

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

## SECTION 1 (REG)

18865 TDW A1446MS HST 960509 130/1205 1245 TLM N MA OPR

\* 05/09/1300Z(TTR)  
 PROBLEM TYPE: OPERATIONAL  
 DR# 32024 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 3  
 ELEMENT W/P: STGT  
 INVESTIGATING ELEMENT: STGT  
 TIME OF ANOMALY: 12:10:08 - 12:27:44 DURATION: 17:36  
 SERVICE LOSS: SEE TEXT DATA LOSS: SEE TEXT

**PROBLEM DESCRIPTION:** THE ABOVE AND BELOW LISTED PROJECTS REPORTED SERVICE LOSSES (NO ODM/GCMR CAPABILITY) DUE TO AN NCC/STGT ISC FAILURE. STGT LINE MAINTENANCE TECHS INADVERTENTLY COMMANDED THE OTU SUPPORTING THE OPS ISC PATH INSTEAD OF A MAINTENANCE CHANNEL OTU.

TDW HST 120529 - 124529 MAR4 32K 17 MINS 36 SECS SVC LOSS  
 TDW XTE 121500 - 130800 MAR3 32K 12 MINS 44 SECS SVC LOSS  
 TDE GRO 122000 - 125500 MAR4 32K 7 MINS 44 SECS SVC LOSS

\* 05/13/1200Z(STGT DAILY OPS SUMMARY DOY 130)  
 HST 12:05:29 - 17 MINS 36 SECS SERVICE LOSS  
 XTE 12:15:00 - 12 MINS 44 SECS SERVICE LOSS  
 GRO 12:20:00 - 7 MINS 44 SECS SERVICE LOSS

THE ABOVE LOSSES WERE DUE TO NO ODM/GCMR CAPABILITY CAUSED BY STGT OPERATOR ERROR RESULTING IN THE OPS PATH BEING MISCONFIGURED. TTR 18865/DR 32

STGT - OPS PATH MISCONFIGURATION:  
 DAY 130/1210Z. WHILE VERIFYING THE PRIME BROADCAST CONFIGURATION VIA THE LOCAL CONTROL AND MONITOR SYSTEM, TECHNICIAN INADVERTENTLY COMMANDED OTU 1 (PRIME OPS PATH) VICE MAINTENANCE CHANNEL OTU TO PORT ADDRESS 477 (MAINTENANCE CHANNEL). WHILE TROUBLESHOOTING, THE OPS PATH WAS ALSO FAILED OVER FROM B TO A. CONFIGURATION WAS FULLY CORRECTED AT 1227Z. THE ERROR RESULTED IN NO ODM AND GCMR CAPABILITY FOR HST, GRO, AND XTE. TTR 18865/DR 32024

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<b>STA</b>	<b>SUPIDEN</b>	<b>USER</b>	<b>YRMODA</b>	<b>START</b>	<b>STOP</b>	<b>TYP</b>	<b>L</b>	<b>SVC</b>	<b>EVAL</b>
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<b>18866</b>	<b>TDW</b>	<b>A6581MS</b>	<b>XTE</b>	<b>960510</b>	<b>131/1545</b>	<b>1636</b>	<b>TLM</b>	<b>N</b>	<b>MA</b>	<b>OPR</b>
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\* **05/10/1301Z(TTR)**

**PROBLEM TYPE: OPERATIONAL**

**DR#**                      **AR PRIORITY:**      **TTR PRIORITY LEVEL: 3**    **IMPACT LEVEL: 2**

**ELEMENT W/P: NASCOM**

**INVESTIGATING ELEMENT: NASCOM**

**TIME OF ANOMALY: 16:16:30 - 16:54:00**                      **DURATION: 22:30**

**SERVICE LOSS: SEE TEXT**    **DATA LOSS: SEE TEXT**

**PROBLEM DESCRIPTION:** THE ABOVE AND BELOW EVENTS EXPERIENCED SERVICE/DATA LOSSES (RECOVERABLE), DUE TO A CSS ANOMALY AT NASCOM. THE NASCOM CSS CRASHED AND HAD TO BE COLDSTARTED. WHILE NASCOM WAS IN MODE 3 (LOCAL MODE), TECH CONTROL DID NOT CONFIGURE THE COMMAND LINE FOR XTE AND THE TELEMETRY LINES FOR THE BRTS EVENTS. XTE DECLARED A SERVICE LOSS FOR THE LACK OF COMMAND CAPABILITY, AND BRTS POCC DECLARED BOTH SERVICE AND DATA LOSSES.

TDW XTE 154500 - 163600 MAF 1K 9 MINS 7 SECS SVC LOSS

TDW C1314MS 164500 - 164900 MAR4 640B 3 MINS 30 SECS SVC/DATA LOSS RECOVERABLE

TDW C1311MS 165000 - 165400 MAR1 640B 3 MINS 30 SECS SVC/DATA LOSS RECOVERABLE

<b>18867</b>	<b>TDS</b>	<b>C1310MS</b>	<b>BRTS</b>	<b>960510</b>	<b>131/0821</b>	<b>0825</b>	<b>TLM</b>	<b>Y</b>	<b>SA</b>	<b>PROC</b>
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\* **05/10/1302Z(TTR)**

**PROBLEM TYPE: PROCEDURAL**

**DR# 32030**                      **AR PRIORITY:**      **TTR PRIORITY LEVEL: 1**    **IMPACT LEVEL: 1**

**ELEMENT W/P: STGT**

**INVESTIGATING ELEMENT: STGT**

**TIME OF ANOMALY: 00:00:00 - 23:59:59**                      **DURATION:**

**SERVICE LOSS: SEE TEXT**    **DATA LOSS: SEE TEXT**

**PROBLEM DESCRIPTION:** BRTS POCC REPORTED SERVICE/DATA LOSSES (NON-RECOVERABLE) FOR THE ABOVE EVENTS, DUE TO OFF POINTING OF THE CENTRAL BRTS ANTENNA AT WSC. SINCE REPOSITIONING OF THE ANTENNA ON DOY 117 IN ACCORDANCE WITH SND 826, A NUMBER OF WSC AND ASCENSION BRTS EVENTS ON TDS HAVE EXPERIENCED LATE ACQUISITION. ON DOY 130 AT 1915Z, STGT ENGINEERS ATTEMPTING TO REFINE THE POINTING OF THE CENTRAL ANTENNA, INADVERTENTLY INCREASED THE ERROR RESULTING IN NO ACQUISITION OF THE LISTED EVENTS. ACCURATE REPOSITIONING OF THE ANTENNA IS DIFFICULT DUE TO A LACK OF A VERNIER OR PROTRACTOR ON THE ANTENNA. THE BELOW LISTED EVENTS WERE AFFECTED:

TDS C1310MS 082100 - 082400 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

TDS C1310MS 085000 - 085400 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

TDS C1310MS 220500 - 221100 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

TDS C1311MS 223500 - 223900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

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STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
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05/14/1200Z(STGT DAILY OPS SUMMARY DOY 131)

BRTS 1310 08:21:00 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO A NEGATIVE ACQUISITION, REASON UNKNOWN. NCC RESCHEDULED A 1310 BRTS SHO WITH THE SAME RESULTS. A LOCALLY ENTERED BRTS 1311 ALSO DID NOT LOCK BUT A SUBSEQUENT LOCAL BRTS 1319 SHOW WAS NOMINAL. ALTHOUGH NOTHING COULD BE FOUND WRONG AT STGT, DR 32030 WAS WRITTEN.

BRTS 1311 22:35:00 - 3 MINS 30 SECS 640 BPS (NON-REC) DATA LOSS DUE TO A NEGATIVE ACQUISITION. THIS EVENT WAS SCHEDULED DURING THE TIMEFRAME THAT IS LIKELY TO HAVE BRTS ACQUISITION PROBLEMS (RE:OPM-54 S3613103). TTR 18867

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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18868	TDS	C1310MS	BRTS	960511	132/0031	0035	TLM	Y	SA	PROC
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\* 05/11/1303Z(TTR)

PROBLEM TYPE: PROCEDURAL

DR# 32030 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 1

ELEMENT W/P: STGT

INVESTIGATING ELEMENT: STGT

TIME OF ANOMALY: 00:31:00 - 00:35:00 DURATION:

SERVICE LOSS: SEE TEXT DATA LOSS: SEE TEXT

**PROBLEM DESCRIPTION:** BRTS POCC REPORTED SERVICE/DATA LOSS DUE TO OFF-POINTING OF THE CENTRAL BRTS ANTENNA AT WSC (TTR 18867 REFERS). STGT ENGINEERING IS ATTEMPTING TO REFINES THE POINTING OF THE CENTRAL ANTENNA. THE BELOW LISTED EVENTS WERE AFFECTED:

TDS C1310MS 003100 - 003500 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

TDS C1311MS 124100 - 124500 SSAR2 640B

TDS C1310MS 202500 - 202900 MAR2 640B

PA NOTE: THE BRTS EVENT SCHEDULED DURING THE TIMEFRAMES REFRENCED IN OPM 54 #3613103 WILL NOT CHARGE STGT FOR SVC/DATA LOSS.

\* 05/14/1201Z(STGT DAILY OPS SUMMARY DOY 132)

BRTS 1310 00:31:00 - 2 MINS 1 SEC 5640 (NON-REC) DATA LOSS DUE TO A LATE ACQUISITION.

TWO FORWARD REACQ'S WERE REQUIRED TO OBTAIN LOCK. PROBLEM ATTRIBUTED TO THE TDRS-1 INCLINATION/BRTS ANTENNA POINTING ANOMALY (SEE OPM-54 S3613103). TTR 18868.

BRTS 12:41:30 - 2 MINS 30 SECS 640 BPS (NON-REC) DATA LOSS DUE TO A LATE ACQUISITION AND SUBSEQUENT UNACCEPTABLE DATA PACKETS AFTGER LOCK. FAILED ACQUISITION ATTRIBUTED TO TDRS-1/WSC BRTS PROBLEM (OPM S3613103). DR 32042/TTR 18868

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STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
18869	TDW	A1398MS	ERBS	960511	132/0304	0316	TLM	N SA	OPR

\* 05/11/1304Z(TTR)  
 PROBLEM TYPE: OPERATIONAL  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 1 IMPACT LEVEL: 1  
 ELEMENT W/P: ERBS  
 INVESTIGATING ELEMENT: ERBS  
 TIME OF ANOMALY: 03:04:00 - 03:16:00 DURATION: 12:00  
 SERVICE LOSS: NONE DATA LOSS: 11:30

**PROBLEM DESCRIPTION:** ERBS POCC REPORTED 11 MINS 30 SECS DATA LOSS RECOVERABLE (1.6KB) DUE TO A POCC OPERATOR ERROR. THIS SUPPORT WAS A BLIND ACQUISITION. THE OPERATOR INADVERTENTLY CONFIGURED THE SPACECRAFT NONCOHERENT MODE VICE COHERENT MODE.

\* 05/14/1202Z(STGT DAILY OPS SUMMARY DOY 132)  
 ERBS 03:04:00 - 11 MINS 30 SECS 1.6 KBPS (REC) DATA LOSS DUE TO NEGATIVE ACQUISITION. INVESTIGATION REVEALED POCC SPACECRAFT MISCONFIGURATION. TTR 18869

\* 05/14/1400Z(POCC)  
 11 MINS 30 SECS 1.6 KBS DATA LOSS DUE TO S/C WAS IN WRONG COHERENCY MODE DURING THE SUPPORT.

18870	TDW	A1446MS	HST	960511	132/1037	1130	TLM	N MA	HW
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\* 05/11/1305Z(TTR)  
 PROBLEM TYPE: HARDWARE  
 DR# 32040 AR PRIORITY: TTR PRIORITY LEVEL: 1 IMPACT LEVEL: 1  
 ELEMENT W/P: STGT  
 INVESTIGATING ELEMENT: STGT  
 TIME OF ANOMALY: 10:37:58 - 10:47:45 DURATION: 09:47  
 SERVICE LOSS: SEE TEXT DATA LOSS: SEE TEXT

**PROBLEM DESCRIPTION:** HST INCURRED 10 MINS 8 SECS LATE ACQUISITION. A RETURN REACQ ON LINK-3 FAILED TO ACQUIRE AND THE EQUIPMENT WENT SUSPECT. A MANUAL FAILOVER TO LINK-4 ACHIEVED LOCK. THE POCC DECLARED NO DATA LOSS. POST EVENT STGT INVESTIGATION REVEALED NO ANOMALIES ON LINK-3. LINK-3 STATUS REMAINED GREEN.

\* 05/14/1203Z(STGT DAILY OPS SUMMARY DOY 132)  
 HST 10:37:58 - EVENT FAILED TO LOCK AT AOS. POCC SENT A RETURN REACQ AFTER WHICH MAR03 WENT SUSPECT. A MANUAL FAILOVER WAS PERFORMED TO MAR04 AND LOCK ACHIEVED. NO DATA LOSS WAS DECLARED AND NO TTR WRITTEN. A DR WILL BE SUBMITTED FOR FOLLOW UP INVESTIGATION PURPOSES.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18871	TDW	C1311MS	BRTS	960511	132/1225	1229	TLM	Y MA	SW

\* 05/11/1306Z(TTR)  
 PROBLEM TYPE: SOFTWARE  
 DR# 32041 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 1  
 ELEMENT W/P: STGT  
 INVESTIGATING ELEMENT: STGT  
 TIME OF ANOMALY: 12:03:00 - 12:29:00 DURATION: 26:00  
 SERVICE LOSS: 03:30 DATA LOSS: 03:30

**PROBLEM DESCRIPTION:** FOLLOWING A MAR LINK-3 FAILURE DURING AN HST EVENT AT 1037:58Z, STGT PERFORMED A LOOP TEST ON THE SUSEPCT LINK. THE TEST PASSED, BUT THE RETURN FROM MAINTENANCE (RFM) ALERT INDICATED A DELAY OF 6 MINS UNTIL THE LINK WOULD BE AVAILABLE FOR SERVICE. THIS KEPT THE LINK RED UNTIL 1 MIN BEYOND THE START TIME OF A SCHEDULED BRTS SHO WITH AN AOS OF 1225Z DUE TO OTHER SCHEDULED MAR SERVICES, THIS SHO HAD NO AVAILABLE EQUIPMENT AT THE TIME OF SERVICE CONFIGURATION AND WAS REJECTED. THE BRTS EVENT WAS LATER RESCHEDULED AND RAN SUCCESSFULLY. THE 6 MIN DELAY WAS WELL BEYOND THE NORMAL AMOUNT OF TIME FOR AN EQUIPMENT TO RETURN TO SERVICE. STGT WILL INVESTIGATE WHY THIS DELAY OCCURRED.

\* 05/14/1204Z(STGT DAILY OPS SUMMARY DOY 132)  
 BRTS 1311 12:25:00 - 3 MINS 30 SECS NON-REC DATA LOSS DUE TO A NEGATIVE ACQUISITION. A LOOP TEST WAS BEING PERFORMED ON MAR03 DUE TO AN EARLIER ANOMALY (SEE DR 32040) WHEN AN ALERT WAS RECEIVED INDICATING THAT NO CHAIN WAS AVAILABLE FOR SUPPORT. THE LOOP TEST WAS TERMINATED AND A RFM ENTERED FOR THE CHAIN. THE RFM START TIME, 5 MINS IN THE FUTURE, WAS AFTER SERVICE START TIME. THE EVENT WAS RESCHEDULED AND NOMINAL. DR 32041/TTR 18871

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18872	TDS	C1312MS	BRTS	960512	133/0815	0819	TLM	Y SA	UNK

\* 05/12/1307Z(TTR)

PROBLEM TYPE: UNKNOWN

DR# 30247 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 1

ELEMENT W/P: UNKNOWN

INVESTIGATING ELEMENT: STGT

TIME OF ANOMALY: 04:21:00 - 04:25:00

DURATION: SEE TEXT

SERVICE LOSS: SEE TEXT DATA LOSS: SEE TEXT

**PROBLEM DESCRIPTION:** A BRTS EVENT HAD ACQUISITION PROBLEMS ON TDS AT STGT. THE C1312MS EVENT AT 0815-0819Z WAS A NEGATIVE ACQUISITION. MULTIPLE REACQS WERE TRANSMITTED TO NO AVAIL. NCC SKED SCHEDULED ANOTHER EVENT AT 0836-0840Z WHICH WAS ALSO A NEGATIVE ACQUISITION. STGT SUSPECTS THAT THE EARLIER OFF-POINTING PROBLEM THAT THEY EXPERIENCED MAY BE THE CAUSE. STGT IS INVESTIGATING. THE BELOW LISTED EVENTS WERE AFFECTED:

TDS C1312MS 081500 - 081900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

TDS C1311MS 202500 - 202900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

PA NOTE: A C1312MS EVENT WAS SCHEDULED AT TDE 0855-0900Z WHICH WAS SUCCESSFUL. THIS PASS WAS SCHEDULED TO ELIMINATE THE POSSIBILITY OF A C1312 TRANSPONDER ANOMALY.

\* 05/14/1207Z(STGT DAILY OPS SUMMARY DOY 133)

BRTS 1312 08:15:00 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO A FAILURE TO ACQUIRE. NCC SCHEDULED A SECOND 1312 BRTS EVENT AT 0836Z WHICH FAILED TO ACQUIRE. TTR 18872 (WILL BE USED FOR TDRS-1/BRTS ACQUISITION ANOMALIES) DR 32047.

