normal until a little over midway through the 202KB dump we took 28 errors. The antenna was put into the program mode and the project was able to dump the 202kb data. CDS ID # 19100

## **REASON UNKNOWN**

11M 1557-1612Z No data loss declared.

### **3. AGS/FAST Support**

**28/1706-1708Z**

RFI After Initial AOS. Normal AOS and good lock on the data. During the decay of the Up-Link Sweep, the antenna began following the unknown source of RFI. The operator first verified the loss of video on the monitor, then noted the increasing angle deltas on the Antenna Control Computer. Immediate action was taken to disable the Autotrack function, forcing the system to Program Track. AOS and lock on the data was verified, then Autotrack was enabled till end of track. No further tracking anomalies were noted. The POCC called by black phone and announced "No Receive transponder lock". The operator was told to Re-Sweep the Command Carrier. Sweep was initiated at 17:10:48z and auto-terminated at 17:11:23z. During the re-acquisition, the spacecraft down link lock was lost by the receiving site from 17:10:56Z to 17:11:01Z. The source of this moving RFI was unknown and appears to be 9 Db hotter than FAST down link, linear and moving. Closer checks at this site indicate we may be tracking across the face of the Sun during these supports. System Planners should be aware of this during scheduling of supports to avoid this natural "RFI" source.  
CDS ID # 19105

## **RFI ANOMALY**

TOTS-1 1706-1736Z 1 Mins 5 Secs Svc/Data Loss Non-Recov

### **4. AGS/OTHER Support**

**28/2020-2028Z**

SONE configured to the wrong onboard antenna. SMOC contacted AGS 20:25Z to report that they were not receiving data. The LEO-T operator observed noise on the data and large variations in the receiver AGCs. The bit synch would not lock on the data. Attempts to resolve the problem by breaking lock at the combiner were unsuccessful. After describing the data quality to the SMOC the spacecraft controller switch the satellite antennas and the data cleaned up. LEO-T maintained lock for ~ 30 seconds and then the bit synch dropped lock again. The bit

synch did not re-lock for the remainder of the pass. TOTS was shadowing this event and conducted a post pass playback recovering the majority of the data. The MOC has scheduled another contact with the AGS LEO-T for 21:59Z to evaluate the spacecraft health and status. CDS # 19106

### **REASON UNKNOWN**

LEO-T 2020-2032Z 12 Mins Svc/Data Loss Recoverable

## **5. AGS/LS7 Support**

**28/2125-2139Z**

Immediately preceding AOS for Landsat 7 support, the Tracking Data Formatter locked up. This unit will not be rebooted and return to system functioning without a Nodal reset and a Master reset. Sometimes it fails totally and sometimes only loses a function. CDS ID # 19107

### **STATION EQUIPMENT**

11M 14Min 20 Secs Svc Loss

29 JUNE

A. SN Anomalies:

## **1. WSGT/ERBS Support**

**29/0717-0727Z**

POCC reported multiple sync errors throughout the event, reason unknown. No problems were noted at WSGT, IP NOCC reported not seeing any errors, and TPF indicated that they were receiving good data. POCC did not declare any data loss. TTR 23940.

The following events had the same problem:

### **REASON UNKNOWN**

29/08:53:00Z TDRS-4/SGLT-4 MAF/R03 Non-coherent.

29/10:29:00Z TDRS-4/SGLT-4 MAF/R02 Non-coherent.

29/12:08:00Z TDRS-6/SGLT-2 MAF/R05 Non-coherent.

29/21:58:34Z TDRS-5/SGLT-1 MAF/R05 Coherent.

29/23:32:00Z TDRS-5/SGLT-1 MAF/R04 Non-coherent.

B.ISS Anomalies - None.

C.GN Anomalies:

**1. AGS/FAST Support**

**29/1704-1708Z**

TPCE failed to start under automation at kickoff time. No error messages were displayed. To recover from the failed automated process the operator manually launched the SDF process and activated the FEP. CDS ID # 19110

**STATION EQUIPMENT**

TOTS 1704-1734Z 4 Min. Svc/Data Loss (Recov)

**2. WGS/QST Support**

**29/2307-2310Z**

Master did not transfer the schedule to the 11 M. SCC had error message (critical failure) on the terminal window. Pass had to be scheduled on the 11M, reason for CRC errors was due to the antenna erratic behavior prior to autotrack being turned off. CDS # 19115

