STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19000	TDE	J4377MS	TOPEX	960919	263/1133	1158	TLM	N	SA SCA

SECTION 1 (REG)

* **09/19/1200Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **1**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **11:33:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: TOPEX POCC REPORTED AT APPROX. 0800Z THE SOLAR ARRAYS DROVE OFF THE SUN. THE POCC DID NOT DECLARE A SPACECRAFT EMERGENCY OR ANY TYPE OF SAFETY CONDITION, HOWEVER THEY DID IMPLEMENT RECOVERY PROCEDURES. THE POCC MANUALLY COMMANDED THE SOLAR ARRAYS TO POINT BACK AT THE SUN AT APPROX 1308Z. THE LISTED EVENTS WERE SUPPORTED DURING THE S/C ANOMALY. TOPEX ADVISED THEY ARE STILL INVESTIGATING THE ANOMALY.

TDE TOPEX 113300-115800 SSAF1 16K
TDW TOPEX 124000-130500 SSAR2 16K
TDE TOPEX 130800-135700 SSAR1 1K\
TDW TOPEX 143500-145800 SSAR1 1K
TDW TOPEX 163930-170000 SSAR1 1K
TDE TOPEX 174900-181100 SSAR1 1K
TDW TOPEX 183000-185500 SSAR2 1K
TDE TOPEX 193000-200000 SSAR2 1K
TDE TOPEX 211000-214000 MAR4 16K
TDW TOPEX 225600-232600 MAR3 16K
TDE TOPEX 234500-000000 SSAR2 1K

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19002	TDE	J4377MS	TOPEX	960920	264/0128	0158	TLM	N	MA SCA

* **09/20/1201Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **00:00:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE LISTED EVENTS WERE SUPPORTED DURING TOPEX RECOVERY FROM THE SOLAR ARRAY S/C ANOMALY. TOPEX ADVISES THEY WILL BE IN RECOVERY UNTIL DATA ANALYSIS FROM DUMPS TAKEN ON DOY 263.

TDE TOPE 012800-015800 MAR5 16K
TDE TOPEX 021500-023000 SSAR3 1K
TDW TOPEX 030300-032800 SSAR2 1K
TDE TOPEX 053500-060500 MAR2 16K
TDW TOPEX 065000-070000 SSAR1 1K
TDE TOPEX 073400-080400 MAR5 16K
TDW TOPEX 091000-093000 SSAR1 1K
TDE TOPEX 094500-101500 MAR1 16K
TDW TOPEX 111019-113519 SSAR2 1K
TDE TOPEX 114600-120600 SSAR2 1K
TDW TOPEX 130300-133300 MAR3 16K
TDE TOPEX 133700-135500 SSAR1 1K
TDW TOPEX 145800-152800 MAR4 16K
TDW TOPEX 164400-170900 SSAR1 1K
TDE TOPEX 172500-175100 SSAR2 1K
TDW TOPEX 191300-194300 MAR1 16K
TDW TOPEX 211630-214630 SSAR1 1K
TDW TOPEX 231500-234500 MAR1 16K

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19003	TDE	J4377MS	TOPEX	960921	265/0015	0025	TLM	N	MA SCA

* **09/21/1202Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **00:00:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE LISTED EVENTS WERE SUPPORTED DURING THE ONGOING S/C ANOMALY. THE POCC REPORTED THEY ARE STILL EXPERIENCING SOLAR ARRAY POSITIONING PROBLEMS. THE POCC REPORTED THEY WILL HAVE A MEETING ON DOY 267 TO TRY TO CLEAR THE S/C ANOMALY.

THE FIRST SUCCESSFUL 512KBS TAPE RECORDER DUMP WAS TAKEN DURING A TDW SA-1 CONTACT DOY 263 AT 1425Z.

TDE TOPEX 001500-002500 SSAR2 1K
TDW TOPEX 011500-014500 MAR4 16K
TDE TOPEX 015600-020600 SSAR1 1K
TDW TOPEX 024700-025700 SSAR2 1K
TDE TOPEX 040500-043500 MAR2 16K
TDW TOPEX 044400-045400 SSAR2 1K
TDE TOPEX 055800-062800 MAR3 16K
TDW TOPEX 073000-075500 SSAR1 1K
TDE TOPEX 084900-085900 SSAR1 1K
TDE TOPEX 101923-104423 SSAR1 512K
TDW TOPEX 111000-112000 SSAR2 1K
TDE TOPEX 121000-124000 MAR1 16K
TDW TOPEX 132400-135400 MAR2 16K
TDE TOPEX 140700-141700 SSAR1 1K
TDW TOPEX 152200-155200 MAR2 16K
TDW TOPEX 171300-172300 SSAR2 1K
TDE TOPEX 1275600-182100 SSAR2 512K
TDW TOPEX 190000-191000 SSAR2 1K
TDW TOPEX 194000-201000 MAR3 16K
TDE TOPEX 211000-212000 SSAR2 1K
TDW TOPEX 214103-221103 SSAR2 32K
TDE TOPEX 225400-230400 SSAR2 1K