BRTS 1311 20:25:00 - 3 MINS 30 SEC SERVICE LOSS DUE TO NEG. ACQ. CAUSED BY POSSIBLE BRTS ANTENNA POINTING. TTR 18872

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18873	TDW	A6581MS	XTE	960512	133/1733	1743	TLM	Y SA	MI

\* 05/12/1308Z(TTR)

PROBLEM TYPE: MUTUAL INTERFERENCE

DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 1

ELEMENT W/P: XTE

INVESTIGATING ELEMENT: XTE

TIME OF ANOMALY: 17:33:11 - 17:43:10

DURATION: 09:59

SERVICE LOSS: NONE DATA LOSS: 00:30

**PROBLEM DESCRIPTION:** 30 SECS 1024KB DATA LOSS DUE TO MUTUAL INTERFERENCE WITH ANOTHER SN USER. XTE EXPERIENCED A LATE ACQ AND DEGRADED DATA WITH DROPOUTS. THE POCC WAS UNABLE TO RECOVER THE DUMP DURING FUTURE EVENTS AND EVENTUALLY DECLARED THE DATA AS A LOSS. ACRS DID PREDICT THE MI AND THE INFORMATION WAS RELAYED TO THE POCC. (REF PA LOG).

**STDN ANOMALY REPORT. PAGE NO. 8**

<b>STA</b>	<b>SUPIDEN</b>	<b>USER</b>	<b>YRMODA</b>	<b>START</b>	<b>STOP</b>	<b>TYP</b>	<b>L</b>	<b>SVC</b>	<b>EVAL</b>
<b>18874</b>	<b>TDS</b>	<b>C1312MS</b>	<b>BRTS</b>	<b>960513</b>	<b>134/0825</b>	<b>0829</b>	<b>TLM</b>	<b>Y SA</b>	<b>UNK</b>

**\***     **05/13/1309Z(TTR)**  
**PROBLEM TYPE: UNKNOWN**  
**DR#**                      **AR PRIORITY:**        **TTR PRIORITY LEVEL: 3**    **IMPACT LEVEL: 1**  
**ELEMENT W/P: STGT**  
**INVESTIGATING ELEMENT: STGT**  
**TIME OF ANOMALY: 08:25:00 - 08:29:00**                      **DURATION: 04:00**  
**SERVICE LOSS: 03:30**                      **DATA LOSS: 03:30**

**PROBLEM DESCRIPTION:** NO ACQUISITION DUE TO ANTENNA POINTING PROBLEM AS A RESULT OF TRANSITIONING.

**\***     **05/14/1209Z(STGT DAILY OPS SUMMARY DOY 134)**  
**BRTS 1312 08:25:00 - 3 MINS 30 SECS SERVICE LOSS DUE TO NEG. ACQ. CAUSED BY POSSIBLE BRTS ANTENNA POINTING. TTR 18874.**



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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18875	TDS	C1312MS	BRTS	960514	135/0825	0829	TLM	Y SA	SYS

\* 05/14/1310Z(TTR)  
 PROBLEM TYPE: SYSTEM  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 1  
 ELEMENT W/P: STGT  
 INVESTIGATING ELEMENT: STGT  
 TIME OF ANOMALY: 08:25:00 - 08:29:00 DURATION: 04:00  
 SERVICE LOSS: 03:30 DATA LOSS: 03:30

**PROBLEM DESCRIPTION:** NO ACQUISITION DUE TO ANTENNA POSITIONING PROBLEM.

\* 05/15/1200Z(STGT DAILY OPS SUMMARY DOY 135)  
 BRTS 1312 082500 - 3 MINS 30 SECS SERVICE LOSS DUE TO NEG. ACQ. CAUSED BY POSSIBLE BRTS ANTENNA POINTING. TTR 18875

18876	TDE	A6951MS	EUVE	960514	135/0910	0930	TLM	N SA	OPR
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\* 05/14/1311Z(TTR)  
 PROBLEM TYPE: OPERATIONAL  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4  
 ELEMENT W/P: EUVE  
 INVESTIGATING ELEMENT: EUVE  
 TIME OF ANOMALY: 09:10:00 - 09:15:25 DURATION: 05:25  
 SERVICE LOSS: NONE DATA LOSS: SEE TEXT

**PROBLEM DESCRIPTION:** 3 MINS 44 SECS 32KB DATA LOSS, RECOVERABLE AND 1 MIN 11 SECS 32KB DATA LOSS, NON-RECOVERABLE, DUE TO GCMR MISMANAGEMENT. A 32KB DATA RATE GCMR WAS SENT INSTEAD OF A FWD REACQ WHEN A FWD REACQ REQUESTED FROM STGT. AT 091030, A GCMR FOR 32KB WAS SENT THEN AT 091121 A FWD REACQ WAS SENT FOLLOWED BY A 1024 GCMR AT 091309. AT 0914Z A FWD REACQ WAS SENT AND ACQUISITION WAS OBTAINED. THE 1 MIN 11 SECS NON-RECOVERABLE DATA LOSS HAPPENED WHEN THE RECORDER STOPPED RECORDING EARLY DUE TO THE GCMR PROBLEMS.

\* 05/15/1201Z(STGT DAILY OPS SUMMARY DOY 135)  
 EUVE 091000 - 3 MINS 44 SECS 32K RECOVERABLE AND 1 MIN 11 SECS 32K NON-RECOVERABLE DUE TO A GENERIC LATE ACQ FOLLOWED BY POCC GCMR MISMANAGEMENT. TTR 18876.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

## SECTION 2 (REG)

17994 TDE A1446MS HST 950103 003/1851 1942 TLM Y MA SW

\* 01/03/1303Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#25021. AR PRIORITY: 4. TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 4.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 18:51:40 - 19:42:24.

DURATION: 17:11.

SERVICE LOSS: 17:11. DATA LOSS: 17:11.

**PROBLEM DESCRIPTION:** A SOFTWARE ANOMALY AT STGT PREVENTED CHAIN AND EQUIPMENT SELECTION FOR THIS SERVICE. WSGT SUPPORTED A NON-COHERENT EVENT FOR HST IN PLACE OF STGT. WSGT ACQUIRED HST'S 4KB DATA AT 10:03:00Z. HST POCC DID NOT START RECEIVING DATA UNTIL COMPLETION OF NGT AND NASCOM LINE CONFIGURATION AT 19:08:51Z. THE 5 MIN 51 SEC OF 4KB DATA FROM AOS AT WSGT UNTIL HST POCC ACQUIRED IS RECOVERABLE. THE PROBLEM IS UNDER INVESTIGATION.

\* 04/1300Z(HST POCC)

5 MINS 51 SECS OF (REC) 4KB DATA LOSS, AND 11 MINS 20 SECS OF (NON-REC) 4KB DATA LOSS, DUE TO A SUSPECTED SOFTWARE PROBLEM AT STGT. SITUATION IS UNDER INVESTIGATION.

\* 04/1300Z(STGT DAILY OPS SUMMARY DOY 003/004)

003/1851Z - TDRS-4 MAR-04 EVENT. 50 MINS 44 SECS SERVICE LOST, 17 MINS 11 SECS DATA LOST, 5 MINS 51 SECS IS RECOVERABLE, LOSS IS DUE TO NEGATIVE ACQUISITION CAUSED BY EVENT TRANSLATION FAILURE. WSGT CONFIGURED AND ACQUIRED AT 19:03:00Z.

TTR#17994/DR#25021.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18038	TDW	A3782MS	UARS	950120	020/2043	2059	TLM	Y SA2	SW

\* **01/20/1303Z(TTR)**  
 PROBLEM TYPE: SOFTWARE.  
 DR#25279. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 2.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 20:43:46 - 20:52:19. DURATION: 08:33.  
 SERVICE LOSS: 08:03. DATA LOSS: 08:03.

**PROBLEM DESCRIPTION:** LATE ACQUISITION, DUE TO A COMMAND HIT WHILE THE TDRS-WEST ANTENNA WAS SLEWING. THIS RESULTED IN 8 MINS 3 SECS OF RECOVERABLE 32KB DATA LOSS. STGT PERFORMED A NULL SEARCH TO ESTABLISH LOCK ON DATA.

\* 20/1300Z(STGT DAILY OPS SUMMARY DOY 020)  
 020/2040Z - TDRS-5 SSA-2 EVENT. 8 MINS 3 SECS OF 32KB DATA LOST, DUE TO COMMAND TRANSMIT ERRORS (FOR 17 SECS) DURING THE SA-2 ANTENNA SLEW. A NULL SEARCH WAS PERFORMED TO RECOVER THE ANTENNA POINTING. REACQUISITION OPMS WERE SENT TO ACHIEVE LOCK. TTR#18038/DR#25279.

\* 16/1214Z(SNAC)(MAR)  
 PROJECTED SOFTWARE DELIVERY IS 95004. NO SBR NUMBER ASSIGNED AS YET.

\* 22/1205Z(SNAC)  
 DR #25279 IS CLOSED TO MASTER DR #27641.

18359	TDE	A3782MS	UARS	950511	131/1811	1839	TLM	N SA2	SYS
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\* **05/11/1303Z(TTR)**  
 PROBLEM TYPE: SYSTEM  
 DR#27436. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 2.  
 ELEMENT W/P: UNKNOWN.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 18:21:11 - 23:59:59. DURATION: 38:48.  
 SERVICE LOSS: NONE. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** UARS POCC REPORTED INTERMITTENT CRC ERRORS, DROP LOCK CONDITIONS, AND FRAMES WITH ERRORS. REASON UNKNOWN, AND BEING INVESTIGATED BY ALL SN ELEMENTS. FOLLOWING ARE IMPACTED EVENTS:

TDE	UARS	18:11:00 - 18:39:00	SSA-2	NO DATA/SERVICE LOSS REPORTED.
TDW	UARS	19:12:00 - 19:38:00	SSA-2	NO DATA/SERVICE LOSS REPORTED.
TDE	UARS	21:29:00 - 21:52:00	SSA-2	9 MINS 9 SECS (REC) 512KB DATA/SVC LOSS.

STDN ANOMALY REPORT. PAGE NO. 12

STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
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- \* 12/1300Z(STGT DAILY OPS SUMMARY DOY 132)  
1811Z - UARS POCC REPORTED CRC ERRORS FROM 18:21:11 - 18:31:14Z ON THE Q-CHANNEL 512K DUMP DATA. NO DATA OR SERVICE LOSS DECLARED. NO PLAYBACK REQUESTED.  
  
1912Z - UARS POCC REPORTED CRC ERRORS ON THE Q-CHANNEL 512K BUMP DATA. NO DATA OR SERVICE LOSS DECLARED. NO PLAYBACK REQUESTED.  
  
2129Z - UARS POCC REPORTED 27 CRC ERRORS ON THE Q-CHANNEL 512K DUMP DATA. 9 MINS 9 SECS SERVICE LOSS DECLARED DUE TO DEGRADED BUT USEABLE DATA. DURING PLAYBACK, 3 CRC ERRORS WERE REPORTED. TTR#18359/DR#27436.
  - \* 18/1202Z(SNAC)(MAY)  
STGT ADVISED THAT THERE ARE THREE (3) DIFFERENT TYPES OF CRC ERRORS.
  - \* 25/1206Z(SNAC)  
DR #27436 IS CLOSED TO MASTER DR #27201.
- |       |     |         |     |        |          |      |     |   |    |    |
|-------|-----|---------|-----|--------|----------|------|-----|---|----|----|
| 18398 | TDW | A1446MS | HST | 950530 | 150/0957 | 1048 | TLM | N | MA | HW |
|-------|-----|---------|-----|--------|----------|------|-----|---|----|----|
- \* 05/30/1317Z(TTR)  
PROBLEM TYPE: **HARDWARE.**  
DR#27745 AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 4.  
ELEMENT W/P: **STGT.**  
INVESTIGATING ELEMENT: **STGT.**  
TIME OF ANOMALY: **10:02:11 - 10:02:12** DURATION: **00:01**  
SERVICE LOSS: **00:01** DATA LOSS: **NONE**  
  
**PROBLEM DESCRIPTION:** 1 SEC DATA INVERSION CAUSED BY A POWER FLUCTUATION ON THE PILOT HPA.
  - \* 31/1310Z(STGT DAILY OPS SUMMARY DOY 150)  
POCC REPORTED A DATA INVERSION COINCIDENT WITH A PRIME UPLINK PILOT HPA RF OUTPUT POWER FLUCTUATION. NO DATA OR SERVICE LOSS DECLARED. TTR 18398/DR 27745.
  - \* 22/1208Z(SNAC)  
DR #27745 IS CLOSED TO MASTER DR #26370.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18419	TDW	J4377MS	TOPEX	950613	164/2250	2320	TLM	Y MA	MAS

\*M 06/13/1308Z(TTR)

PROBLEM TYPE: **HARDWARE.**

DR#**27975.** AR PRIORITY: TTR PRIORITY LEVEL: **2.** IMPACT LEVEL: **1.**

ELEMENT W/P: **STGT.**

INVESTIGATING ELEMENT: **STGT.**

TIME OF ANOMALY: **23:07:03 - 23:43:00.**

DURATION: **36:00**

SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT.**

**PROBLEM DESCRIPTION:** THE MABE CONTROLLER FOR SGLT-2 AT STGT FAILED, CAUSING THE ABOVE EVENTS TO DROP LOCK. THE MA SYSTEM WAS NOT RECOVERED UNTIL 2343Z. THE BELOW LISTED EVENTS WERE AFFECTED:

TDW TOPEX 2250-2320 MAR 16K 12 MINS 57 SECS SVC/DATA LOSS RECOVERABLE

TDW HST 221901-230901 MAR 32K 1 MIN 47 SECS SVC/DATA LOSS, 1 MIN RECOV., 47 SECS NON-RECOV.

NOTE: A MA INITIALIZATION WAS PERFORMED TO CLEAR THE ANOMALY.

\* 15/1200Z(STGT DAILY OPS SUMMARY DOY 164)

HST 22:30:00 - POCC REPORTED 1 MIN 47 SECS 32K DATA LOSS DUE TO A MABE CONTROLLER FAILURE. 1 MIN IS RECOVERABLE. TTR 18419/DR 27975.

TOPEX 22:50:00 - POCC REPORTED 12 MINS 57 SECS 16K RECOVERABLE DATA LOSS DUE TO A MABE CONTROLLER FAILURE. TTR 18419/DR 27975.

SGLT-2 MABE CONTROLLER FAILURE

DAY 164/2306Z - RECEIVED LOSS OF LOCK INDICATIONS ON THE ONGOING HST AND TOPEX EVENTS FOLLOWED BY ALERTS INDICATING THE PRIME MABE CONTROLLER-A HAD STOPPED PROCESSING. A RFAILOVER TO THE HSM MABE CONTROLLER-B WAS UNSUCCESSFUL AND

INDICATIONS WERE THAT IT WAS HUNG AS WELL. A COMPLETE POWER CYCLE OF THE MABE EQUIPMENT WAS REQUIRED TO CLEAR THE FAULTS, FOLLOWED BY AN MA SYSTEM

INITIALIZATION AND RESTART OF THE CALIBRATION PROCESS. GOOD MA CAL AT 2343Z. NEXT GRO EVENT AT 2351Z SUCCESSFULLY ACQUIRED LOCK. TTR 18419/DR 27975.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18426	TDW	A1446MS	HST	950621	172/1449	1528	TLM	Y MA	SW

\* 06/21/1300Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#28081. AR PRIORITY: TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 1.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 14:49:47 - 14:59:00.

DURATION: 10:47

SERVICE LOSS: 08:04 DATA LOSS: 06:04.

**PROBLEM DESCRIPTION:** 6 MINS 4 SECS OF 4KB DATA LOSS, 3 MINS 1 SEC RECOVERABLE. FROM S/C RECORDER, 3 MINS 3 SECS NON-RECOVERABLE, ALL CAUSED BY AN STGT DIS (DATA INTERFACE SYSTEM) SLOWDOWN. THIS DIS SLOWDOWN IS A KNOWN PROBLEM AND AN STGT SOFTWARE FIX IS UNDER DEVELOPEMENT. THE PROBLEM OCCURS WHEN THE DIS SLOWS DOWN DURING SCHEDULE CLEANUP. ANY PORTS BEING CONFIGURED DURING THIS SLOWDOWN ARE AFFECTED AND THE DIS IS LATE SETTING UP THE EVENT. ONCE THE DIS COMPLETED SET-UP ON THIS EVENT THE POCC RECEIVED DATA, HOWEVER AN ADDITIONAL 2 MINS OF USEABLE BUT DEGRADED DATA WAS REPORTED BY THE POCC (145700-145900) AND STGT CONFIRMED AN OUT OF TOLERANCE CONDITION ON AN ITU WHICH THEY ATTRIBUTE TO THIS DIS SLOWDOWN. THIS 2 MINS IS REPORTED AS SVC LOSS ONLY AND NOT DATA LOSS.

TM COMMENTS: STGT REPORTED THAT FURTHER INVESTIGATION INTO THE DIS SLOWDOWN ON 6/21 REVEALED A DIS SOFTWARE TRANSLATION PROCESS STOPPED. AND RE-STARTED BY ITSELF CAUSING THE SLOWDOWN. THE REASON FOR THE PROCESS STARTING AND STOPPING IS UNDER INVESTIGATION.

\* 27/1200Z(POCC)

6 MINS 4 SECS 4KB DATA LOSS NON-RECOVERABLE DUE TO STGT NOT SHOWING LINES CONFIGURED. 2 MINS 4KB DATA INTERMITTANT HITS NO DATA LOSS.