**STATION EQUIPMENT**

11M 2305-2320Z Data Loss Unknown

30 JUNE

A.SN Anomalies:

**1. STGT/ERBS Support**

**30/0120-1241Z**

Continued reports of multiple frame sync errors throughout this event. Tape playbacks of reported problem events were performed between STGT and WSGT to allow troubleshooting using a Data Quality Monitor (DQM). These tests did not indicate any problems with the data leaving WSC. TTR 23941. Additionally, errors were reported on the following events:

## **REASON UNKNOWN**

30/03:08:00Z TDRS-5/SGLT-1 MAF/R05 Non-coherent.  
30/05:42:14Z TDRS-4/SGLT-4 MAF/R03 Non-coherent.  
30/07:18:30Z TDRS-4/SGLT-4 MAF/R02 Non-coherent.  
30/08:54:33Z TDRS-4/SGLT-4 MAF/R03 Non-coherent.  
30/12:11:00Z TDRS-4/SGLT-4 MAF/R02 Non-coherent

## **2. STGT/UARS Support**

**30/0214-0217Z**

Delayed entry: Generic TTR parameters exceeded by 18 seconds. POCC a little slow in responding to the no lock condition. TTR 23942

## **REASON UNKNOWN**

MAR 0214-0242Z 2Mins 42 Secs Svc/Data Loss Non-Recov

B. ISS Anomalies - None.

C. GN Anomalies:

## **1. AGS/EO-1 Support**

**30/0612-0625Z**

Master computer configured SCC wrong. When Master pushed configuration to station, noticed that the SCC as not programmed correctly. It was showing an AOS time of 20 minutes after LOS. Looked at ephemeris data in SCC and it did show an AOS time 20 minutes past LOS. Rebooted Master and SCC, and had the same ephemeris. It was too late for a manual input of needed data. Entire pass was missed. EO1 NOC said data was downlinked from a previous pass, and it was an S-band only pass. Notified NOC and TM, once it was identified that there would not be enough time to reload ephemeris data into the SCC. The AOS Data that the ephemeris data was showing was an AOS of 6:46:45, an elevation angle of 68.9. CDS ID # 19114

## **UNDER INVESTIGATION**

11M 13 Mins Data Loss Recoverable

D. The **MAP Spacecraft** was successfully Launched on

30/19:46:46.183Z

01 JULY

A. SN Anomalies - None.

B. ISS Anomalies - None.

C. GN Anomalies:

### **1. AGS/TRACE Support**

**01/1603-1604Z**

When the antenna went to Autotrack at mask break, it failed to stay on target. The operator disengaged the Autotrack and went to program mode from the ACC. Looking at the SDU, noticed a non-linear display on the LHC Tracking receiver (Spectral noise increasing from a low level on the left to a high level on the right). The currently (AGC) selected receiver was LHC. The operator disabled the auto-diversity, and forced the RHC track, then enabled Autotrack, tracking the remainder of the support with no further problems. After second AOS, the U/L was commanded to re-sweep (182/16:04:23Z to 182/16:05:15Z) to re-capture the S/C transponder, no commands were received during the second U/L sweep. This appears to be an intermittent problem in this receiver. Troubleshooting continues. CDS ID # 19116

### **UNDER INVESTIGATION**

TOTS-1 1603-1613Z 1 Min 18 Secs Data Loss Non-Recov

### **2. WGS/QST Support**

**01/2359-183/0009Z**

Antenna went back to autotrack after being placed in program mode. Following AOS and at the point where the antenna went into autotrack, the antenna was placed into program mode. Shortly after this event, the signal strength dropped low enough to turn off the autotrack and turn it back on again. When this happened, the antenna went from program track back to autotrack. This caused the antenna to have an erratic track

causing hits in the data. Hits were as follows:

4kb 835 blocks with 5 drops

262kb 1710 blocks with 26 drops

2mb 49993 blocks with 1068 drops and 11091 CRC errors.

Antenna was once again put back into program mode. Track was completed without any further problems. The autotrack problem is an ongoing problem that is being investigated.

CDS ID # 19117

## **UNDER INVESTIGATION**

11M No Data Loss

### Part II. Testing Anomalies

A. SN Test - None.

B. GN Test - None.

Part III. Equipment Status Changes - None.

\$ = Changed ETRO

\*\* = New Items

Part IV. Scheduled Activities - None.

Part V. Launch Forecast Changes - None.