NOTE: PROJECT CONTINUES TO TAKE OMNI EVENTS IN ADDITION TO THEIR NORMAL EVENTS TO KEEP CLOSE TRACK OF THE SPACECRAFT STATUS. BATTERY POWER IS DOWN TO 60 PERCENT AS A RESULT OF THE SOLAR ARRAY CONTROL ELECTRONICS PROBLEM. FOLLOWING A CHECKOUT OF AN AVAILABLE BACKUP SOLAR ARRAY CONTROL ELECTRONICS PACKAGE THE PLAN IS TO DO A FAILOVER EARLY IN THE WEEK.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19004	TDW	J4377MS	TOPEX	960922	266/0140	0150	TLM	N	SA SCA

* **09/22/1203Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **00:00:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE LISTED EVENTS WERE SUPPORTED DURING THE ONGOING S/C ANOMALY. THE POCC REPORTED THEY ARE STILL EXPERIENCING SOLAR ARRAY POSITIONING PROBLEMS. THE POCC REPORTED THEY WILL HAVE A FAULT ANALYSIS/RECOVERY MEETING ON 23 SEP, (DOY 267) S/C ANOMALY.

TDW TOPEX 014000-015000 SSAR1 1K
TDE TOPEX 022000-025000 MAR4 16K
TDW TOPEX 032000-033000 SSAR2 1K
TDE TOPEX 042500-045500 MAR4 16K
TDW TOPEX 051500-052500 SSAR1 1K
TDW TOPEX 055100-061600 SSAR2 1K
TDW TOPEX 074700-075700 SSAR1 1K
TDE TOPEX 082700-085700 MAR1 16K
TDW TOPEX 094000-095000 SSAR2 1K
TDE TOPEX 103500-110500 MAR5 16K
TDW TOPEX 114000-115000 SSAR2 1K
TDE TOPEX 124600-131100 SSAR2 1K
TDW TOPEX 134700-141700 MAR2 16K
TDE TOPEX 150700-151700 SSAR1 1K
TDW TOPEX 155000-160000 SSAR2 1K
TDE TOPEX 164400-170900 SSAR2 1K
TDW TOPEX 173100-174100 SSAR1 1K
TDW TOPEX 175600-182600 MAR5 16K
TDW TOPEX 194500-195500 SSAR2 1K
TDE TOPEX 203500-210500 MAR5 16K
TDE TOPEX 211000-212000 SSAR1 1K
TDW TOPEX 220000-223000 MAR2 16K
TDE TOPEX 233500-234500 SSAR1 1K

THE FIRST SUCCESSFUL 512KB TAPE RECORDER DUMP WAS TAKEN DURING A TDW SA-1 CONTACT DOY 263 AT 1425Z.

NOTE: PROJECT CONTINUES TO TAKE OMNI EVENTS IN ADDITION TO THEIR NORMAL EVENTS TO KEEP CLOSE TRACK OF THE SPACECRAFT STATUS. BATTERY POWER IS DOWN TO 60 PERCENT AS A RESULT OF THE SOLAR ARRAY CONTROL ELECTRONICS PROBLEM. FOLLOWING A CHECKOUT OF AN AVAILABLE BACKUP SOLAR ARRAY CONTROL ELECTRONICS PACKAGE THE PLAN IS TO DO A FAILOVER EARLY IN THE WEEK.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19005	TDE	A6581MS	XTE	960922	266/1054	1122	TLM	N	SA	SCA

* **09/22/1204Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **2**
ELEMENT W/P: **XTE**
INVESTIGATING ELEMENT: **XTE**
TIME OF ANOMALY: **10:54:09 - 23:59:59** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: XTE SPACECRAFT WENT INTO AN ACE (ATTITUDE CONTROL ELECTRONICS) SAFEHOLD MODE FOLLOWING AN ACE PROCESSOR WARMSTART. THE ANOMALY IS UNDER INVESTIGATION.

TDE XTE 105409-112204 MAR2 32K
TDW XTE 113246-115246 SSAR1 32K
TDE XTE 121049-130511 MAR1 32K
TDW XTE 132130-134130 SSAR1 32K
TDE XTE 142700-144819 MAR4 32K
TDW XTE 145929-155405 MAR5 32K
TDE XTE 160405-163155 MAR5 32K
TDW XTE 164244-173631 MAR2 32K
TDE XTE 175241-181241 SSAR1 32K
TDW XTE 182516-191851 MAR2 32K
TDW XTE 200804-203124 MAR5 32K
TDW XTE 204124-210124 MAR2 32K
TDE XTE 211128-214012 MAR2 32K
TDW XTE 215012-224439 MAR1 32K
TDE XTE 230000-232000 SSAR2 32K
TDW XTE 233319-002814 MAR5 32K

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19006	TDE	J4377MS	TOPEX	960923	267/0052	0122	TLM	N	MA SCA

* **09/23/1205Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **00:00:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE LISTED EVENTS WERE SUPPORTED DURING THE ONGOING S/C ANOMALY. THE POCC REPORTED THEY ARE STILL EXPERIENCING SOLAR ARRAY POSITIONING PROBLEMS.