\* 27/1301Z(STGT DAILY OPS SUMMARY DOY 172)

HST 14:49:47 - 6 MINS 4 SECS 4KBPS DATA LOSS (3 MINS 1 SEC RECOVERABLE) DUE TO A DIS SOFTWARE ANOMALY. TTR 18426/DR 28081.

DIS SLOW DOWN ANOMALY:

DAY 172/1450Z. DURING THE START OF AN HST EVENT, DIS HARDWARE WAS SLOW IN CONFIGURING FOR SUPPORT. SOFTWARE ANALYSIS INDICATES SOFTWARE PROCESS "TRANSLATION" WAS IN A HUNG CONDITION FROM 1445Z TO 1555Z (APPROXIMATELY). ONCE THE HUNG CONDITION CLEARED, DIS HARDWARE CONFIGURED NOMINALLY. SOFTWARE INVESTIGATION CONTINUES. DR 28081/TTR 18426.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18479	TDW	A3782MS	UARS	950719	200/2112	2128	TLM	N SA	SW

\* 07/19/1302Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#28542. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 2.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 21:22:03 - 21:28:23.

DURATION: 06:20

SERVICE LOSS: 09:33. DATA LOSS: 09:33.

**PROBLEM DESCRIPTION:** RETURN SERVICE DROPOUT RESULTING IN THE MENTIONED DATA/SERVICE LOSSES. THIS HAS BEEN ATTRIBUTED TO A SOFTWARE ANOMALY AT STGT. THE BELOW LISTED EVENT WAS AFFECTED:

TDW UARS 211253 - 212823 SSA2 32K 6 MINS 3 SECS SVC/DATA LOSS RECOV, 512K 3 MINS 30 SECS SVC/DATA LOSS RECOV.

\* 24/1201Z(STGT DAILY OPS SUMMARY DOY 200)

UARS 21:12:53 - 6 MINS 3 SECS 32K RECOVERABLE DATA LOSS (I-CHANNEL) AND 3 MINS 30 SECS 512K (Q-CHANNEL) LOSS DECLARED DUE TO AN STGT SOFTWARE ANOMALY. INITIAL ACQUISITION WAS NOMINAL. THE IR'S DROPPED LOCK ON BOTH CHAINS BRIEFLY, RELOCKED AND THEN DROPPED LOCK FOR GOOD AT 21:22:10Z. A DCE WAS SENT, FORWARD REACQ WAS SENT, AND FROWARD CHANIN FAILOVER A TO B WAS TRIED WITH NO CHANGE IN THE STATUS OF EITHER CHANNEL AND EVENT COMPLETED WITH NO LOCK. INVESTIGATION FOUND THAT THE EXEC SOFTWARE HAD FLAGGED THE EVENT AS NON-COHERENT, WHEN IN FACT THE SHO WAS DG1M4 (COHERENT). AS A RESULT, AN INITIAL DCI WHICH WAS SENT AT 21:14:33Z, WAS ONLY APPLIED TO THE FORWARD SERVICE (WHEN IT SHOULD HAVE BEEN SENT TO BOTH FORWARD AND RETURN). A BOUT 8 MINS LATER (AT 21:22:10Z) THE IR HAD BUILT UP ENOUGH RESIDUAL DOPPLER TO DROP LOCK. ANALYSIS BY EXEC ENGINEER WILL CONTINUE. TTR 18479/DR 28542.

\* 24/1301Z(POCC)

6 MINS 3 SECS OF I-CHANNEL AND 3 MINS 30 SECS OF Q-CHANNEL DATA LOSS, REASON UNKNOWN.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18482	TDW	A1446MS	HST	950720	201/2223	2314	TLM	N MA	SYS

\* 07/20/1304Z(TTR)

PROBLEM TYPE: SYSTEM.

DR#28571. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 2.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 23:04:48 - 23:09:23.

DURATION: 04;35

SERVICE LOSS: NONE. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** POCC EXPERIENCED 4 MINS 35 SECS OF DEGRADED DATA DUE TO INCLEMENT WEATHER AT STGT. POCC DID NOT DECLARE A DATA LOSS.

\* 24/1204Z(STGT DAILY OPS SUMMARY DOY 201)

HST 22:48:31 - POCC REPORTED 4 MINS 35 SECS DEGRADED DATA, NO DATA LOSS, DUE TO INCLEMENT WEATHER AT STGT. TTR 18482/DR 28571.

\* 24/1302Z(POCC)

4 MINS 35 SECS OF DEGRADED 32K DATA (DATA INVERSIONS) DUE TO INCLEMENT WEATHER AT WSGT.

\* 18/1056Z(STGT TI #1)

THIS IS A SYSTEM PROBLEM AND NOT A "HARDWARE" PROBLEM. WHAT WE KNOW ABOUT IT SO FAR IS AS FOLLOWS:

1. NO MI BETWEEN CAL AND USER
2. ROOFTOP EMMITTERS ARE A-OK (I.E. NO LEAKS OR CABLE PROBLEMS)
3. THE DROP IN CAL C/N WAS COINCIDENT WITH A DROP IN DOWNLINK SIGNAL STRENGTH.  
THE PROBLEM IS THAT A 5 DB DROP IN DOWNLINK SIGNAL STRENGTH SHOULD NOT HAVE CAUSED THIS TYPE OF PROBLEM, IN THE LINEAR SENSE, BUT THIS PHENOMENOM HAS HAPPENED ON TWO OTHER OCCASIONS BOTH OF WHICH OCCURRED DURING HEAVY RAIN AND CLOUDS WHICH DO AFFECT THE K-BAND SGL.
4. SYSTEM ENGINEERING WILL LOOK INTO WHY THE MABE'S CAL ROUTINE (I.E. THE CORRELATION BETWEEN PN CODES RECEIVED BACK FROM THE IR AND THE DOWNLINK PN CODES) ARE AFFECTED IN THIS MANNER.

TI #4 - MEETING TO BE HELD TO DISCUSS INCREASING THE CAL EIRP:

A MEETING WILL BE HELD TO DISCUSS OUR PLANS TO INCREASE THE MA CAL EIRP OUT OF THE ROOFTOP EMMITTERS TO ABOUT 13 DBW. THIS SHOULD PROVIDE SUFFICIENT MARGIN. MORE TO COME AFTER THE MEETING



STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
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TI #5 - MEETING:

A MEETING WAS HELD TO DISCUSS THE MA CAL EIRP INCREASE. AS A SHORT TERM "FIX" NASA AGREED TO A CHANGE, HOWEVER, WE NEED TO LOOK INTO THE ROOT CAUSE AS TIME PERMITS. AS A SIDE NOTE, THE IR GURU'S WILL MAKE CHANGES TO THE IR F/W FOR TYING THE REF CNO TO FFT THRESHOLD FOR CAL MODE. MORE TO COME.

TI #6 - GATHERED MORE DATA ON ANOTHER FADE ON 9/20/95:

GATHERED LOTS OF DATA ON A RAIN "FADE" WHICH OCCURRED ON SEPT 20 1995 AT 2000Z.

TI #7 - ADDITIONAL INFO:

TO BRING THE "INCREASED MA CAL EIRP" TO FRUTION, THE FOLLOWING ACTIONS NEED TO BE PERFORMED:

1. MAKE UP LABELS FOR THE SGLT-1 AND 2 MA CAL TX RACKS TO SHOW THE NOMINAL POWER LEVEL FOR INPUT TO THE CABLES LEADING TO THE ROOF. THESE VALUES ARE BASED ON THE LOCATION OF THE RACK AND THE CABLE LOSS TO THE ROOF.
2. MEASURE EACH CAL TX AND DERIVE A FRONT PANEL TABLE THAT SHOWS A "LOW", "MIDPOINT", AND "HIGH" VALUE FOR THE POTENTIOMETER SETTING. THIS WILL BE USED BY THE TECHS TO SET THE CAL TX POWER VIA FRONT PANEL.
3. UPDATE THE "CAL SOURCE TX POWER" HMD PM.
4. UPDATE ANY DOCUMENTS THAT REFERENCE THE ACTUAL CAL TX POWER LEVELS.

TI #9 - LABELS MADE UP FOR RACKS:

LABELS HAVE BEEN MADE FOR THE MA CAL SOURCE RACKS THAT STATE WHAT THE FRONT PANEL "POTS" NEED TO BE SET TO FOR 12.4 DBW. HOWEVER, THE F/W FIX TO THE IR TO TIE THE "FEF CNO" TO "FFT THRESHOLD" WILL NOT BE IN PLACE TILL MID JANUARY. UNTIL THAT TIME, THE LMT'S ARE TO DISREGARD THE LABELS. A MEMO TO THIS FACT WAS PASSED TO OPS AND OTHER PARTIES ON 11-9-95.

TI #10 - STGT MA CAL EIRP INCREASED.

ON DAY 348 (DEC 14, 1995) THE STGT CAL EIRP WAS INCREASED TO 12.4 DBW ON BOTH SGLT'S. THIS WILL IMPROVE THE OVERALL CAL PERFORMANCE DURING HEAVY RAIN AT THE SITE. MORE INVESTIGATION INTO THE EXACT CAUSE OF THE CAL C/N DEGRADATION WILL CONTINUE, BUT BASED ON DATA ALREADY COLLECTED, THE CAUSE MAY BE MORE RELATED TO DEPOLARIZATION OF THE SGL DOWNLINK THAN AN ACTUAL SIGNAL FADE.

TI #11 - TEST PLANS:

IN ORDER TO TEST OUT THE "DEPOLARIZATION" THEORY, I WILL ATTEMPT TO COORDINATE A "NO-USER" WINDOW TO RECREATE THE ANOMALY. MORE TO COME.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18513	TDE	C1319MS	BRTS	950819	231/0017	0021	TLM	Y SA	OPR

\* **08/19/1302Z(TTR)**

PROBLEM TYPE: **OPERATIONAL.**

DR#**28988** AR PRIORITY: TTR PRIORITY LEVEL: **1.** IMPACT LEVEL: **1.**

ELEMENT W/P: **STGT.**

INVESTIGATING ELEMENT: **STGT.**

TIME OF ANOMALY: **00:17:00 - 00:21:00.** DURATION: **04:00**

SERVICE LOSS: **03:30.** DATA LOSS: **03:30.**

**PROBLEM DESCRIPTION:** 3 MINS 30 SECS OF NON-RECOVERABLE DATA LOSS REASON UNKNOWN. BRTS POCC REPORTED GETTING GOOD TRACKING DATA BUT NO TELEMETRY. STGT DID A DELOG AND REPORTED THE EVENT LOOKED NOMINAL AT THEIR END. A MAKE-UP EVENT SCHEDULED AT 010500 WAS NOMINAL.

\* **22/1201Z(STGT DAILY OPS SUMMARY DOY 231)**

BRTS 00:17:00 - 3 MINS 30 SECS 640 BPS DATA LOSS DECLARED, REASON UNKNOWN. THE EVENT LOCKED ON TIME AND ALL INDICATIONS LOOKED NORMAL AT STGT. POST EVENT, THE BRTS POCC REPORTED RECEIVING TRACKING DATA BUT NO TELEMETRY DATA. A RERUN OF THE EVENT WAS SCHEDULED AND THE POCC REPORTED RECEIVING BOTH TRACKING AND TELEMETRY DATA. TTR 18513/DR 28988.

18528	TDW	J4377MS	TOPEX	950904	247/0145	0210	TLM	N SA	SW
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\* **09/04/1303Z(TTR)**

PROBLEM TYPE: **SOFTWARE.**

DR#**29168.** AR PRIORITY: TTR PRIORITY LEVEL: **4.** IMPACT LEVEL: **2.**

ELEMENT W/P: **STGT.**

INVESTIGATING ELEMENT: **STGT.**

TIME OF ANOMALY: **01:45:00 - 02:08:39** DURATION: **23:39.**

SERVICE LOSS: **NONE.** DATA LOSS: **23:09.**

**PROBLEM DESCRIPTION:** AT AOS, THE S/C DID NOT LOCK. STGT REPORTED GOOD RF. 2 FWD REAQ'S, A LINK FAILOVER (FWD), AND FWD LINK SWEEP DID NOT ACHEIVE LOCK. A GCMR TO MODE-2 DID NOT ACHEIVE LOCK EITHER. A MODE-1 GCMR, 1 FWD REAQ AND ANOTHER LINK SWEEP STILL DID NOT ACHEIVE LOCK. THE TNC SENT A GCMR TO MODE-2 AND AN EXPANDED USER FREQ. UNCERTAINTY AND LOCK WAS ACHEIVED AT 020839Z. IT WAS THEN DETERMINED THAT THE TOPEX S/C WAS MIS-CONFIGURED AS MODE-2 FROM THE PREVIOUS PASS.

\* **06/1300Z(STGT DAILY OPS SUMMARY DOY 247)**

01:45:00 - 23 MINS 9 SECS 16K RECOVERABLE DATA LOSS DUE TO SPACECRAFT MISCONFIGURATION. TTR 18528.

\* **14/1202Z(SNAC)**

POCC ADVISED S/C WAS NOT MISCONFIGURED.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18545	TDW	C1310MS	BRTS	950920	263/2011	2015	TLM	N MA	SW

\* 09/20/1300Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#29328. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 2.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 20:11:30 - 20:15:00

DURATION: 03:30.

SERVICE LOSS: 03:30. DATA LOSS: 03:30.

**PROBLEM DESCRIPTION:** INTERMITTENT LOCK THROUGH THE ENTIRE EVENT. THE NEXT C1310MS EVENT WHICH RAN A SHORT TIME LATER ON TDS WAS NOMINAL AND THE NEXT EVENT TO USE LNK-04 ON SGLT-2 WHICH ALSO RAN A SHORT TIME LATER WAS ALSO NOMINAL.

NOTE: FURTHER INVESTIGATION BY STGT SHOWED THIS INTERMITTENT LOCK WAS DUE TO AN ADPE SLOWDOWN. THE CAUSE OF THE SLOWDOWN IS UNDER INVESTIGATION.

18555	TDW	A1446MS	HST	951003	276/2247	2334	TLM	N SA	SW
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\* 10/03/1308Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#29480. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 1.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 23:13:20 - 23:34:51.

DURATION: 21:31.

SERVICE LOSS: 21:31. DATA LOSS: 21:31.

**PROBLEM DESCRIPTION:** DAY 276/2308 RECEIVED ALERT ATXS30 ANT SA2 SHO ID 4374266 IN CONFLICT WITH EXISTING SERVICE. THE EXISTING SERVICE WAS A KSA2F EET 2762254 FROM 2254-2301Z. THE HST SA2 FWD & RTN SERVICE RAN FROM 231320-233451Z. THE MA RTN SERVICE RAN FROM 224726-233451. THE KSA2 FWD EET SHO WAS INPUT AT 224640. FOLLOWING TERMINATION OF SHO 2762254 THE SA2 ANT REMAINED INACTIVE UNTIL APPROXIMATELY 5 SECS PRIOR TO THE START OF THE FWD & RTN SERVICES. THIS RESULTED IN LATE ACQ. AND THE RTN SERVICE DID NOT LOCK UNTIL 231359Z. FOLLOWING THIS HST POCC SAID THEY DID NOT SEE ANY FWD AGC LOCK ON HST. A FWD REACQ AND FWD FAILOVERS WERE DONE BUT HST STILL SAW NO FWD LOCK. TROUBLESHOOTING CONTINUED TO THE END OF SERVICE WITH HST NEVER ACHIEVING FWD LOCK. 21:31 1K COMMAND DATA LOSS. DELOG REVEALED THAT THE TWT ON THE TDRS S/C REMAINED IN AN INTERSERVICE STATE (PWR OUT AT .5 WATTS).

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STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
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- \* 04/1200Z(STGT DICREPANCY REPORT)  
 DAY 276/2308 RECEIVED ALERT ATXS30 ANT SA2 SHO ID 4374266 IN CONFLICT WITH EXISTING SERVICE. THE EXISTING SERVICE WAS A KSA2F EET 2762254 FROM 2254-2301Z. THE HST SA2 FWD & RTN SERVICE RAN FROM 231320-233451Z. THE MA RTN SERVICE RAN FROM 224726-233451. THE KSA2 FWD EET SHO WAS INPUT AT 224640. FOLLOWING TERMINATION OF SHO 2762254 THE SA2 ANT REMAINED INACTIVE UNTIL APPROXIMATELY 5 SECS PRIOR TO THE START OF THE FWD & RTN SERVICES. THIS RESULTED IN LATE ACQ. AND THE RTN SERVICE DID NOT LOCK UNTIL 231359Z. FOLLOWING THIS HST POCC SAID THEY DID NOT SEE ANY FWD AGC LOCK ON HST. A FWD REACQ AND FWD FAILOVERS WERE DONE BUT HST STILL SAW NO FWD LOCK. TROUBLESHOOTING CONTINUED TO THE END OF SERVICE WITH HST NEVER ACHIEVING FWD LOCK. 21:31 1K COMMAND DATA LOSS. DELOG REVEALED THAT THE TWT ON THE TDRS S/C REMAINED IN AN INTERSERVICE STATE (PWR OUT AT .5 WATTS).
  
- \* 04/1201Z(STGT ALERT NOTICE)  
 ALLOW 6 MINS BETWEEN THE TERMINATE TIME OF A SA1/SA2 SHO (EET OR USER) AND THE START TIME OF A USER SA1/SA2 CROSS SUPPORT SERVICE. THIS 6 MINUTE WINDOW IS REQUIRED TO AVOID A CONFLICT WITH THE CROSS-SUPPORT SLEW AND TDRS FWD SERVICE SETUP. IF A CONFLICT OCCURS, THE TDRS FWD LINK WILL REMAIN IN AN INTER-SERVICE STATE (MINIMUM PWR OUT).  
  
 THIS ALERT NOTICE IS NOT IN CONFLICT WITH AN 95220 WHICH ONLY ADDRESSES THE MINIMUM TIME REQUIRED BETWEEN EET SHO'S AND USER SHO'S.
  
- \* 12/1215Z(SNAC)  
 STGT IS CLAIMING 16 MINS OF DATA LOSS. 6 MINS ON FWD AND 10 MINS ON RTN UPLINK INTERRUPTED.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18578	TDW	A1446MS	HST	951021	294/0809	0850	TLM	Y MA	SW

\* 10/21/1305Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#29627. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 1.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 08:08:26 - 08:19:03.

DURATION: 10:37

SERVICE LOSS: 09:55. DATA LOSS: 06:55.

**PROBLEM DESCRIPTION:** 9 MINS 55 SECS SERVICE LOSS AND 6 MINS 55 SECS OF 32K NON-RECOVERABLE DATA LOSS DUE TO UNPLANNED ADPE DIS FAILOVER AT STGT. STGT SUSPECTS SOFTWARE PROBLEM. (POCC ADVISED S/C RECORDER WAS OFF AT 081208 AND ONLY DECLARED DATA LOSS FROM THIS TIME).

\* 24/1200Z(POCC)

6 MINS 55 SECS 32K ENGINEERING TELEMETRY DATA LOSS, NON-RECOVERABLE DUE TO A PROCESS FAILURE AT STGT.

\* 24/1305Z(STGT DAILY OPS SUMMARY DOY 294)

HST 08:09:08 - 6 MINS 55 SECS 32KB DATA LOST (NOT RECOVERABLE) AND 9 MINS 55 SECS SERVICE LOST DUE TO AN UNPLANNED DIS FAILOVER. PROCESS DFDI GSI DIED WHILE OFFLINE ANALYST WAS ATTEMPTING TO TROUBLESHOOT AN EARLIER PROBLEM. A GCMR WAS REQUESTED TO CONFIGURE THE DIS, HOWEVER, WHEN NO GCMR WAS RECEIVED, THE PATHS WERE CONFIGURED MANUALLY. TTR 18578/DR 29627.

DURING THE TROUBLESHOOTING OF THIS ANOMALY AT 0809Z, THE DIS OFFLINE ANALYST WAS ATTEMPTING THE DUMP THE LIMITS FILE TO DETERMINE THE CAUSE. WHILE THIS DUMP WAS IN PROGRESS, THE OFFLINE ANALYST FELT THAT THE DUMP WAS TAKING TOO LONG AND EXITED THE DUMP TOOL. PROCESS DFDI GSI (FAULT MANAGEMENT) WENT INTO DEAD LOCK AND FAILED AND CAUSED AN ADPE FAILOVER. AN HST EVENT DOWNLOADED AT TIME OF THE DIS FAILOVER AND DIDN'T CONFIGURE PROPERLY. TTR 18578 AND DE 29627.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18592	TDW	A1446MS	HST	951025	298/0513	0558	TLM	N MA	HW

\* 10/25/1300Z(TTR)

PROBLEM TYPE: **HARDWARE**

DR#29668. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 4.

ELEMENT W/P: **STGT.**

INVESTIGATING ELEMENT: **STGT.**

TIME OF ANOMALY: **05:31:46 - 05:31:47.** DURATION: **00:01**

SERVICE LOSS: **SEE TEXT.** DATA LOSS: **NONE.**

**PROBLEM DESCRIPTION:** HST EXPERIENCED A 1 SEC DATA INVERSION DURING A TDW MAR SERVICE. STGT OBSERVED THAT THE DATA INVERSION COINCIDED WITH A CMD HIT. THEY (STGT) BELIEVE THAT THE COMMAND HIT WAS RESPONSIBLE FOR THE DATA INVERSION. A DR HAS BEEN OPENED.

\* 31/1200Z(POCC)

DATA INVERSION, NO DATA LOSS, DUE TO COMMANDING HIT ON TDRS WEST.

\* 31/1300Z(STGT DAILY OPS SUMMARY DOY 298)

HST 05:13:13: - POCC REPORTED ONE DATA INVERSION. NO DATA LOSS DECLARED. INVERSION WAS COINCIDENT WITH CMD HIT. DELOGS INDICATE NO UPLINK PERTURBATION. DR 29668.

18593	TDW	J4377MS	TOPEX	951025	298/1423	1453	TLM	N MA	SYS
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\* 10/25/1301Z(TTR)

PROBLEM TYPE: **SYSTEM.**

DR#29673. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 4.

ELEMENT W/P: **STGT.**

INVESTIGATING ELEMENT: **STGT.**

TIME OF ANOMALY: **14:31:39 - 14:52:22.** DURATION: **20:43**

SERVICE LOSS: **03:31.** DATA LOSS: **03:31.**

**PROBLEM DESCRIPTION:** STGT LOST THE MA-CAL LINK AT 143139Z AT WHICH TIME TOPEX REPORTED REC'ING DROPOUTS WHICH LASTED UNTILE 145222, FOR A TOTAL OF 3 MINS 31 SECS SVC/DATA LOSS (16KB RECV).

POST EVENT REPORT:

STGT REPORTED THE MABE-A (MA BEAM FORMING EQUIPMENT) CARD LOCKED UP. STGT RE-SEATED THE CARD TO CLEAR THE PROBLEM.

\* 31/1301Z(STGT DAILY OPS SUMMARY DOY 298)

TOPEX 14:31:00 - POCC REPORTED 3 MINS 31 SECS DATA LOSS DUE TO A MABE CONTROLLER ANOMALY AT STGT. MABE CONTROLLER FAILOVER FROM A TO B, AND A RESET OF THE MABE CONTROLLER CARD CLEARED THE ANOMALY. DR 29673/TTR 18593.

\* 16/1207Z(SNAC)

DR #29673 IS CLOSED TO DR #29828 WHICH IS A SYSTEM DR AND IS OPEN.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18606	TDW	M2073LS	STS-73	951103	307/1537	1632	TLM	N SA	SW

\* 11/03/1301Z(TTR)  
 PROBLEM TYPE: SOFTWARE.  
 DR#29831. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 3.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 15:40:44 - 15:42:28. DURATION: 01:44.  
 SERVICE LOSS: 01:44. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** AT 154044Z, STGT EXPERIENCED AN AUTO DIS ADPE FAILOVER FROM "A" TO "B", DUE TO A TRANSLATION PROCESS FAILURE. THIS ANOMALY CAUSED NO ODM/GCMR CAPABILITY. ANOMALY IS UNDER INVESTIGATION AT STGT.

\* 04/09 1300Z(STGT)  
 DR #29831 IS CLOSED TO MASTER DR #29796.

18610	TDS	C1311MS	BRTS	951105	309/2026	2030	TLM	Y SA	PROC
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\* 11/05/1305Z(TTR)  
 PROBLEM TYPE: PROCEDURAL.  
 DR#29860. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 1.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 20:26:00 - 20:36:00. DURATION: 10:00  
 SERVICE LOSS: SEE TEXT. DATA LOSS: SEE TEXT.

**PROBLEM DESCRIPTION:** STGT WAS UNABLE TO SUPPORT TWO (2) BRTS EVENTS (1311 309/202600-203000 AND 1310 309/203200-203600) STGT WAS UNABLE TO FAIL BACK TO K-BAND FROM S-BAND IN TIME TO SUPPORT THE TWO SKED BRTS EVENTS DUE TO A PROC PROBLEM. THE TWO BRTS EVENTS (1310 & 1311) WERE RE-SKED AND SUPPORTED WITH NO PROBLEM NOTED. THE BELOW LISTED EVENTS WERE AFFECTED:

TDRS7 C1311MS 202600-203000 SA2 640BPS 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE  
 TDRS7 C1310MS 203200-203600 SA2 640BPS 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV.

\* 07/1201Z(WSC DISCREPANCY REPROT)  
 WHILE PERFORMING PROCEDURE 4.29.6.2 FOR S-K FREQUENCY SWITCHOVER ON TDRS7 AND SGLT3 ALL TDRS7 COMMANDS WERE IN PROCEDURE UNTIL STEP 69 THE LAST STEP REFERS TO PARAGRAPH 4.21.6.3 PART OF ETO RECOVERY FOR S-BAND PAYLOAD REACTIVATION IN THIS SECTION NO TDRS7 COMMANDS WERE CALLED OUT ONLY TDRS 1-6 COMMANDS. REFERED TO SO.03 13.3.6.3 FOR S-BAND PAYLOAD ACTIVATION ALSO NO TDRS7 COMMANDS CHECKED SEVERAL COPIES NO JOY HAD TO ASK NCC TO RESCHEDULE TO BRTS EVENTS ON TDRS 7 WHILE WE CONTACTED TA'S FOR ASSISTANCE.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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\* 07/1202Z(STGT DAILY OPS SUMMARY DOY 309)  
C1311 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO PROCEDURE PROBLEM.  
TTR 18610/DR 29860

C1310 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO PROCEDURE PROBLEM.  
TTR 18610/DR 29860.

NO TDRS-7 COMMANDS FOR PAYLOAD ACTIVATION:

DAY 309/2010Z. WHILE PERFORMING VOLUME 5 PROCEDURE 4.29.6.2, S TO K-BAND FREQUENCY SWITCHOVER, THE LAST STEP WAS REACHED WHICH REFERS TO PROCEDURE 4.31.6.3 TO COMPLETE THE S-BAND PAYLOAD ACTIVATION. ALL PROCEDURES USED, TO THAT POINT, HAD THE REQUIRED TDRS-7 COMMANDS. THERE WAS SUFFICIENT TIME TO PERFORM THE PROCEDURE, HAD THE PROCEDURE BEEN COMPLETE. BY THE TIME THE PROPER COMMANDS WERE FOUND, TWO BRTS EVENTS WERE MISSED, TOTALING 7 MINS OF DATA LOSS. TTR 18610. DR 29860.

18652	TDW	C1310MS	BRTS	951213	347/1820	1824	TLM	Y	SA	OPS
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\* 12/13/1201Z(TTR)  
PROBLEM TYPE: OPERATIONAL.  
DR#30417. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 1.  
ELEMENT W/P: STGT.  
INVESTIGATING ELEMENT: STGT.  
TIME OF ANOMALY: 18:20:00 - 18:29:00. DURATION: SEE TEXT.  
SERVICE LOSS: SEE TEXT. DATA LOSS: SEE TEXT.

**PROBLEM DESCRIPTION:** THE BELOW EVENTS EXPERIENCED NEGATIVE ACQUISITION DUE TO AN OPERATOR ERROR AT STGT. BOTH EVENTS WERE POST-MANUEVUER BRTS EVENTS. STGT'S SPACECRAFT ENGINEERS ARE LOOKING INTO THE PROBLEM.

TDW C1310 182000 - 182400 SSA2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE  
TDW C1313 182400 - 182900 SSA1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

PA NOTE: STGT'S POST EVENT INVESTIGATION REVEALS THAT THERE WAS A VECTOR PROPAGATION ERROR WHICH CAUSED THE NEGATIVE ACQUISITION.

\* 14/1302Z(STGT DAILY OPS SUMMARY DOY 347)  
BRTS C1310 18:20:00, C1313 18:25:00 - 3 MINS 30 SECS 640B DATA LOST DUE TO NEGATIVE ACQUISITION CAUSED BY AN O.E. WHEN POST MANEUVER EPHEMERIS WAS DOWNLOADED LOCALLY AT STGT. SPACECRAFT ENGINEERS EMPLOYED THE WRONG PROPAGATION INTERVAL.  
TTR 18652/DR 30417.



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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18677	???	A6581MS	XTE	960102	002/????	????	TLM	N ??	SW

\* 01/02/1208Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#30553. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 3.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 00:00:00 - 13:20:00.

DURATION: SEE TEXT.

SERVICE LOSS: SEE TEXT. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** FDF REPORTED INVALID TDM'S FOR XTE SGLT-3 EVENTS AND ALL MA EVENTS ON SGLT-1. STGT FAILED THE ADPE'S FOR BOTH SGLT'S AND REBOOTED THE AFFECTED ADPE'S WHICH CLEARED THE PROBLEM. SGLT-2 WAS NOT AFFECTED. STGT IS INVESTIGATING.

\* 04/1203Z(SNAC)

DR #30553 IS CLOSED TO MASTER DR #30548.

18729	TDW	C1310MS	BRTS	960130	030/2116	2120	TLM	Y MA	SW
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\* 01/30/1308Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR# 30891. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 1.

ELEMENT W/P: STGT.

INVESTIGATING ELEMENT: STGT.

TIME OF ANOMALY: 21:16:00 - 21:20:00.

DURATION: 04:00

SERVICE LOSS: 03:30. DATA LOSS: 03:30.

**PROBLEM DESCRIPTION:** 3 MINS 30 SECS SVC/DATA LOSS DUE TO NEGATIVE ACQUISITION. EVENTS DID NOT ACQUIRE LOCK AT AOS DUE TO A SW PROBLEM AT STGT. EVENT WAS RE-SKED (030/220600Z) AND RAN WITH NO PROBLEMS NOTED.

\* 31/1201Z(STGT DAILY OPS SUMMARY DOY 030)

BRTS 21:16:00 - 3 MINS 30 SECS 640 BIT RECOVERABLE DATA LOSS DUE TO A SOFTWARE ANOMALY. A PREVIOUS BRTS 1314 EVENT HAD RUN PRESERVICE, BUT THE SOFTWARE DID NOT RELEASE THE PRESERVICE CHAIN IN TIME FOR THE BRTS 1310 EVENT. TTR 18729/DR 30891.

\* 14/1203Z(SNAC)

DR#30891 IS CLOSED TO DR#29399.

STDN ANOMALY REPORT. PAGE NO. 26

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18799	TD7	LDBP	960304	064/0641	0642	TLM	N	??	SW

\* **03/04/1208Z(TTR)**  
 PROBLEM TYPE: SOFTWARE.  
 DR# 31322. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 4.  
 ELEMENT W/P: WSGTU.  
 INVESTIGATING ELEMENT: WSGTU.  
 TIME OF ANOMALY: 06:41:00 - 20:00:00. DURATION: 05:00:00.  
 SERVICE LOSS: NONE. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** MINOR PROBLEM DURING 1K CH-I OPERATIONS WITH THE LDBP, THE ODM'S FROM WSGTU INDICATE ASCII BLANKS, INSTEAD OF A NUMBER DISPLAY, ONLY AFFECTS ODMS, NOT TELEMETRY. UNDER INVESTIGATION BY WSGTU ENGINEERING/SOFTWARE SUPPORT. I CHANNEL PERCENT LOCK INDICATOR.

18810	WPS	TDRS-1	960320	080/1020	1123	TLM	Y	9M	UNK
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\* **03/20/1201Z(TTR)**  
 PROBLEM TYPE: UNKNOWN  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4  
 ELEMENT W/P: WPS  
 INVESTIGATING ELEMENT: WPS  
 TIME OF ANOMALY: 10:27:20 - 10:37:50 DURATION: 10:30  
 SERVICE LOSS: 10:30 DATA LOSS: 10:30

**PROBLEM DESCRIPTION:** WPS RANGE DATA EXHIBITED A BIAS OF +18.75 KW INDICATIVE OF A PHASE REVERSAL DURING THE TDRS-1 WSGTU HANDOVER TEST.

STDN ANOMALY REPORT. PAGE NO. 27

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18812	TDE	A6951MS	EUVE	960322	082/2239	2259	TLM	N MA	UNK

\* **03/22/1203Z(TTR)**  
 PROBLEM TYPE: UNKNOWN  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 1 IMPACT LEVEL: 1  
 ELEMENT W/P: UNKNOWN  
 INVESTIGATING ELEMENT: NCC  
 TIME OF ANOMALY: 22:39:30 - 22:45:23 DURATION: 05:53  
 SERVICE LOSS: 05:53 DATA LOSS: 05:53

**PROBLEM DESCRIPTION:** THE ABOVE EUVE EVENT WAS NOT RESIDENT IN THE NASCOM CSS, REASON UNKNOWN. ANOMALY BEING INVESTIGATED BY THE NCC. NASCOM HAD TO CONFIGURE THE EVENT MANUALLY. POCC DECLARED 5 MINS 53 SECS OF RECOVERABLE 32KB DATA LOSS.

\* 26/1203Z(STGT DAILY OPS SUMMARY DOY 082)  
 EUVE 22:39:00 - 5 MINS 53 SECS SERVICE LOSS (2+27 REC, AND 3+26 NON-REC 32 Kbps DATA). POCC REPORTED NO LOCK ON DATA FROM AOS TO 2245Z. SERVICE LOCKED AT STGT ON TIME, WITH GOOD DATA LEAVING STATION. NCC SUSPECTS A SCHEDULING ANOMALY IMPACTED THIS SERVICE. TTR 18812. NO DR WRITTEN.

\* 04/18 1204Z(SNAC)  
 POCC HAS NOTHING TO ADD. WAITING NCC RESPONSE.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18815	TDE	A3782MS	UARS	960325	085/1501	1521	TLM	N SA	SW

\* **03/25/1209Z(TTR)**  
 PROBLEM TYPE: SOFTWARE.  
 DR# 31602. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 2.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 15:10:43 - 15:14:10. DURATION: 03:27.  
 SERVICE LOSS: 03:27. DATA LOSS: 03:27.