TDE TOPEX 005200-012200 MAR4 16K
TDW TOPEX 014400-015400 SSAR2 1K
TDW TOPEX 020100-022600 SSAR2 1K
TDW TOPEX 033500-034500 SSAR1 1K
TDE TOPEX 044600-051600 MAR2 16K
TDW TOPEX 054500-055500 SSAR1 1K
TDE TOPEX 064500-071500 MAR4 16K
TDW TOPEX 080000-081000 SSAR1 1K
TDE TOPEX 085500-092500 MAR1 16K
TDE TOPEX 093200-094200 SSAR2 1K
TDW TOPEX 101000-103500 SSAR1 1K
TDW TOPEX 112000-113000 SSAR1 1K
TDW TOPEX 121500-124500 MAR4 16K
TDE TOPEX 133300-134300 SSAR2 1K
TDW TOPEX 141000-144000 MAR4 16K
TDE TOPEX 152000-153000 SSAR1 1K
TDW TOPEX 161000-164000 MAR4 16K
TDE TOPEX 170600-171600 SSAR1 1K
TDW TOPEX 181000-183500 SSAR1 1K
TDE TOPEX 193800-194800 SSAR1 1K
TDW TOPEX 203000-210000 MAR1 16K
TDE TOPEX 220300-221300 SSAR2 1K
TDE TOPEX 231400-234400 MAR3 16K

NOTE: PROJECT CONTINUES TO TAKE OMNI EVENTS IN ADDITION TO THEIR NORMAL EVENTS TO KEEP CLOSE TRACK OF THE SPACRFAFT STATUS.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19007	TDE	A6581MS	XTE	960923	267/0038	0105	TLM	N	MA	UNK

* **09/23/1206Z(TTR)**

PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **XTE**
INVESTIGATING ELEMENT: **XTE**
TIME OF ANOMALY: **00:00:00 - 03:55:00** DURATION: 03:55:00
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: XTE SPACECRAFT WENT INTO AN ACE (ATTITUDE CONTROL ELECTRONICS) SAFEHOLD MODE FOLLOWING AN ACE PROCESSOR WARMSTART. THE ANOMALY IS UNDER INVESTIGATION.

TDW XTE 003815-010543 MAR5 32K
TDW XTE 011640-021141 MAR2 32K
TDE XTE 022142-024912 MAR4 32K
TDW XTE 031241-033241 SSAR1 32K
TDE XTE 034301-043244 MAR3 640B

NOTE: THE SAFEHOLD MODE ENDED AT 267/0100Z.

NOTE: DURING THE EVENT AT 267/034300 SCIENCE DATA WAS TAKEN AND THE SPACECRAFT WAS BACK TO NORMAL OPERATION.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19009	TDE	J4377MS	TOPEX	960924	268/0115	0145	TLM	N	SA	SCA

* **09/24/1208Z(TTR)**

PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **00:00:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE LISTED EVENTS WERE SUPPORTED DURING THE ONGOING S/C ANOMALY. THE POCC REPORTED THEY ARE STILL EXPERIENCING SOLAR ARRAY POSITIONING PROBLEMS.

TDE TOPEX 011500-014500 SSAR1 1K
TDW TOPEX 021000-023500 SSAR1 1K
TDE TOPEX 033500-034500 SSAR1 1K
TDE TOPEX 050900-053900 MAR4 16K
TDW TOPEX 062000-063000 SSAR2 1K
TDE TOPEX 071100-074100 MAR5 16K
TDE TOPEX 084000-085000 SSAR2 1K
TDE TOPEX 091000-094000 MAR2 16K
TDW TOPEX 103000-105500 SSAR1 1K
TDE TOPEX 115800-120800 SSAR2 1K
TDW TOPEX 123600-130600 MAR4 16K
TDE TOPEX 134000-135000 SSAR2 1K
TDW TOPEX 143300-150300 MAR1 16K
TDE TOPEX 153300-154300 SSAR2 1K
TDE TOPEX 172000-174500 SSAR1 1K
TDW TOPEX 183000-184000 SSAR1 1K
TDW TOPEX 185100-192100 MAR4 16K
TDE TOPEX 202500-203500 SSAR2 4K
TDW TOPEX 205300-212300 MAR5 16K
TDW TOPEX 222200-223000 SSAR1 1K
TDE TOPEX 233000-000000 MAR4 16K