**PROBLEM DESCRIPTION:** 3 MINS 27 SECS SVC/DATA LOSS 32K RECOVERABLE. UARS POCC SENT A DCI GCMR. THE DCI TOOK AT STGT ON THE FWD BUT NOT ON THE RTN. THE POCC SENT A DCE RESPEC. THE FREQ TO CLEAR THE ANOMALY.

\* 27/1300Z(STGT DAILY OPS SUMMARY DOY 085)  
 UARS 15:01:30 - 3 MINS 27 SECS 32KB DATA LOST DUE TO C1 EXEC ANOMALY. A DCI WAS RECEIVED FOR A COHERENT SERVICE, HOWEVER, EXEC ONLY APPLIED THE DCI TO THE FORWARD. THE FORWARD AND RETURN FREQUENCIES STARTED TO DIVERGE. CSC HAD POCC SEND DCE WHICH CAUSED THE RETURN TO DROPOUTT FOLLOWED BY A FORWARD REACQ WHICH WAS UNSUCCESSFUL FOLLOWED BY A FORWARD OPM WITH THE FREQUENCY RESPECIFIED WHICH WAS SUCCESSFUL. TTR 18815/DR 31602

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18822	TDW	A1313MS	BRTS	960327	087/2040	2044	TLM	N MA	SW

\* **03/27/1201Z(TTR)**  
 PROBLEM TYPE: SOFTWARE.  
 DR# 31637. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 4.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 20:40:00 - 20:44:00. DURATION: 04:00.  
 SERVICE LOSS: 03:30. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** AS A RESULT OF A SOFTWARE PROBLEM AT STGT EVENT DID NOT LOCK UP. EVENT WAS RESCHEDULED AND RAN SUCCESSFULLY.

18828	TDW	C1313MS	BRTS	960401	092/0440	0444	TLM	N MA	SW
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\* **04/01/1206Z(TTR)**  
 PROBLEM TYPE: SOFTWARE  
 DR# 31669. AR PRIORITY: TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 2.  
 ELEMENT W/P: STGT  
 INVESTIGATING ELEMENT: STGT  
 TIME OF ANOMALY: 04:40:00 - 04:44:00. DURATION: 04:00.  
 SERVICE LOSS: 03:30. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** C1313 EXPERIENCED A NEGATIVE ACQUISITION; REASON UNKNOWN. NCC RESCHEDULED A REPLACEMENT EVENT AT 0550-0554Z TDW/MA WHICH WAS SUCCESSFUL (ON THE SAME MA LINK AS THE ABOVE FAILED EVENT).

\* 03/1300Z(STGT DAILY OPS SUMMARY DOY 092)  
 BRTS 1313 04:40:00 - 3 MINS 30 SECS SERVICE LOSS DUE TO NEGATIVE ACQUISITION. AN ALERT WAS RECEIVED INDICATING THAT MAR04 DID NOT CONFIGURE COMPLETELY. BIT TEST WAS RUN ON MAR04 IR WITH NO PROBLEM NOTED. THE EVENT WAS RESCHEDULED FOR 0515Z AND SUCCESSFULLY RAN ON MAR04. TTR 18828. DR 31669

STDN ANOMALY REPORT. PAGE NO. 29

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18829	TDE	A1446MS	HST	960401	092/1428	1510	TLM	Y MA	FW

\* 04/01/1207Z(TTR)  
 PROBLEM TYPE: FIRMWARE.  
 DR# 28420 AR PRIORITY: TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 1.  
 ELEMENT W/P: STGT.  
 INVESTIGATING ELEMENT: STGT.  
 TIME OF ANOMALY: 14:56:22 - 15:36:10. DURATION: 39:48.  
 SERVICE LOSS: SEE TEXT. DATA LOSS: SEE TEXT.

**PROBLEM DESCRIPTION:** THE BELOW LISTED EVENTS EXPERIENCED SERVICE/DATA LOSSES DUE TO A STGT MABE CONTROLLER ANOMALY. STGT RESEATED NUMEROUS CARDS TO CLEAR THE ANOMALY. THIS ANOMALY IS A KNOWN STGT FIRMWARE PROBELM. REFERENCE DR #27975 AND 29828.

TDE HST 142821 - 151054 MAR2 32K 46 SECS SVC/DATA LOSS NON-RECOVERABLE  
 TDE GRO 152100 - 161600 MAR5 32K 15 MINS SVC LOSS AND 15 MINS 10 SECS DATA LOSS N/R

\* 03/1300Z(STGT DAILY OPS SUMMARY DOY 092)  
 HST 14:28:21 - 46 SECS 32KB DATA LOST (NOT RECOVERABLE) DUE TO A COMM FAILURE BETWEEN THE MA MABE CONTROLLER AND THE CHANNEL PROCESSOR. HST SUSTAINED 9 DROPOUTS TOTALING 46 SECS WHILE THE MA CAL DEGRADED. THE B MABE PROCESSOR, 6 QUAD SPLITTERS AND 2 NODE CARDS IN AGIPA 1 WERE RESET. TTR 18829 DR 31674

GRO 15:21:00 - 15 MINS 10 SECS 32KB DATA LOST (NOT RECOVERABLE) DUE TO SAME PROBLEM.

\* 04/02 2315Z (STGT TI 2)  
 THERE HAS BEEN DISCUSSION RELATIVE TO THIS ANOMALY. ONCE ATSC BECOMES COGNIZANT WITH THE MABE FW, THE PROBLEM OUTLINED IN THIS DR MAY BE ADDRESSED.

\* 04/02 2313Z (STGT TI 3)  
 PLEASE MAKE THIS DR THE MASTER FOR THE FAILURES EXPERIENCED WHEN THE SYSTEM SEES A "CW" TYPE SIGNAL AT APPROXIMATELY 2287.5 MHZ. TWO MORE OCCURRENCES HAVE BEEN ASSIGNED (SLAVED) TO THIS DR. THEY ARE 31674 ON DAY 092 AND 31692 ON DAY 093. BOTH OF THOSE WERE CAUSED WHEN RFSOC RADIATED AT TDE.

\* 04/02 2315Z (STGT TI 4)  
 SYSTEMS ENGINEERING WILL GENERATE AN ALERT NOTICE TO AID OPERATIONS IN DEALING WITH THIS TYPE OF PROBLEM. ALSO, THE SITE RECOMMENDS TO THE NETWORK THAT SN TESTING ACTIVITIES SHOULD TRY TO CHANGE THEIR TRANSMIT FREQUENCY FROM A NOMINAL 2287.5 TO 2287.50500MHZ. MORE TO COME.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

\* 04/03 1646Z (STGT TI 5)  
ALERT NOTICE 96072 WAS CREATED ON 4-3-96 IN AN EFFORT TO ASSIST OPS WITH THE BEST RECOVERY ACTION TO THIS PROBLEM. ALSO, A MEMO WAS DRAFTED TO EXPLAIN THE PROBLEM IN DETAIL AND ALSO TO AID NASA IN IMPLEMENTING A WORK-AROUND UNTIL THE FW IN THE MABE CAN BE MODIFIED.

\* 04/04 1204Z(SNAC)  
DR# 31674 IS CLOSED TO MASTER DR# 28420 WHICH IS OPEN AND IN WORK.

18833 TDW A1446MS HST 960405 096/1925 2006 TLM Y MA SW

\* 04/08/1200Z(TTR)  
PROBLEM TYPE: SOFTWARE.  
DR# 31742 AR PRIORITY: 4. TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 2.  
ELEMENT W/P: STGT.  
INVESTIGATING ELEMENT: STGT.  
TIME OF ANOMALY: 19:53:09 - 19:57:12. DURATION: 4:12  
SERVICE LOSS: 04:12 DATA LOSS: 04:12

**PROBLEM DESCRIPTION:** HST EXPERIENCED A RETURN SVC DROPOUT DUE TO A SW ANOMALY AT STGT. HST WAS LOCKED ON MA-LINK #2. HST LOST 4 MINS 12 SECS OF DATA DURING AN ENGINEERING CHECKOUT OF DRR-17 IN SGLT-2. AN INTERNAL LOOP TEST WAS SCHEDULED TO RUN ON LINK 3 WHICH WAS DOWNED FOR MAINTENANCE, BUT IT RAN ON LIST 2 (HST ACTIVE) INSTEAD. IT APPEARS TO BE A SW ANOMALY. A FORCED FAILOVER BY STGT TO LINK 4 WAS IMPLEMENTED AND LOCK WAS RE-ESTABLISHED.

\* 156/1200Z(STGT DAILY OPS SUMMARY FOR DOY 096)  
HST 19:25:32 - 4 MINS 12 SECS 32K NON-RECOVERABLE DATA LOSS DUE TO A SOFTWARE ANOMALY AT STGT. WHILE PERFORMING A LOOP TEST ON MAR03 TO CHECKOUT THE INSTALLATION OF DRR17, THE CORRECT LINK WAS FAILED DOWN BUT THE LOOP TEST RAN ON MAR02 WHICH WAS ACTIVE WITH THE HST SHO. THIS SHOULD HAVE BEEN PREVENTED BY THE SOFTWARE. A MANUAL FAILOVER TO MAR04 WAS PERFORMED TO RESTORE GOOD LOCK. TTR 1883/DR 31742.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18836	TDE	C1310MS	BRTS	960409	100/1601	1605	TLM	Y	SSAR SW

\* 04/09/1200Z(TTR)

PROBLEM TYPE: SOFTWARE

DR# 31780 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 2

ELEMENT W/P: STGT

INVESTIGATING ELEMENT: STGT

TIME OF ANOMALY: 16:01:00 - 16:06:00

DURATION: 5:00

SERVICE LOSS: 3:30 DATA LOSS: NONE

**PROBLEM DESCRIPTION:** STGT WAS UNABLE TO SUPPORT THIS EVENT AT ITS SCHEDULED TIME DUE TO A DIS SYSTEM ANOMALY. THE ANOMALY IS UNDER INVESTIGATION. THE 1310 BRTS EVENTS WAS RESCHEDULED AND RAN SUCCESSFULLY. AFTER FURTHER INVESTIGATION, IT WAS REVEALED THAT A LOSS OF STATUS AND COMMAND OCCURRED AND BOTH MDA AND MDB SSCS FAILED. A FAILOVER IF THE DIS WAS ATTEMPTED BUY WAS UNSUCCESSFUL DUE TO IN QUEUE QUOTA PROBLEMS (DR 26411) ON THE PRIME. THE PRIME MACHINE (A) WAS FORCED TO FAIL AND THE FAILOVER WAS NOMINAL.

\* 16/1204Z(STGT DAILY OPS SUMMARY DOY 100)

BRTS 1310 16:01:00 - 3 MINS 30 SECS SERVICE LOSS DUE TO DIS STATUS AND COMMAND FAILURE. DIS FAILOVER WAS PERFORMED AND 1310 EVENT RE-RUN WAS NOMINAL. TTR 18836/DR 31780.

18844	BDA	B3557MT	GPS-25	960326	086/1300	2130	TLM	N ??	CP
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\* 03/26/1200Z(TTR)

PROBLEM TYPE: COMM PROBLEM

DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4

ELEMENT W/P: BDA

INVESTIGATING ELEMENT: BDA

TIME OF ANOMALY: 17:48:00 - 20:01:00

DURATION:

SERVICE LOSS: NONE DATA LOSS: NONE

**PROBLEM DESCRIPTION:** EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 2; COMMENTS: DURING THE DELTA/GPS-25 F-1 DAY CHECKS THE FOLLOWING PROBLEMS WERE ENCOUNTERED. FOLLOWING ARE NOTES FROM THE BDA COMM LOG BOOK.

1748Z - CMD REPORTS SEEING DROP OUTS ON CMEV LINK 2. THE DROP OUTS ACTUALLY BEGAN APPROXIMATELY 1717Z. CKT IN USE 58551.

1804Z - CHECKED WITH CABLE & WIRELESS ON 58551. EVERYTHING NORMAL AT THEIR FACILITY.

1805Z - LAST DROP OUT SEEN ON CMEV LINK 2.

1817Z - CMEV LINK 2 GOOD SINCE 1805Z.

181719Z - TOOK ANOTHER HIT ON CMEV LINK 2.

2003Z - CMD REPORTS TAKING HITS ON LINK 2. LAST HIT ON 200124Z.

2049Z - RELEASED FROM GPS-25 CHECKS.

REF BDA'S PRT DTG 04/2352Z.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

\* 04/2352Z(BDA)  
PRT BDA  
1. N/A  
2. B3557MT, GPS-25, 960326, 1300Z  
3. COMMUNICATION  
4. EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 2  
COMMENTS:  
DURING THE DELTA/GPS-25 F-1 DAY CHECKS THE FOLLOWING PROBLEMS WERE ENCOUNTERED.  
FOLLOWING ARE NOTES FROM THE BDA COMM LOG BOOK.  
1748Z - CMD REPORTS SEEING DROP OUTS ON CMEV LINK 2. THE DROP OUTS ACTUALLY BEGAN  
APPROXIMATELY 1717Z. CKT IN USE 58551.  
1804Z - CHECKED WITH CABLE & WIRELESS ON 58551. EVERYTHING NORMAL AT THEIR FACILITY.  
1805Z - LAST DROP OUT SEEN ON CMEV LINK 2.  
1817Z - CMEV LINK 2 GOOD SINCE 1805Z.  
181719Z - TOOK ANOTHER HIT ON CMEV LINK 2.  
2003Z - CMD REPORTS TAKING HITS ON LINK 2. LAST HIT ON 200124Z.  
2049Z - RELEASED FROM GPS-25 CHECKS.

18838 TDW A6581MS XTE 960410 101/2156 2216 TLM N SA OPR

\* 04/10/1201Z(TTR)  
PROBLEM TYPE: OPERATIONAL  
DR# 31797 AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 2.  
ELEMENT W/P: STGT  
INVESTIGATING ELEMENT: STGT  
TIME OF ANOMALY: 21:56:40 - 22:16:40 DURATION: 20:00  
SERVICE LOSS: 01:30 DATA LOSS: 01:30  
**PROBLEM DESCRIPTION:** THE DATA LOSS WAS DUE TO THE SA2 ANTENNA BEING IDLED AT  
EVENT START. BOTH SA ANTENNAS AS WELL AS THE SGL ANTENNA BECAME IDLED DURING THE  
CLUSTER TRANSITION THAT OCCURS AFTER A TT&C FAILOVER WHEN THE HSM MACHINE REJOINS  
THE CLUSTER. ONLY THE SGT L ANTENNA BEING IDLED WAS NOTICED.

\* 12/1301Z(STGT DAILY OPS SUMMARY DOY 101)  
XTE 21:56:40 - 1 MIN 30 SECS 32 KB DATA LOST (RECOVERABLE) DUE TO THE SA2 ANTENNA  
BEING IDLED AT EVENT START. BOTH SA ANTENNA AS WELL AS THE SGL ANTENNA BECAME  
IDLED DURING THE CLUSTER TRANSITION THAT OCCURS AFTER A TT&C FAILOVER WHEN THE HSM  
MACHINE REJOINS THE CLUSTER. ONLY THE SGL ANTENNA BEING IDLED WAS NOTICED. TTR  
18838/DR 31797.



STDN ANOMALY REPORT. PAGE NO. 33

STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
18842	TDE	J4377MS	TOPEX	960411	102/0632	0700	TLM	N MA	OTH

\* 04/11/1203Z(TTR)

PROBLEM TYPE: OTHER

DR# 31804 AR PRIORITY: TTR PRIORITY LEVEL: 3 IMPACT LEVEL: 3

ELEMENT W/P: TOPEX

INVESTIGATING ELEMENT: TOPEX

TIME OF ANOMALY: 06:32:00 - 06:34:51 DURATION: 02:51

SERVICE LOSS: NONE DATA LOSS: 02:51

**PROBLEM DESCRIPTION:** TOPEX REPORTED 2 MINS 51 SECS DATA LOSS (32K). THIS WAS DUE TO A BAD EPHEMERIS LOAD WHICH CAUSED THE TOPEX SPACECRAFT'S ANTENNA TO SLEW LATE TOWARDS TDRS-EAST. THE PROBLEM HAS BEEN CORRECTED.

\* 15/1201Z(STGT DAILY OPS SUMMARY DOY 102)

TOPEX 06:32:00 - 2 MINS 51 SECS 16 KBPS DATA LOSS (RECOVERABLE) DUE TO A LATE ACQUISITION. TWO RETURN REACQS DID NOT LOCK THE SERVICE. LOCK AT 06:34:51 WITH NO FURTHER INTERVENTION. DELOGS INDICATE EB/NO OF 9 AT AOS IMPROVING OVER THE NEXT TWO MINUTES TO 19. UNDER INVESTIGATION. TTR 18842/DR 31804.

\* 15/1202Z(STGT TI #1)

DELOG ANALYSIS AND CONFIRMATION FROM THE TOPEX POCC VERIFY THAT THE TOPEX HIGH-GAIN ANTENNA WAS STILL "SLEWING" TOWARDS TDE AT EVENT START. NO SITE ACTION REQUIRED.

\* 04/18 1200Z(SNAC)

STGT CLOSED DR #31804 AS NON-DISCREPANT. WAITING POCC RESPONSE.

STDN ANOMALY REPORT. PAGE NO. 34

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18846	TDS	A4625MS	GRO	960411	102/2041	2110	TLM	N MA	FW

\* 04/11/1205Z(TTR)  
 PROBLEM TYPE: FIRMWARE  
 DR# 31816 AR PRIORITY: TTR PRIORITY LEVEL: 1 IMPACT LEVEL: 1  
 ELEMENT W/P: WSGT  
 INVESTIGATING ELEMENT: WSGT  
 TIME OF ANOMALY: 20:38:00 - 21:08:54 DURATION:  
 SERVICE LOSS: 27:54 DATA LOSS: NONE

**PROBLEM DESCRIPTION:** GRO POCC REPORTED 27 MINS 54 SECS (32K) DATA/SERVICE LOSS DUE TO AN EQUIPMENT PROBLEM AT WSGT. WSGT OPS ADVISED THAT THE SGLT-5 MA EQUIPMENT WENT HAYWIRE, REASON UNKNOWN. WSGT'S S/W PERSONNEL WERE CALLED IN TO INVESTIGATE THE ANOMALY. BOTH SUBSYSTEM CONTROLLERS WERE HUNG AND HAD TO BE RECYCLED. THIS HAS BEEN A REOCCURRING PROBLEM AND THE PURPOSE OF THE TTR IS TO TRACK IT. A TEST BRIS EVENT WILL BE SCHEDULED.

PA NOTE: A BRIS EVENT AT 102/2150Z WAS SUPPORTED SUCCESSFULLY. RECYCLING THE HUNG SSC'S AND A LOT OF HELP FROM THEIR SOFTWARE PROBLEM SEEMED TO HAVE ALLEVIATED THE PROBLEM. WSGT IS INVESTIGATING WHY THE SSC'S HUNG UP IN THE FIRST PLACE.

STDN ANOMALY REPORT. PAGE NO. 35

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18855	BDA	D4934LS	TITAN	960423	114/1200	1800	TLM	N MA	CP

\* 04/23/1300Z(TTR)  
 PROBLEM TYPE: COMM PROBLEM  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4  
 ELEMENT W/P: BDA  
 INVESTIGATING ELEMENT: BDA  
 TIME OF ANOMALY: 13:12:00 - UNKNOWN DURATION:  
 SERVICE LOSS: NONE DATA LOSS: NONE

**PROBLEM DESCRIPTION:** EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 1. COMMENTS: DURING THE F-1 DAY CHECKS CAPE CARRIER REPORTED DROP OUTS ON CMEV LINK 1 AT 1312Z. END TO END TESTS CHECKED GOOD. THE PROBLEM CLEARED AFTER THE BDA CMEV WAS RE-INITIALIZED. REF BDA'S PRT DTG 25/1304Z.

\* 25/1304Z(BDA)  
 PRT BDA  
 1. NA  
 2. D4934MT, TITAN, 960423, 1200Z  
 3. COMMUNICATION PROBLEM  
 4. EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 1.  
 COMMENTS: DURING THE F-1 DAY CHECKS CAPE CARRIER REPORTED DROP OUTS ON CMEV LINK 1 AT 1312Z. END TO END TESTS CHECKED GOOD. THE PROBLEM CLEARED AFTER THE BDA CMEV WAS RE-INITIALIZED. REF BDA'S PRT DTG 25/1304Z.

**STDN ANOMALY REPORT. PAGE NO. 36**

<b>STA</b>	<b>SUPIDEN</b>	<b>USER</b>	<b>YRMODA</b>	<b>START</b>	<b>STOP</b>	<b>TYP</b>	<b>L</b>	<b>SVC</b>	<b>EVAL</b>
<b>18856</b>	<b>BDA</b>	<b>D4934LS</b>	<b>TITAN</b>	<b>960423</b>	<b>114/1200</b>	<b>1800</b>	<b>TLM</b>	<b>N MA</b>	<b>CP</b>

**\* 04/23/1300Z(TTR)**  
**PROBLEM TYPE: COMM PROBLEM**  
**DR#**                      **AR PRIORITY:**      **TTR PRIORITY LEVEL: 4**    **IMPACT LEVEL: 4**  
**ELEMENT W/P: BDA**  
**INVESTIGATING ELEMENT: BDA**  
**TIME OF ANOMALY: 16:38:00 - 18:28:00**                      **DURATION:**  
**SERVICE LOSS: NONE**                      **DATA LOSS: NONE**

**PROBLEM DESCRIPTION:** EQUIPMENT AFFECTED: 2.4 KB FPQ-6 RADAR MDDF DATA AND 2.4 KB LTAS DATA. COMMENTS: DURING THE F-1 DAY CHECKS AT  
1638Z - LEMON ONE REPORTED THE DELAY WAS GREATER THAN 400 MILLI SECONDS ON BOTH THE PRIME AND BACK UP CIRCUITS AND REQUESTED WE RESET THE RTPS. THE RTPS WAS RESET AND THE DELAY REMAINED THE SAME.  
1650Z - UNABLE TO TROUBLE SHOOT DUE TO EXPECTED THEORETICAL RUN. DELAY WAS CHECKED USEING THE STPS AND INDICATED 250 MILLI SECONDS WHICH WOULD EQUATE TO APPROXIMATELY 150 MILLI SECONDS ON SITE DELAY.  
1655Z - LEMON ONE REPORTS DELAY IS 400 MILLI SECONDS ON PRIME CIRCUIT.  
1757Z - LTAS PRIME 2.4 KB DATA IS BAD.  
1802Z - CIRCUIT CHECKS GOOD.  
1810Z - FDF REPORTS BAD LTAS DATA.  
1828Z - LTAS DATA IS GOOD. SIGNAL WAS REPATCHED AT CAPE AND PROBLEM WAS GONE.

REF BDA'S PRT DTG 25/1332Z.

**\* 25/1332Z(BDA)**  
**PRT BDA**  
1. NA  
2. D4934MT, TITAN, 960423, 1200Z  
3. COMMUNICATION PROBLEM  
4. EQUIPMENT AFFECTED: 2.4 KB FPQ-6 RADAR MDDF DATA AND 2.4 KB LTAS DATA.  
COMMENTS: DURING THE F-1 DAY CHECKS AT  
1638Z - LEMON ONE REPORTED THE DELAY WAS GREATER THAN 400 MILLI SECONDS ON BOTH THE PRIME AND BACK UP CIRCUITS AND REQUESTED WE RESET THE RTPS. THE RTPS WAS RESET AND THE DELAY REMAINED THE SAME.  
1650Z - UNABLE TO TROUBLE SHOOT DUE TO EXPECTED THEORETICAL RUN. DELAY WAS CHECKED USEING THE STPS AND INDICATED 250 MILLI SECONDS WHICH WOULD EQUATE TO APPROXIMATELY 150 MILLI SECONDS ON SITE DELAY.  
1655Z - LEMON ONE REPORTS DELAY IS 400 MILLI SECONDS ON PRIME CIRCUIT.  
1757Z - LTAS PRIME 2.4 KB DATA IS BAD.  
1802Z - CIRCUIT CHECKS GOOD.  
1810Z - FDF REPORTS BAD LTAS DATA.  
1828Z - LTAS DATA IS GOOD. SIGNAL WAS REPATCHED AT CAPE AND PROBLEM WAS GONE.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18854	BDA	D4934LS	TITAN	960424	115/1235	0030	TLM	N MA	CP

\* 04/24/1300Z(TTR)  
 PROBLEM TYPE: COMM PROBLEM  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4  
 ELEMENT W/P: BDA  
 INVESTIGATING ELEMENT: BDA  
 TIME OF ANOMALY: 14:20:00 - 20:54:00 DURATION:  
 SERVICE LOSS: NONE DATA LOSS: NONE

**PROBLEM DESCRIPTION:** EQUIPMENT AFFECTED: 2.4 KB MDDF AND LTAS DATA.

COMMENTS: DURING THE LAUNCH COUNT FOR D4934 AT:

1420Z - FPQ-6 IS TAKING DROP OUTS ON NASA-1 LTAS CIRCUIT.

1432Z - NASA 1 IS O.K. ROCC COMM BYPASSED A FAULTY JACK.

1446Z - LTAS IS BAD ON NASA-1 AT START OF THEORETICAL. GSFC TECH CONTROL NOTIFIED.

1448Z - LTAS ON NASA-1 ID GOOD. NO TROUBLE FOUND.

1558Z - LEMON ONE REPORTS FPQ-6 MDDF DATA IS STALE ON THE BACK UP CIRCUIT. TRIED ANOTHER SLEW AND MDDF IS STILL STALE.

1607Z - TRIED ANOTHER TIMEPLEX CHANNEL AND MDDF DATA IS STILL STALE.

1612Z - TRIED THE WALLOPS CIRCUIT AND MDDF IS STILL STALE.

1630Z - TECH CONTROL REPORTED GSFC HAD RELEASED OUR CIRCUIT ON 16 APRIL TO "ALL TEL" OFFICE IN NEW YORK TO INSTALL AN OPERATIONAL AMPLIFIER. NO DELAY MEASUREMENT WAS MADE AFTER THE INSTALLATION.

1653Z - CAPE & GSFC TECH CONTROL SPLIT THE PRIME MDDF FROM BDA AND PUT THE DATA ON TWO CIRCUITS GOING FROM GSFC TO THE CAPE.

1658Z - RE-RAN THE SLEW AND IT WAS GOOD. BOTH CIRCUITS HAVE 400 MILLISECONDS DELAY.

2040Z - LOST DATA ON THE PRIME CIRCUIT. GSFC HAS ALSO LOST IT.

2054Z - PRIME LTAS IS GOOD. ROCC COMM CROSS PATCHED THE PRIME AND BACKUP AT ROCC COMM AND NOW BOTH CIRCUITS ARE GOOD.

REF BDA'S PRT DTG 25/1500Z.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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\* 25/1500Z(BDA)  
PRT BDA  
1. NA  
2. D4934LS, TITAN, 960424, 1200Z  
3. COMMUNICATION PROBLEM  
4. EQUIPMENT AFFECTED: 2.4 KB MDDF AND LTAS DATA.  
COMMENTS: DURING THE LAUNCH COUNT FOR D4934 AT:  
1420Z - FPQ-6 IS TAKING DROP OUTS ON NASA-1 LTAS CIRCUIT.  
1432Z - NASA 1 IS O.K. ROCC COMM BYPASSED A FAULTY JACK.  
1446Z - LTAS IS BAD ON NASA-1 AT START OF THEORETICAL. GSFC TECH CONTROL NOTIFIED.  
1448Z - LTAS ON NASA-1 ID GOOD. NO TROUBLE FOUND.  
1558Z - LEMON ONE REPORTS FPQ-6 MDDF DATA IS STALE ON THE BACK UP CIRCUIT. TRIED  
ANOTHER SLEW AND MDDF IS STILL STALE.  
1607Z - TRIED ANOTHER TIMEPLEX CHANNEL AND MDDF DATA IS STILL STALE.  
1612Z - TRIED THE WALLOPS CIRCUIT AND MDDF IS STILL STALE.  
1630Z - TECH CONTROL REPORTED GSFC HAD RELEASED OUR CIRCUIT ON 16 APRIL TO "ALL TEL"  
OFFICE IN NEW YORK TO INSTALL AN OPERATIONAL AMPLIFIER. NO DELAY MEASUREMENT WAS MADE AFTER THE INSTALLATION.  
1653Z - CAPE & GSFC TECH CONTROL SPLIT THE PRIME MDDF FROM BDA AND PUT THE DATA ON  
TWO CIRCUITS GOING FROM GSFC TO THE CAPE.  
1658Z - RE-RAN THE SLEW AND IT WAS GOOD. BOTH CIRCUITS HAVE 400 MILLISECONDS DELAY.  
2040Z - LOST DATA ON THE PRIME CIRCUIT. GSFC HAS ALSO LOST IT.  
2054Z - PRIME LTAS IS GOOD. ROCC COMM CROSS PATCHED THE PRIME AND BACKUP AT ROCC  
COMM AND NOW BOTH CIRCUITS ARE GOOD.

AT 1400Z BDA TOOK DELAY MEASUREMENTS FROM THE RTPS TO THE STPS, LOOPED BACK AT GSFC, LOOPED BACK AT ROCC COMM, AND LOOPED BACK AT THE EASTERN RANGE COMPUTER. GSFC TECH CONTROL TOOK A DELAY MEASUREMENT WITH LOOP BACK AT BDA. RESULTS FOLLOW.

BDA RTPS TO BDA STPS  
ONE OUTPUT = 250 MILLI SECONDS.

BDA RTPS TO GSFC TO BDA STPS  
PRIME = 350 MILLI SECONDS  
BACK UP = 450 MILLI SECONDS

BDA RTPS TO GSFC TO ROCC TO GSFC TO BDA STPS  
PRIME = 450 MILLI SECONDS  
BACK UP = 550 MILLI SECONDS

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

BDA RTPS TO GSFC TO ROCC TO USER TO ROCC TO GSFC TO BDA STPS  
PRIME = 350 MILLI SECONDS  
BACK UP = 450 MILLI SECONDS

TECH CONTROL MEASUREMENT GSFC TO BDA TO GSFC 24 APRIL 96  
PRIME = 212 MILLI SECONDS  
BACK UP = 222 MILLI SECONDS

TECH CONTROL MEASUREMENT GSFC TO BDA TO GSFC 04 MARCH 96  
PRIME = 168 MILLI SECONDS  
BACK UP = 180 MILLI SECONDS

NOTE: THE DELAY MEASUREMENT GSFC TOOK INCREASED FROM 168 MILLISECONDS ON 4 MARCH 1996 TO 212 MILLI SECONDS ON 24 APRIL 1996 ON THE PRIME CIRCUIT AND FROM 180 MILLI SECONDS TO 222 MILLI SECONDS ON THE BACK UP CIRCUIT. WE NEED TO FIND THE CAUSE OF THE INCREASED TIME DELAY.

THE TIME DELAY BETWEEN THE RTPS AND THE STPS REMAINED CONSTANT AT 250 MILLI SECONDS ON BOTH APRIL 23 AND 24.

NOTE: THE MEASUREMENTS MADE BY THE STPS ARE ONLY MEASURED IN 50 MILLI SECOND INCREMENTS.

18857 BDA D4934LS TITAN 960424 115/1235 0030 TLM N MA CP

\* 04/24/1300Z(TTR)

PROBLEM TYPE: COMM PROBLEM

DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4

ELEMENT W/P: BDA

INVESTIGATING ELEMENT: BDA

TIME OF ANOMALY: 18:38:00 - UNKNOWN DURATION:

SERVICE LOSS: NONE DATA LOSS: NONE

**PROBLEM DESCRIPTION:** EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 1. COMMENTS: AT 1838Z DURING THE TITAN LAUNCH COUNT SWITCHING CHECKS WE HAD SOME DROP OUTS ON CMEV LINK 1 AT THE BEGINNING OF THE CHECKS. REASON IS UNKNOWN. REF BDA'S PRT DTG 25/1518Z.

\* 25/1518Z(BDA)

PRT BDA

1. NA

2. D4934LS, TITAN, 960424, 1200Z

3. COMMUNICATION PROBLEM

4. EQUIPMENT AFFECTED: 2.4 KB CMEV LINK 1.

COMMENTS: AT 1838Z DURING THE TITAN LAUNCH COUNT SWITCHING CHECKS WE HAD SOME DROP OUTS ON CMEV LINK 1 AT THE BEGINNING OF THE CHECKS. REASON IS UNKNOWN.

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STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18858	TDE	A6959LS	EUVE	960430	121/1547	1603	TLM	N MA	HW

\* 04/30/1300Z(TTR)  
 PROBLEM TYPE: **HARDWARE**  
 DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 2  
 ELEMENT W/P: **EUVE**  
 INVESTIGATING ELEMENT: **EUVE**  
 TIME OF ANOMALY: 15:47:00 - 16:03:00 DURATION: 16:00  
 SERVICE LOSS: 00:15:30 DATA LOSS: 00:15:30

**PROBLEM DESCRIPTION:** 15 MINUTES AND 30 SECONDS (RECOVERABLE) 32 KB DATA LOSS DUE TO POCC APPLICATIONS PROCESSOR (AP) HARDWARE PROBLEM. A HARDWARE REBOOT WAS PERFORMED TO CLEAR THE ANOMALY.

18859	TDW	A6581LS	XTE	960430	121/1529	TLM	N	MA	SYS
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\* 04/30/1301Z(TTR)  
 PROBLEM TYPE: **SYSTEM**  
 DR# 31973 AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4  
 ELEMENT W/P: **UNKNOWN**  
 INVESTIGATING ELEMENT: **STGT/NCC**  
 TIME OF ANOMALY: 15:29:00 - 16:03:24 DURATION: 34:24  
 SERVICE LOSS: **SEE TEXT** DATA LOSS: **NONE**

**PROBLEM DESCRIPTION:** NO UPD RECEIVED AT XTE POCC AND TOPEX POCC FROM START OF EVENT UNTIL 160324Z REASON UNKNOWN. NCC SUCCESSFULLY TRANSMITTED TEST BLOCKS AND DESELECTED AND SELECTED UPD TO BOTH XTE AND TOPEX. POCCS STILL DID NOT RECEIVE UPD. STGT ADVISED NCC THAT THEY WERE SEEING ODMS LEAVING SITE AND NASCOM ADVISED NO PROBLEMS. WERE SEEN. NO IMPACT TO SUPPORT AND NOT TLM LOSS.  
 NOTE: STGT WAS RUNNING AN END-TO-END TEST. WHEN THIS ETE WAS CANCELLED AT 160324Z, VALID UPD WAS OBSERVED AT THE POCC AND THE NCC.