NOTE: PROJECT CONTINUES TO TAKE OMNI EVENTS IN ADDITION TO THEIR NORMAL EVENTS TO KEEP CLOSE TRACK OF THE SPACRFAFT STATUS.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

S E C T I O N 2 (REG)

STGT

18074 TDW A1446MS HST 950201 032/2037 2128 TLM N MA MAS

***M 02/01/1306Z(TTR)**
PROBLEM TYPE: **SYSTEM.**
DR#**27201.** AR PRIORITY: TTR PRIORITY LEVEL: **4.** IMPACT LEVEL: **4.**
ELEMENT W/P: **UNKNOWN.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **21:01:28 - 21:01:28.** DURATION: **SEE TEXT.**
SERVICE LOSS: **NONE.** DATA LOSS: **NONE.**

PROBLEM DESCRIPTION: HST POCC EXPERIENCED A COMMAND HALT DURING THIS EVENT. HOWEVER, POCC DECLARED NO DATA LOSS. THE POCC REPORTED PARTIAL VERIFICATION ON MULTIPLE BLOCK COMMANDS.

* 02/1300Z(STGT DAILY OPS SUMMARY DOY 033)
032/2037Z - TDRS-5 SSA-2/MAR-03 EVENT. THE POCC RECEIVED COMMAND REJECT WHILE SENDING A COMMAND BLOCK AT 21:01:08Z. RETRANSMITTED THE BLOCK SUCCESSFULLY., SYMPTOMS WERE SIMILAR TO THOSE RECEIVED ON TDRS-4, HOWEVER UNLESS PROBLEM RECURS, IT IS BEING INVESTIGATED SEPARATELY. NO DATA OR SERVICE LOSS DECLARED. TTR#18074/DR#25462.

* 02/1300Z(HST POCC)
COMMANDS REJECTED WHEN TRYING TO UPLINK A SCIENCE LOAD TO THE SPACECRAFT. REASON UNKNOWN. NO DATA LOSS.

* 20/1205Z(SNAC)(APR)
WAITING STGT'S RESPONSE TO - WHETHER BIT #82 WAS SET TO 0 VICE 1?

* 15/1208Z(SNAC)
DR #25462 IS CLOSED TO MASTER DR # 27201.

* 15/1401Z(SNAC)
THIS TTR WILL SERVE AS A MASTER FOR CRC ERROR. ASSOCIATED TTR'S ARE 18127, 18304, 18373, 18371, AND 18379

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
18444	**TDW**	**M2071LS**	**STS-71**	**950703**	**184/0558**	**0630**	**TLM**	**N**	**SA**	**FW**

* **07/03/1309Z(TTR)**
PROBLEM TYPE: **FIRMWARE**
DR#**28269.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **3.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **06:00:58 - 06:04:37.** DURATION: 0**3:39**
SERVICE LOSS: **03:39** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: HOUSTON CMD TRANSMITTED A DCI AT 060058Z, HOWEVER STGT REPORTED THE DCI DID NOT PROCESS. STGT ASK HOUSTION COMMAND TO RETRANSMIT THE DCI. THE SECOND DCI PROCESS "NOMINAL". REASON FOR THE ANOMALY IS UNKNOWN AND UNDER INVESTIGATION AT STGT.

NOTE: HOUSTION CMD REPORTED THIS ANOMALY CAUSED 3 MINS 39 SECS OF TRACKING SVC LOSS.

* 05/1404Z(STGT DAILY OPS SUMMARY DOY 184)
STS-71 05:58:55 - 3 MINS 39 SECS TRACKING SERVICE LOSS DECLARED (NO DATA LOSS) DUE TO DCI FAILURE AT STGT. AT 06:00:57Z, A DCI WAS SENT BY JSC. AT 06:01:13Z, A FAILED OPM EVENT ALERT WAS RECEIVED DUE TO THE IRXXFDCT COMMANDS FAILING. STGT REQUESTED THAT A DCE BE SENT, FOLLOWED BY ANOTHER DCI. JSC DECIDED THAT THEY DID NOT WANT TO BREAK THE FORWARD LINK, SO STGT SUGGESTED RESENDING THE DCI. AFTER THIS WAS DONE, TRACKING DATA WSAS RECEIVED NOMINALLY FOR THE REMAINDER OF THE EVENT. INVESTIGATION ONGOING. TTR 18444/ DR 28269.

* 08/1300Z(SNAC FEB 96)
FIX WITH FW DEL 96001, CCR 563.

* 05/16/1403Z(SNAC)
ITEM CURRENTLY AT NASA REVIEW.

* 06/27/1307Z(SNAC)
STGT REQUESTED THIS TTR BE BROUGHT BACK TO SECTION 2.

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 EMITTERS TO ABOUT 13 DBW. THIS SHOULD PROVIDE SUFFICIENT MARGIN. MORE TO COME AFTER THE MEETING

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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.

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 SCHEDCULED AND THE POCC REPORTED RECEIVING BOTH TRACKING AND TELEMETRY DATA. TTR 18513/DR 28988.

18555	**TDW**	**A1446MS**	**HST**	**951003**	**276/2247**	**2334**	**TLM**	**N**	**SA**	**SW**

* **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 WSERE 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 THTAT THE TWT ON THE TDRS S/C REMAINED IN AN INTERSERVCE STATE (PWR OUT AT .5 WATTS).

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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 WSERE 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 THTAT THE TWT ON THE TDRS S/C REMAINED IN AN INTERSERVCE 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 CROS 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 TRDRS 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.

18597 TDW M2073LS STS-73 951027 300/0007 0059 TLM Y SA MAS

***M 10/27/1305Z(TTR)**
PROBLEM TYPE: **SYSTEM.**
DR#**29705.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **00:33:00 - 00:59:37.** DURATION: **SEE TEXT.**
SERVICE LOSS: **NONE.** DATA LOSS: **SEE TEXT.**

PROBLEM DESCRIPTION: DFE REPORTED NUMEROUS DROPOUTS ON CHANNEL #2 1024KB DATA, REASON UNKNOWN. THE DATA WAS RECOVERABLE AFTER THE DATA WAS PLAYED BACK. STGT REPORTED A LOSS OF MODULATION DURING THE DROPOUTS. THE ABOVE AND BELOW LISTED EVENTS WERE AFFECTED:

TDW STS-73 000706-005937 KSAR2 1024KB
TDW STS-73 080421-084800 KSAR2 1024KB 40 SECS DATA LOSS RECOVERABLE
TDW STS-73 111805-121049 KSA2 1024KB
TDE STS-73 121109-124803 KSA2 1024KB
TDE STS-73 134537-142345 KSA2 1024KB

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 31/1305Z(STGT DAILY OPS SUMMARY DOY 300)
STS-73 - 00:07:06 - NUMEROUS INTERMITTENT DROPOUTS WERE SEEN DURING A 1024K CHANNEL 2 DUMP FOR UNKNOWN REASONS. DATA HAD TO BE RE-CUED AND RESENT SEVERAL TIMES IN ORDER TO RECOVER ENTIRE DUMP. DURING SEVERAL DROPOUT PERIODS, STGT NOTED ON THE SPECTRUM THAT MODULATION APPEARED INTERMITTENT. A POST EVENT DELOG SHOWED THAT THE B-CHAIN (ONLINE) FRAME SYNC MODE WAS IN AND OUT OF LOCK AT TIMES THE A-CHAIN REMAINED IN LOCK. CURRENTLY MONITORING B-CHAIN AS HSM. NO DATA OR SERVICE LOSS DECLARED. TTR 18597/DR 29705

* 09/16/0934Z(STGT TI 12)
THE PROBLEMS DOCUMENTED IN THIS DR AND ITS SLAVE DR''S ARE ASSUMED TO BE PROBLEMS ASSOCIATED WITH CHANNEL-2 TRANSITION DENSITIES WHICH FALL BELOW THE TDRSS SPECIFICATION. THE IR'S KSHR CHANNEL-2 BIPHASE-L PHASE AMBIGUITY ALGORITHM DOES NOT WORK WELL AT TRANSITION DENSITIES LOWER THEN 25 PERCENT MINIMUM SPECIFICATION. ANALYSIS OF STS 1024 OPS RECOREDER DUMPS HAVE IN THE PAST SHOWN TRANSITION DENSITIES BELOW THIS MINIMUM SPECIFIED LEVEL (B. VERMILLION MEMO OF OCTOBER 31, 1994).

WSC ENGINEERING PLANS TO INVESTIGATE THE POSSIBILITY OF IMPROVING THE PERFORMANCE OF THIS ALGORITHM FOR LOWER TRANSITION DENSITIES. THIS, HOWEVER, IS NOT CURRENTLY CONSIDERED TO BE A HIGH PRIORITY PROBLEM, AND WILL PROBABLY NOT BE WORKED IN THE NEAR FUTURE UNLESS ITS PRIORITY IS RAISED.

18610 TDS C1311MS BRTS 951105 309/2026 2030 TLM Y SA PROC

* **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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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 S0.03 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.

* 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

*** 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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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.

18828 TDW C1313MS BRTS 960401 092/0440 0444 TLM N MA SW

*** 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

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.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18859	**TDW**	**A6581LS**	**XTE**	**960430**	**121/1529**	**TLM**	**N**	**MA**	**SW**

* **04/30/1301Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **31973** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
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.

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 CELARED 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 ENTEREING THE EET SHO. ODM PROCESSING AT THE NCC WAS GOOD. I FORGOT TO MENTION

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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.