TDW	XTE	15:29:23 - 16:24:22	MAR-2	16 MINS 28 SECS SERVICE LOSS ONLY
TDW	TOPEX	15:50:00 - 15:59:51	MAR-5	13 MINS 24 SECS SERVICE LOSS ONLY

\* 05/02/1100Z(STGT DAILY OPS SUMMARY DOY 121)  
 XTE 15:29:23 - 16 MINS 28 SECS SERVICE LOSS DUE TO NO ODM CAPABILITY UNTIL APPROXIMATELY 1603Z DUE TO REASON UNKNOWN. TTR 18859/DR 31973.



STDN ANOMALY REPORT. PAGE NO. 41

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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TOPEX 15:50:00 - 13 MINS 24 SECS SERVICE LOSS DUE TO NO ODM CAPABILITY FROM AOS TO APPROXIMATELY 1603Z DUE TO REASON UNKNOWN.

\* 05/02/1200Z(SNAC)  
THIS PROBLEM IS ALSO UNDER INVESTIGATION BY NASA TEST AND TNAS.

\* 05/09/1205Z(STGT TI #1)  
WE ENTERED AN MA EET SHO ON SGLT-2 TO ATTEMPT TO FAULT ISOLATE THE SOURCE OF THE RDD 1/2 BIT DELAY FOR DR 31888. THERE WERE NO OTHER SGLT-2 MA USERS ACTIVE AT EET SHO START. DURING THE COURSE OF THE EET SHO, THREE OTHER SGLT-2 MA USERS STARTED SERVICES. TWO OF THE THREE USERS REPORTED ODM PROBLEMS. OTHER SN USERS WERE GETTING ODM'S OK. WHEN THE EET SHO WAS CANCELLED, THE TWO USERS REPORTED GOOD ODM'S. IT APPEARED THE EET SHO HAD CAUSED THE ANOMALY OR THE ANOMALY HAD COINCIDENTLY CELEARED WHEN THE EET SHO WAS CANCELLED. DELOGS FROM THE EXEC AND DIS INDICATE ODM'S WERE LEAVING STGT OK. WHILE LOOKING AT THE DELOGGED ODM'S, MARY BROCK NOTICED THE EET SHO HAD A LOGICAL MA RETURN LINK ID OF 08.. SHE SAID THE RANG EHAD BEEN REDUCED FROM 1-10 TO 1-5 A COUPLE YEARS AGO. WE DID FIND REFERENCE TO THIS IN THE PHASE II SPEC, BUT YOU WOULDN'T KNOW THE RANGE WAS 1-5 FROM OUR SOFTWARE INTERFACE. ANYWAY, I TRIED TO RECREATE THE ANOMALY BY ASKING NCC TO SCHEDULE A BRTS DURING A NO MA USER WINDOW AND ENTERING THE EET SHO. ODM PROCESSING AT THE NCC WAS GOOD. I FORGOT TO MENTION ABOVE THAT THE NCC WAS ALSO UNABLE TO PROCESS ODM'S FOR THE TWO USERS HAVING PROBLEMS. WE HAVE SINCE RUN THE EET SHO WITH ON ORBIT USERS WITHOUT PROBLEM, ALTHOUGH I DID CHANGE THE LINK ID TO 1-5. SO, DELOGS SHOW NO PROBLEM HERE AND ATTEMPTS TO DUPLICATE THE PROBLEM FAILED, THERES NOTHING TO SAY IT WAS THE LINK ID IN THE EET SHO. NO PROBLEM FOUND/UNABLE TO DUPLICATE. PLEASE CLOSE, AS REASON UNKNOWN.

STDN ANOMALY REPORT. PAGE NO. 42

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18786	TDZ	A4625MS	GRO	960302	062/1522	1555	TLM	Y SA	PROC

\* 03/02/1400Z(TTR)

PROBLEM TYPE: PROCEDURAL.

DR#. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 1.

ELEMENT W/P: GRO.

INVESTIGATING ELEMENT: GRO.

TIME OF ANOMALY: 15:22:00 - 15:55:00. DURATION: 33:00.

SERVICE LOSS: NONE. DATA LOSS: 33:00.

**PROBLEM DESCRIPTION:** 33 MINS 1KB DATA LOSS DUE TO A SPACECRAFT MISCONFIGURATION. THE WRONG TRANSPONDER WAS CONFIGURED FOR THIS EVENT.

\* 06/1200Z(POCC)

33 SECS DATA LOSS NON-RECOVERABLE. S/C MISCONFIGURED, WRONG RTS FOR XMITTER..

\* 05/02/1203Z(SNAC)

WAITING FOR A RESPONSE FROM GRO.

18862	TDW	C1313MS	BRTS	960507	128/1415	1419	TLM	N SA	SCA
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\* 05/07/1301Z(TTR)

PROBLEM TYPE: SPACECRAFT ANOMALY

DR# 32013 AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4

ELEMENT W/P: STGT

INVESTIGATING ELEMENT: STGT

TIME OF ANOMALY: 14:15:00 - 14:19:00 DURATION: 04:00

SERVICE LOSS: 03:30 DATA LOSS: NONE

**PROBLEM DESCRIPTION:** NEG ACQ. , REASON UNKNOWN. A NEW C1313MS (SA-2 TDW) EVENT WAS SKED BY THE NCC WITH A START TIME OF 128/1450Z-1454Z, EVENT RAN WITH NO PROBLEMS.

NOTE: REASON FOR NEG ACQ IS UNDER INVESTIGATION AT STGT.

\* 05/08/1200Z(STGT DAILY OPS SUMMARY DOY 128)

BRTS 1313 14:15:00 - 3 MINS 30 SECS 640 BIT SERVICE LOSS DUE TO NEGATIVE ACQUISITION CAUSED BY A POSSIBLE STALE VECTOR IN THE SYSTEM. TWO AUTO-REACQS WERE SENT WITH NO LOCK. EVENT WAS RESCHEDULED AND SUCCESSFULLY SUPPORTED AT 1450Z. THIS EVENT WAS SHORTLY AFTER COMPLETION OF A NORTH MANEUVER, BUT TRANSITION TO NEW VECTORS HAD NOT YET OCCURRED. ALL OTHER EVENTS HAVE LOCKED NOMINALLY. TTR 18862/DR 32013

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

**OPEN STS TTRS**  
**AS OF: 05/14/96**

TTR NO.	ELEM. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18214	DR#26567	03/08/95	STS-67	HW	STGT	3 A	
18223		03/10/95	STS-67	UNK	UNK	3 A	
18442	DR#28259	07/01/95	STS-71	OPR	STGT	3 A	
18463		07/13/95	STS-70	UNK	MIL	4 A	
18470		07/13/95	STS-70	HW	BDA	4 A	
18471		07/13/95	STS-70	HW	BDA	4 A	
18473		07/17/95	STS-70	UNK	JSC	4 A	
18531		09/07/95	STS-69	HW	BDA	4 A	
18540		09/15/95	STS-69	OTH	JSC	3 A	
18577	DR#29626	10/21/95	STS-73	SW	STGT	3 A	
18580	DR#29646	10/21/95	STS-73	OPR	STGT	4 A	
18583		10/22/95	STS-73	RFI	UNK	4 A	
18584		10/22/95	STS-73	RFI	UNK	4 A	
18585		10/22/95	STS-73	RFI	UNK	3 A	
18588		10/24/95	STS-73	UNK	UNK	4 A	
18589		10/24/95	STS-73	UNK	JSC	4 A	
18597	DR#29705	10/27/95	STS-73	SYS	STGT	3 A	
18590		10/20/95	STS-73	SW	BDA	4 A	
18609		11.04/95	STS-73	OPR	JSC	4 A	
18782		02/27/96	STS-75	HW	BDA	4 A	
18818		03/22/96	STS-76	CP	BDA	4 A	
18819		03/22/96	STS-76	UNK	BDA	4 A	
18820		03/22/96	STS-76	UNK	BDA	4 A	
18814		03/24/96	STS-76	FW	STGT	3 A	
18832		03/22/96	STS-76	CP	BDA	4 A	
18830		03/26/96	STS-76	CP	BDA	4 A	
18697		01/11/96	STS-72	SYS	BDA	4 A	

**LEGEND:**

PROBLEM TYPES: HW = HARDWARE SW = SOFTWARE OPR = OPERATIONAL UNK = UNKNOWN  
 PROC = PROCEDURAL SCA = SPACECRAFT ANOMALY CP = COMM PROBLEM  
 RFI = RADIO FREQ. INTERFERENCE OTH = OTHER SYS = SYSTEM  
 RESOLUTIONS: COR = CORRECTED RFI = RADIO FREQUENCY INTERFERENCE UNK = UNKNOWN  
 MAS = CLOSED TO A MASTER OTH = OTHER GEN = GENERIC

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

**NASA REVIEW/STGT TTRS  
AS OF: 05/14/96**

TTR NO.	DR. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18274	DR#26855	03/27/95	HST	FW	STGT	3 A	
18369	DR#27501	05/16/95	HST	HW	STGT	4 A	
18637	DR#30236	11/28/95	GRO	OPR	STGT	1 A	
18795	DR#31412	03/11/96	UARS	HW	STGT	2 A	
18726	DR#30856	01/28/96	XTE	SYS	STGT	2 A	
18674	DR#30551	01/01/96	XTE	SYS	STGT	4 A	
18675	DR#30551	01/01/96	XTE	SYS	STGT	4 A	
18576	DR#29625	10/20/95	STS-73	FW	STGT	4 A	
18837	DR#31786	04/10/96	XTE	HW	STGT	3 A	
18841	DR#31801	04/11/96	TOPEX	SYS	STGT	1 A	
18476	DR#28515	07/18/95	STS-70	HW	STGT	3 A	

**LEGEND:**

## PROBLEM TYPES:

HW = HARDWARE SW = SOFTWARE OPR = OPERATIONAL UNK = UNKNOWN  
 PROC = PROCEDURAL SCA = SPACECRAFT ANOMALY CP = COMM PROBLEM  
 RFI = RADIO FREQ. INTERFERENCE OTH = OTHER SYS = SYSTEM

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

OPEN MASTER TTRS  
AS OF: 05/14/96

TTR NO.	ELEM. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18074	DR#27201	02/01/95	HST	SW	STGT	4 A	
18551	DR#29468	09/28/95	UARS	UNK	UARS	4 A	
18465	DR#28547	07/14/95	STS-70	SW	STGT	2 A	

**LEGEND:**

## PROBLEM TYPES:

CP = COMM PROBLEM FW = FIRMWARE HW = HARDWARE OPR = OPERATIONAL  
MI = MUTAUL INTERFERENCE SW = SOFTWARE OTH = OTHER PROC = PROCEDURAL  
RFI = RADIO FREQ. INTERFERENCE SCA = SPACECRAFT ANOMALY SYS = SYSTEM  
UNK = UNKNOWN

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

# GRO REMOTE TERMINAL SYSTEM

## (GRTS) REPORT

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SEC 1: PAGE 47 SEC 2: PAGES 48 - 54

MAY 08 THRU MAY 14, 1996.  
JULIAN DATES: 129 THRU 135 1996.

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<u>NAME</u>	<u>CODE/SECTION</u>	<u>COPIES</u>
C. HOSTETTER	531.1	1 - GRTS
M. BACON	534.1	1 - GRTS
F. STOCKLIN	531.1	1 - GRTS
D. ZILLIG	531.2	1 - GRTS
D. ISRAEL	531.2	1 - GRTS
R. ELWOOD	534	1 - GRTS
G. JORDAN	300	1 - GRTS
R. BECK	STGT	1 - GRTS

\*\*\*\*\*QUERIES SHOULD BE DIRECTED TO SNAR/NR COORDINATOR X3237/2992\*\*\*\*\*

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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**S E C T I O N 1 (GRTS)**

18864	CAN	TDRS-3	960509	130/0225	0550	TLM	N	??	HW
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\* **05/09/1400Z(TTR)**PROBLEM TYPE: **HARDWARE**DR#. AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **4**ELEMENT W/P: **CAN**INVESTIGATING ELEMENT: **CAN**TIME OF ANOMALY: **02:36:00 - 02:40:00**DURATION: **04:00**SERVICE LOSS: **04:00** DATA LOSS: **NONE**

**PROBLEM DESCRIPTION:** WSGT OS REPORTED 4 MINS NO COMMAND CAPABILITY DURING THIS EVENT. TDRS-3 WAS HANDED OVER TO DSS46 FROM RGRT. RGRT WAS SCHEDULED TO PERFORM MAINTENANCE AT 0236Z, DSS46'S COMMAND SYSTEM FAILED, THEY WERE UNABLE TO FAILOVER TO THEIR BACKUP SYSTEM DUE TO THE LAN FAILURE RGRT RESUMED COMMANDING AT 0240Z.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

## SECTION 2 (GRTS)

18664 TDZ A4625MS GRO 951220 354/0300 0326 TLM Y SA SW

\* 12/20/11202Z(TTR)

PROBLEM TYPE: SOFTWARE.

DR#30474. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 3.

ELEMENT W/P: RGRT.

INVESTIGATING ELEMENT: RGRT.

TIME OF ANOMALY: 03:18:53 - 03:21:47.

DURATION: 02:54.

SERVICE LOSS: 02:54. DATA LOSS: 02:54.

**PROBLEM DESCRIPTION:** 2 MINS 54 SEC SVC/DATA LOSS AT GRO & PACOR. DATA IS 32K NON-RECOVERABLE. THE OMCS INDICATED SOLID LOCK THROUGHOUT. NASCOM INVESTIGATED AND DID NOT SEE A DROP.

NOTE: SATCON AND CANBERRA ALSO REPORTED NOMINAL CONDITIONS THROUGHOUT. THE POCC REGAINED TLM WITH NO RUGHER ACTION TAKEN.

TM NOTE: TLM FOR EVENT WAS NOT LOGGED ON RGRT CP'S, NO PLAYBACK POSSIBLE. AFTER READING THE 12./19/1200Z - 12/20/1200Z STGT DAILY OPS SUMMARY, IT WAS DISCOVERED THAT RGRT HAD SWITCHED CP'S TO RESTORE DATA. THIS WAS NEVER REPORTED TO THE NCC.

\* 26/1210Z(POCC)

2 MINS 54 SECS R/T 32KB DATA LOSS, REASON UNKNOWN.

\* 26/1301Z(STGT DAILY OPS SUMMARY DOY 354)

GRO/GRTS 03:00:00 - 2 MINS 54 SECS 32KB NON-RECOVERABLE DATA LOSS, REASON UNKNOWN. NOMINAL SUPPORT UNTIL 0318Z, WHEN THE POCC REPORTED LOSING DATA. BOTH TURFTS-A (SSA) AND B (MA) SHOWED GOOD PN AND CARRIER LOCK; HOWEVER, TURFTS-B, CONNECTED THROUGH COMM PROC-B HAD NO BIT SYNC LOCK. RECONFIGURED BASE-BAND SWITCH TO COMM PROC-A AND GRO REPORTED GOOD LOCK AT 0321Z. TTR 18664/DR 30474

\* 27/1200Z(WSC/GTE)

THIS IS A KNOWN SOFTWARE PROBLEM WITH THE TURFTS. IF A GLITCH IN THE DOWNLINK OCCURS, THE TURFTS WILL FLAG AN OUT-OF-LOCK CONDITION ON THE BIT SYNC AND DECODER EVENT THOUGH THE RECEIVED POWER AND EB/NO NUMBERS ARE GOOD AND IT HAS CARRIER AND PN CODE LOCKED. A RE-ACQ WILL CLEAR THE FAULT.

SINCE THIS HAS HAPPENED IN THE PAST, THIS TTR SHOULD BE MADE A GENERIC.



STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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\* 15/1218Z(SNAC)  
WAITING TO FIND OUT IF THE SW WILL BE UPDATED FOR THE TURFTS. ALSO PER THE TNA THEIRS NO PLAN AT THIS TIME TO MAKE THIS A GENERIC TTR.

\* 04/04 1209Z(RGRT)  
THE SW FIX FOR THE TURFTS TO KEEP CHECKING LOCK STATUS IS COMPLETE AND IS BEING SENT TO RGRT FOR IMPLEMENTATION.

18733	TDZ	A4625MS	GRO	960131	031/1143	1217	TLM	Y	SA	UNK
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\* 01/31/1400Z(TTR)  
PROBLEM TYPE: UNKNOWN.  
DR#. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 1.  
ELEMENT W/P: RGRT.  
INVESTIGATING ELEMENT: RGRT.  
TIME OF ANOMALY: 11:43:00 - 11:47:39. DURATION: 04:39.  
SERVICE LOSS: 04:39. DATA LOSS: 04:39.

**PROBLEM DESCRIPTION:** POCC REPORTED 4 MINS 39 SECS 32KB DATA LOSS NON-RECOVERABLE, REASON UNKNOWN. TURFTS-B (SSA) LOCK UP MOMENTARILY AND THEN DROPPED LOCK. SATCON SWITCH TO TURFTS-A (MA) TO CLEAR THE ANOMALY. TURFTS-B LOCK AFTER SWITCHING TO TURFTS-A.

\* 06/1200Z(POCC)  
4 MINS 39 SECS DATA LOSS NON-RECOVERABLE, REASON UNKNOWN.

18792	TDZ	A4625MS	GRO	960307	067/0119	0143	TLM	Y	SA	FW
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\* 03/07/1400Z(TTR)  
PROBLEM TYPE: FIRMWARE.  
DR#. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 1.  
ELEMENT W/P: RGRT.  
INVESTIGATING ELEMENT: RGRT/ETGT.  
TIME OF ANOMALY: 01:19:00 - 01:40:49. DURATION: 21:49.  
SERVICE LOSS: 21:49. DATA LOSS: 21:49.