* 05/24/1213Z(SNAC)
THIS ITEM WILL BE CLOSED AT STGT AS NON-REPRODUCABLE. ITEM UNDER INVESTIGATION BY NCC TNAS AND NASA TEST.

* 05/30/1202Z(SNAC)
TEST RAN ON MAY 29TH. PROBLEM UNDER INVESTIGATION BY NASA TEST ONLY.

* 06/07/1030Z(NASA TEST)
DELOG OF ODMS SHOW MESSAGE TYPE 06S (MA ODMS, NOT MA EET ODMS/07S) BEING RECEIVED AT THE NCC. THE 06S RECEIVED CONTAINED "08" AS THE LOGICAL MA RETURN LINK. CCS VALIDATES THE DATA CONTAINED IN THIS FIELD AND RECOGNIZED THE "08" AS INVALID SERVICE DATA. MARY BROCK IS CORRECT. THIS FIELD MUST CONTAIN VALUES FROM 01 TO 05. THE PROBLEM THAT THIS CAUSES CAN BE HIDDEN DUE TO THE WAY ODM BLOCKS ARE BUILT. IF THE INVALID SERVICE DATA IS CONTAINED IN THE FIRST ODM SUBHEADER IN THE BLOCK, ALL FOLLOWING DATA IN THE BLOCK WILL NOT BE PROCESSED BUT IF THE INVALID DATA IS IN THE LAST SUBHEADER, NO OTHER USER DATA IS TRASHED BY CCS AND THE PROBLEM WILL NOT BE SEEN BY OPERATORS IN THE NCC OR THE MOCS.

THE NCC MUST SCHEDULE A NORMAL SERVICE FOR EVERY EET SERVICE.

TO WRAP UP, IF THE GROUND TERMINALS ALSO HAVE TO DO THIS WHEN THEY LOCALLY SCHEDULE AN EET SERVICE, THEN THEY SHOULD HAVE HAD A PROCEDURE THAT LIMITS THEIR IMPACT TO THE NETWORK WHEN SCHEDULING THESE SERVICES. IF THEY LOCALLY SCHEDULE ALL SERVICES ON LOGICAL LINKS 01 TO 05, THE NCC WILL STILL RECEIVE "ODMS FOR INACTIVE SERVICE" MESSAGES EVERY 3 MINUTES AS LONG AS THE EET SERVICE IS ACTIVE BUT AT LEAST THIS WILL NOT PREVENT CCS FROM CREATING UPD OR FORWARDING IT TO THE MOCS.

* 07/17/1102Z(STGT TI 3)
THE MA RETURN LINK ID RANGE FOR AN MA RETURN SERVICE WAS REDUCED FROM 1-10 TO 1-5, APPARENTLY A COUPLE YEARS AGO. THE WSC SYSTEM SHO ACCEPTANCE PROCESSING STILL ALLOWS A RANGE OF 1-10, SO, A SHO WITH LINK ID OF SAY 8 IS ACCEPTED AND RUNS. THE SOFTWARE BUILDS ODM'S WITH THE LINK ID OF 8 IN THEM. THE NCC SOFTWARE CHECKS THE LINK ID'S. IN MY CASE, THE LINK 8 ODM WAS THE FIRST OF FOUR MAR SERVICES ACTIVE. THE NCC S/W SAW THE LINK ID OF 8 AND THREW THE WHOLE BLOCK OF ODM DATA AWAY, RESULTING IN 3 POCC'S NOT GETTING MAR ODM'S. THE MMI S/W AT WSC GIVES VISUAL QUEUES THAT LINK ID'S 1-10 ARE STILL LEGAL. FOR INTSANCE CYCLEWIDGETS FOR MAR LINK ID'S IN

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

OPM TEMPLATES STILL RANGE FROM 1-10, ODM MENUS STILL RANGE FROM 1-10, DIS INTEGRATED SCHEDULE, WHICH LISTS MAR SERVICES BY LINK ID, STILL RANGE FROM 1-10. THE ONLY PLACE I FOUND REFERENCE TO LINK ID'S OF 1-5 WAS IN THE PHASE II SPEC. APPENDIX D (OSIR). TO ASK SOFTWARE TO LIMIT CHECK LINK ID'S WOULD BE ONE WAY TO PREVENT A RECURRENCE OF THE ABOVE, BUT, IF WE'RE GOING TO LIMIT CHECK LINK ID'S WHY NOT LIMIT CHECK EVERYTHING! I DOUBT THAT WOULD GET APPROVED. IT WKS WOULD CHANGE CYCLE WIDGET RANGES, AND REMVOE EXTRANEOUS LINK ID DRIVEN MENU SELECTIONS I THINK IT WOULD GO ALONG WAY TOWARD PREVENTING SYSTEM OPERATORS FROM BEING MISLED. THE WSC APPARENTLY DID NOT CHANGE ANY SOFTWARE WHEN THE LINK ID RANGE WAS REDUCED. PLEASE REASSIGN TO WKS.

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

* 05/16/1200Z(SNAC)
CONFIRMED O.E. DOCUMENTATION PENDING.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18867	**TDS**	**C1310MS**	**BRTS**	**960510**	**131/0821**	**0825**	**TLM**	**Y**	**SA**	**MAS**

***M** **05/10/1302Z(TTR)**
PROBLEM TYPE: **SYSTEM**
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

* 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

* 05/30/1210Z(SNAC)
THIS TTR WILL SERVE AS A MASTER TO TRACK THE BRTS 1310 & 1311 ANTENNA POINTING PROBLEM.

* 05/30/1211Z(STGT)
THERE IS A BRTS ANTENNA POINTING PROBLEM WITH THE PAIR OF BRTS RANSPONDERS (1310 AND 1311) LOCATED AT WSC (MASTER TTR 18874) AND WITH THE PAIR OF BRTS TRANSPONDERS (1312 AND 1319) LOCATED AT ACN (MASTER TTR 18867). THESE ANOMALIES WILL BE CLOSED OUT WHEN THE ANTENNA AT EACH SITE ARE POSITIONED CORRECTLY.

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

* **05/12/1307Z(TTR)**
PROBLEM TYPE: **SYSTEM**
DR# **32047** 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 ACQUSITION 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 NEGATVIE 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 TRASNPONDER 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
18874	TDS	C1312MS	BRTS	960513	134/0825	0829	TLM	Y	SA	MAS

*M 05/13/1309Z(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 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.

* 05/24/1219Z(SNAC)
THIS TTR WILL SERVE AS A MASTER TO TRACK THE BRTS 1312 & 1319 ANTENNA POINTING PROBLEM.

* 05/30/1201Z(STGT)
THERE IS A BRTS ANTENNA POINTING PROBLEM WITH THE PAIR OF BRTS RANSPONDERS (1310 AND 1311) LOCATED AT WSC (MASTER TTR 18874) AND WITH THE PAIR OF BRTS TRANSPONDERS (1312 AND 1319) LOCATED AT ACN (MASTER TTR 18867). THESE ANOMALIES WILL BE CLOSED OUT WHEN THE ANTENNA AT EACH SITE ARE POSITIONED CORRECTLY.

18886	TDRS-1		960520	141/0000	0000	TLM	N	??	SCA

* 05/20/1311Z(TTR)
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# **32102** AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **3**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **14:46:00 - UNKNOWN** DURATION:
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: DURING A TDRS-1 MANEUVER, COMMANDING WAS LOST AT 1446Z AND THE SPACECRAFT ETO'D AT 1456Z. A NO.1 ESA FAILSAFE SPACECRAFT EMERGENCY WAS DECLARED AT 1510Z. THE BRTS EVENTS THAT WERE SCHEDULED FOR THE POST MANEUVER PERIOD WERE DELETED FOR DAY 141 AND WILL BE RESCHEDULED AFTER RECOVERY. STGT IS INVESTIGATING THE PROBLEM.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18985	**TDS**	**C1311MS**	**BRTS**	**960911**	**255/1230**	**1234**	**TLM**	**Y**	**MA**	**SYS**

* **09/11/1400Z(TTR)**
PROBLEM TYPE: **SYSTEM**
DR#**33056** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **12:30:30 - 12:34:00** DURATION: **03:30**
SERVICE LOSS: **03:30** DATA LOSS: **03:30**

PROBLEM DESCRIPTION: 3 MINS 30 SECS OF NON RECOV. 640BPS DATA LOSS RESULTING FROM A NEGATIVE ACQUISITION. REASON UNKNOWN. TWO FWD REACQS AND A MANUAL FAILOVER FAILED TO ACHIEVE LOCK. SUBSEQUENT C1311 TDS ON SSA-2 1314-1318 LOCKED.

NOTE: STGT OPS REPORTED THAT THE DYNAMICS OF TDRS-1 MAY HAVE PREVENTED LOCK ON THE MA EVENT, HOWEVER THEY ARE STILL INVESTIGATING THIS ANOMALY.

* 09/17/1200Z(WSC DAILY OPS SUMMARY DOY 255)
BRTS 1311 12:30:00 - THIS EVENT DID NOT ACQUIRE INITIALLY, NOR AFTER FORWARD REACQS AND RETURN FAILOVER. TDRS-1 ORBIT AND TIME OF DAY B ELIEVED TO BE PROBLEM. OPM 3625502 TRANSMITTED TO THE NCC FOR SCHEDULING REQUESTS. TTR 18985/DR 33056.