**PROBLEM DESCRIPTION:** A PILOT GENERATOR ANOMALY OCCURRED AFTER A PLANNED DSS-46 TO RGRT TDRS-3 HANDOVER. MFG LOCK COULD NOT BE ACHIEVED. ETGT INTERVENTION HAD NEGATIVE RESULTS. RGRT HAD TO MANUALLY RESET THE GENERATORS AND THEIR PARAMETERS. PILOT GENERATOR-B WAS FINALLY ABLE TO ESTABLISH MFG LOCK WITH TDRS-3 RESULTING IN TURFTS ACQUISITION. RGRT AND ETGT INVESTIGATING THIS ANOMALY.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

\* 12/1302Z(STGT DAILY OPS SUMMARY DOY 067)  
GRO/GRTS 01:19:00 - 21 MINS 49 SECS 32K NON-RECOVERABLE DATA LOSS DUE TO PILOT GENERATOR ANOMALY AT RGRT. FOLLOWING GRTS MAINTENANCE (AT 0059Z), UNABLE TO ACQUIRE MFG LOCK ON TDRS. NUMEROUS RESETS, RELOADS AND RESWEEPS OF BOTH PILOT GENERATOR'S (A AND B) WERE UNABLE TO MAINTAIN GOOD LOCK. TO ATTAIN MFG LOCK, CANBERRA OPERATOR HAD TO GO TO THE SHELTER AND MANUALLY RESET PILOT GENERATOR B, RELOAD PARAMETERS AND RESWEEP. POST EVENT, PILOT GENERATOR A WAS FOUND WITH SAME PROBLEM AND CORRECTED. TTR 18792.

\* 11/1205Z(SNAC)  
A PROCEDURE IS IN PLACE AS A WORK AROUND FOR THE FW PROBLEM.

18801 TDZ TDRS-3 960314 074/0000 0500 TLM N ?? OPR

\* 03/14/1400Z(TTR)  
PROBLEM TYPE: OPERATIONAL.  
DR#. AR PRIORITY: TTR PRIORITY LEVEL: 2. IMPACT LEVEL: 2.  
ELEMENT W/P: ETGT.  
INVESTIGATING ELEMENT: ETGT.  
TIME OF ANOMALY: 05:23:00 - 08:28:00. DURATION: SEE TEXT.  
SERVICE LOSS: SEE TEXT. DATA LOSS: SEE TEXT.

**PROBLEM DESCRIPTION:** AT 0523Z AN ETO ON TDRS-3 WAS EXPERIENCED DUE TO A SHUTTLE FORWARD COMMANDING TEST BEING CONDUCTED JOINTLY BETWEEN WSGTU AND RGRT. THE S-2 S-BAND TWTA HAD BEEN ENABLED AND WAS RADIATING AT 72 DBW WHEN SATCON LOST ANY USABLE TELEMETRY THROUGH DSS-46, WHICH WAS SUPPORTING THE SATELLITE. OPERATORS WERE ABLE TO VERIFY THROUGH TELEMETRY BEING RECEIVED THROUGH RGRT, THAT COMMANDS WERE STILL GETTING IN. AFTER SEVERAL UNSUCCESSFUL ATTEMPTS TO RE-ESTABLISH NOMINAL SUPPORT VIA DSS-46, A DECISION WAS MADE TO TRY TO ACQUIRE VIA RGRT. SEVERAL SWEEPS ON THE UPLINK WERE MADE BY RGRT BUT SATCON WAS UNABLE TO ACQUIRE THE SPACECRAFT AND THE ETO OCCURRED. THE SA-2 TWTA SHUT DOWN WHEN THE TDRS ETO'D AND SATCON WAS ABLE TO SWEEP AND ACQUIRE THE TDRS ON THE FIRST ATTEMPT. WHILE ATTEMPTING TO GO TO K-BAND FOLLOWING A RE-ACQUISITION OF THE TDRS, SATCON AND RGRT WERE UNABLE TO ESTABLISH A K-BAND UPLINK. CAUSE OF THE PROBLEM IS UNDER INVESTIGATION. AFTER MAKING CHECKS ON EQUIPMENT AT RGRT, LOCK ON K-BAND WAS OBTAINED AT 083734Z. THE REASON FOR THE PROBLEM IS STILL UNKNOWN. NO GRTS EVENTS WERE SCHEDULED DURING THIS TIME THEREFORE NO DATA LOSS WAS INCURRED BY GRO.

STA	SUPIDEN	USER	YRMODE	START	STOP	TYP	L	SVC	EVAL
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14/0527Z(WSGT OS)

THE FOLLOWING IS THE TIME LINE IS AN OVERVIEW OF THE EVENTS LEADING UP TO, DURING, AND IMMEDIATELY FOLLOWING A TDRS-3 ETO (96/074/0526Z). ADDITIONAL DETAILS WILL BE FORWARDED AS THEY BECOME AVAILABLE:

0400Z - TDRS-3 STATUS: PRIME S-BAND T&C, DSS-46. RGRT HAS SCHEDULED MAINTENANCE.

0420Z - WSC TD AT CANBERRA REQUESTS IMPLEMENTATION OF TSI W-96025 (GRTS S-BAND SHUTTLE FORWARD LINK TEST).

0421-0435Z - THE SPACECRAFT IS CONFIGURED PER THE TSI: SSA-2 TO LCP, SSA-2 TO FREQUENCY 2106.5MHZ, SSA-2 PDA TO 72 COUNTS (36DBW), ETC.

0440Z - LOST TLM FROM DSS-46, REASON UNKNOWN

0440-0515Z - ATTEMPTED TO PROCESS RGRT S-BAND AND K-BAND TLM, BOTH WERE ERRATIC & UNUSABLE AT FIRST BUT FINALLY LOCKED AND WAS ABLE TO VERIFY THAT COMMANDING HAD BEEN GOOD.

0516Z - ATTEMPTED TO HAND S-BAND COMMAND OVER TO RGRT BUT WAS UNABLE TO ACQUIRE THE UPLINK. ATTEMPTED TO GO BACK TO DSS-46 BUT THE SITE HAD ALREADY CONFIGURED FOR ANOTHER SUPPORT.

0526Z - TDRS-3 ETO.

0529Z - GOOD S-BAND COMMAND VIA RGRT. THE UPLINK ACQUISITION WAS NOMINAL FOLLOWING THE ETO.

CONCLUSION: TURNING ON THE SSA-2 TWTA AND SETTING THE PDA FOR AN EIRP OF 36DBW OVER-POWERED THE DOWN LINK AT THE SPACECRAFT RESULTING IN THE LOSS OF TLM. FURTHER, AFTER THE DSS-46 UPLINK WAS TAKEN DOWN, THE SAME CONDITION PREVENTED REACQUISITION OF THE UPLINK UNTIL THE ETO TURNED OFF THE SSA-2 TWTA.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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18806	TDZ	TDRS-3	960319	079/0000	2400	TLM	N	??	OPR
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\* 03/19/1401Z(TTR)

PROBLEM TYPE: OPERATIONAL.

DR#. AR PRIORITY: TTR PRIORITY LEVEL: 4. IMPACT LEVEL: 4.

ELEMENT W/P: ETGT.

INVESTIGATING ELEMENT: ETGT.

TIME OF ANOMALY: 02:32:00 - 02:48:00. DURATION: 16:00.

SERVICE LOSS: SEE TEXT. DATA LOSS: SEE TEXT.

**PROBLEM DESCRIPTION:** TDRS-3 ETO DUE TO AN INCORRECT NULL SEARCH PROCEDURE DURING A SCHEDULED H/O WITH DSS 46. THE SGL NULL SEARCH PROCEDURE WAS PERFORMED USING THE S-BAND PROCEDURES WHILE TDRS-3 WAS AT K-BAND. THIS RESULTED IN THE SGL ANTENNA BEING DRIVEN OUT OF THE K-BAND BEAM WIDTH.

0232Z - SGL NULL SEARCH START

0234Z - LOSS OF TLM AND CMD

0244Z - ETO

0248Z - RECOVERY AT S-BAND

\* 04/04 1216Z RGRT)

AT NASA REVIEW. THE OIRB WAS HELD FOR THIS OPERATOR ERROR AND THERE ARE NO PENDING ACTIONS.

18811	TDZ	A4625MS	GRO	960322	082/0826	0920	TLM	Y	MA	OPR
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\* 03/22/1300Z(TTR)

PROBLEM TYPE: OPERATIONAL.

DR# 31564. AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 3.

ELEMENT W/P: WSGT/ETGT.

INVESTIGATING ELEMENT: WSGT/ETGT

TIME OF ANOMALY: 08:26:00 - 08:29:15. DURATION: 03:15.

SERVICE LOSS: 03:15. DATA LOSS: 03:15.

**PROBLEM DESCRIPTION:** POCC REPORTED 3 MINS 15 SECS 32KB DATA LOSS NON-RECOVERABLE DUE TO AN ETGT/WSGT OPERATOR ERROR. THE INCORRECT ANTENNA SLEW TIME WAS ENTERED BY THE ETGT/WSGT OPERATOR.

\* 26/1400Z(POCC)

3 MINS 15 SECS DATA LOSS NON-RECOVERABLE. LATE ACQUISITION DUE ANTENNA SLEW ON TDRS.

STDN ANOMALY REPORT. PAGE NO. 53

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

- \* 26/140Z(STGT DAILY OPS SUMMARY DOY 082)  
GRO/GRTS 08:26:00 - 3 MINS 15 SECS 32K NON-RECOVERABLE DATA LOSS DUE TO LATE ACQUISITON CAUSED BY OPERATOR ERROR. INCORRECT SSA1 ANTENNA SERVICE TIME INPUT CAUSE LATE SLEW FOR SUPPORT. TTR 18811. DR 31564.
- \* 04/04 1217Z RGRT)  
AT NASA REVIEW. THE OIRB WAS HELD FOR THIS OPERATOR ERROR AND THERE ARE NO PENDING ACTIONS.

18813 TDZ M2076LS STS-76 960324 084/0401 0419 TLM N SA OTH

- \* 03/24/1301Z(TTR)  
PROBLEM TYPE: OTHER.  
DR# . AR PRIORITY: TTR PRIORITY LEVEL: 3. IMPACT LEVEL: 3.  
ELEMENT W/P: RGRT.  
INVESTIGATING ELEMENT: RGRT  
TIME OF ANOMALY: 04:01:00 - 04:16:00 . DURATION: 15:00.  
SERVICE LOSS: 15:00. DATA LOSS: NONE.

**PROBLEM DESCRIPTION:** DATA DROPPED OUT ON THE TDZ RETURN LINK EVERY TIME THE FORWARD MODULATION WAS APPLIED AT RGRT. SEVERAL OFRWARD RE-ACQUISITIONS WERE TRIED AT RGRT WITH NO POSITIVE RESULTS. THE TDE EVENT FORWARD LINK WAS CHANGED TO HIGH FREQUENCY WITH NO HELP. AT 04:15:26Z THE TDE EVENT TERMINATED. THE TDZ FORWARD LINK ACQUIRED TRANPONDER LOCK AT 04:16:00 AND MAINTAINED LOCK UNTIL TDW EVENT START AT 04:18:13Z. THE ENGINEERS AT RGRT REPORTED POST PASS THAT THE SSRE RECEIVER HAD ONLY A 70 KHZ CAPTURE RANGE FOR DOPPLER. THE TDZ RETURN LINK DOPPLER WAS 42 TO 43 KHZ BEFORE FORWARD MODULATION WAS APPLIED. WHEN THE SHUTTLE WENT COHERENT IT EFFECTIVELY DOUBLED THE DOPPLER RATE TO 86 KHZ WHICH WAS OUT OF THE RECEIVER CAPTURE RANGE. THE RGRT STATION LOST ALL TELEMETRY WHENEVER THEY WERE COHERENT. WHEN THE DOPPLER DROPPED TO THE 31 OR 32 KHZ RANGE RGRT WAS ABLE TO MAINTAIN LOCK WHILE IN THE COHERENT MODE.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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18824	TDZ	A4625MS	GRO	960328	088/1558	1633	TLM	Y	MA	OTH
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\* 03/28/1301Z(TTR)

PROBLEM TYPE: OTHER.

DR# . AR PRIORITY: TTR PRIORITY LEVEL: 1. IMPACT LEVEL: 1.

ELEMENT W/P: RGRT

INVESTIGATING ELEMENT: RGRT

TIME OF ANOMALY: 15:58:00 - 16:07:00.

DURATION: 03:30.

SERVICE LOSS: 03:30. DATA LOSS: 03:30.

**PROBLEM DESCRIPTION:** 3 MINS 30 SECONDS 1KB RETURN SERVICE/DATA LOSS (NON-RECOVERABLE) REASON UNKNOWN. ETGT REPORTED LOW SIGNAL STRENGTH.

\* 03/1400Z(STGT DAILY OPS SUMMARY DOY 088)

GRO 15:58:00 - DUE TO A SCHEDULING ERROR, 9 MINS OF 1 KBPS NON-RECOVERABLE DATA WAS LOST. TTR 18823. AND ADDITIONAL 3 MINS 30 SECS OF DATA WAS LOST DUE TO DROPOUTS. LOW SIGNAL STRENGTH WAS NOTED< HOWEVER REASON UNKNOWN. TTR 18824. NO DR WRITTEN.

18860	TDRS-3			960430	121/2150		N		HW
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\* 04/30/1302Z(TTR)

PROBLEM TYPE: HARDWARE

DR# AR PRIORITY: TTR PRIORITY LEVEL: 4 IMPACT LEVEL: 4

ELEMENT W/P: RGRT

INVESTIGATING ELEMENT: RGRT

TIME OF ANOMALY: 21:50:00 - 21:54:00

DURATION: 4:00

SERVICE LOSS: NONE DATA LOSS: NONE

**PROBLEM DESCRIPTION:** DURING A S-BAND TO S-BAND HANDOVER FROM DSS-46 TO RGRT, AFTER A SCHEDULED MAINTENANCE PERIOD, THE S-BAND PA-B AT RGRT FAILED TO RADIATE. AFTER CYCLING BOTH THE HIGH POWER AND THE RF INHIBIT SWITCH OFF AND ON SEVERAL TIMES, WITH NEGATIVE RESULTS, THE GROUND STATION (RGRT) WAS CONFIGURED TO SUPPORT AT K-BAND. PROBLEM UNDER INVESTIGATION.

NOTE 1: POST HANDOVER CAN ENG REPORTS THEY ARE UNABLE TO BRING UP POWER ON PA-1 AND REQUEST THAT IT BE RELEASED TO THEM FOR MAINTENANCE.

NOTE 2: CAN ENG RESET THE BEAM VOLT CKT BREAKER WHICH CORRECTED THE PROBLEM.

\* 05/02/1201Z(RGRT)

PA "B" WOULD NOT RADIATE WAS FOUND TO BE CAUSED BY THE BEAM VOLT CIRCUIT BREAKER WAS IN THE OFF POSITION. IT IS ASSUMED THE CIRCUIT BREAKER TRIPPED. THE BREAKER WAS RESET AND THE PA "B" WAS TESTED INTO DUMMY LOAD FOR SEVERAL HOURS. ALL POWER AND LOGIC INDICATION ON THE PA "B" ARE NORMAL.

\* 05/02/1202Z(SNAC)

WAITING FOR ADDITIONAL INFO ON HOW THE CIRCUIT BREAKER TRIPPED.

STDN ANOMALY REPORT. PAGE NO. 55

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

SNAR SEC 1: PAGES 1 - 9 SEC 2: PAGES 10 - 42

GRTS SEC 1: PAGE 47 SEC 2: PAGES 48 - 54

MAY 08 THRU MAY 14 1996.  
JULIAN DATES: 129 THRU 135 1996.

NAME	CODE/SECTION	COPIES	NAME	CODE/SECTION	COPIES
H. MILLER	ATSC/STGT	ALL - EFAX	E. BERGER	519.8/RM S24	1 - SNAR
D. ANGEL	CONTEL/STGT	ALL - EFAX	A. DYSON	553.1	1 - SNAR
G. PICARD	JPLALL - FAX	H. HOGE	CSC	1 - SNAR	
B. CHIESIELSKI	ATSC/NASCOM	ALL - EMAIL	F. PIRNIA	ATSC/NCC	1 - SNAR
D. ELWELL	532.1	ALL - EMAIL	PA	ATSC/NCC	1 - ALL
D. WALLS	553.0	ALL - EMAIL	C. MORRIS	ATSC/NCC	1 - ALL
J. GLASS	FHA	ALL - EMAIL	K. QUINT	ATSC/NCC	1 - ALL
TNA	ATSC/NCC	ALL - EMAIL	L. BROWN	ATSC/NCC	1 - ALL
B. SLATER	ATSC/NCC	ALL - EMAIL	J. SHECKLER	ATSC/QA	1 - ALL
J. SCAROROUGH	ATSC/NCC	ALL - EMAIL			
K. HARTNETT	513/RM 213	ALL - EMAIL			
P. PATARO	440.8	ALL - EMAIL			
G. KINNAMAN	440.8	ALL - EMAIL			
OSC	ATSC/OSC	ALL - EMAIL			

SNAC WILL BE HELD THURSDAY AT 11:00 A.M. IN THE NCC CONF ROOM BLDG-13 RM-209.

\*\*\*\*\*QUERIES SHOULD BE DIRECTED TO SNAR/NR COORDINATOR X3237/2992\*\*\*\*\*

\*\*\*\*\*MARSHALL COMMUNICATIONS - 8-205-544-5300\*\*\*\*\*