* 09/19/1200Z(SNAC)
STGT RERAN EVENT AND DATA WAS RECOVERABLE.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

WSGT

18900 TDW A6951MS EUVE 960611 163/2219 2249 TLM Y SSA SCA

* **06/11/1301Z(TTR)**
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# **32253** AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **1**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **163/22:40:00 - 164/01:10:00** DURATION: **SEE TEXT**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: TDRS-5 KSA COMPOSITE IS SHOWING A 3-3DB DEGRADATION INDICATING EMINENT FAILURE. TO REDUCE THE USER DATA LOSS THAT WOULD BE EXPERIENCED BY THIS FAILURE A DOWN TIME IS REQUIRED TO SWAP THE COMPOSITE HELIX TUBE. THE LISTED EVENTS ARE THE ONES. THAT WERE DELETED TO GIVE WSGT THE TIME NEEDED TO DO THE SWAP. SOME OF THESE EVENTS WERE READDED IN A DIFFERENT TIME FRAME. THERE WAS NO DATA LOSS DECLARED ON ANY OF THE MISSED EVENTS. THE BELOW LISTED EVENTS WERE AFFECTED:

TDW EUVE 221900 - 224900 SSAR2 9 MINS SVC LOSS
TDW TOPEX 224000-231000 MAR1 30 MINS SVC LOSS
TDW XTE 231331- 233331 SSAR1 20 MINS SVC LOSS
TDW GRO 231500 - 001100 MAR4 56 MINS SVC LOSS
TDW HST 233227 - 002237 SSAR1 50 MINS 10 SECS SVC LOSS
TDW ERBS 233501 - 234701 SSAR1 11 MINS 59 SECS SVC LOSS
TDW UARS 233900 - 235430 SSAR2 15 MINS 30 SECS SVC LOSS
TDW XTE 234331 - 000702 MAR2 23 MINS 31 SECS SVC LOSS
TDW EUVE 001000 - 003000 MAR5 20 MINS SVC LOSS
TDW TOPEX 004400 - 010900 SSAR1 25 MINS SVC LOSS
TDW GRO 005400 - 015100 MAR3 17 MINS SVC LOSS
TDW XTE 005603 - 014934 SSAR1 13 MINS 57 SECS SVC LOSS
TDW C1310 001100 - 001500 SSAR2 4 MINS SVC LOSS
TDW C1313 001600 - 002000 SSAR1 4 MINS SVC LOSS

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18909	**TDE**		**RFSOC**	**960621**	**173/2110**	**2321**	**TLM**	**N**	**KSA**	**SYS**

* **06/21/1300Z(TTR)**
PROBLEM TYPE: **SYSTEM**
DR# **32386** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **21:10:01 - 23:00:00** DURATION: **01:49:59**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: SOMETHING AT WSGT CAUSED THE ANTENNA TO SLEW AWAY, OFF POINTING FROM THE RFSOC. REF TO 211001Z EVENT.

TDE RFSOC 211001 - 232138 KSAR1 50M SVC LOSS (ALL)
TDE RFSOC 223938 - 231830 KSAR1 50M SVC LOSS (PART)

ON THE 3RD EVENT, REF 223938Z WSGT SAW THE RF FROM RFSOC THEN LOST RF AT APPROXIMATELY AROUND 2243Z DUE TO ANOTHER ANTENNA SLEW AWAY.

NOTE: WSGT TC WILL PROVIDE A DR ON MONDAY 6/24/96.

18919	**TDW**	**M2078MS**	**STS-78**	**960630**	**182/0245**	**0323**	**TLM**	**N**	**KSA**	**HW**

* **06/30/1306Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# **32464** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **02:45:59 - 03:23:16** DURATION: **37:17**
SERVICE LOSS: **37:17** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: HOUSTON COMMAND REPORTED HAVING A COMMAND ANOMALY AT 0305Z. HOUSTON COMMAND SENT A FWD REACQ IN AN ATTEMPT TO CLEAR THE ANOMALY, BUT TO NO AVAIL. ALL INDICATION BY WSGT SHOWED GOOD LOCK ON THE FWD. POST EVENT CHECKOUT BY WSGT REVEALED THAT THE FWD LINK WAS DISABLED DUE TO A "COMBINER SELECT SWITCH POROBLEM". DURING THE PRE-SERVICE CHECKOUTS AT WSGT THE "COMBINER SELECT SWITCH" FAILED OVER TO THE "B" SIDE, LIKE IT SHOULD HAVE, BUT DID NOT SWITCH BACK TO THE "A" SIDE. REASON IS UNKNOWN WHY IT DID NOT. ANOMALY IS UNDER INVESTIGATION AT WSGT.

* 06/30/1200Z(STGT DAILY OPS SUMMARY DOY 182)
STS-78 02:45:59 - 37 MINS 17 SECS FORWARD SERVICE LOSS DUE TO COMBINER SELECT SWITCH K27 REMAINING CONNECTED TO THE REDUNDANT CHAIN-B FOLLOWING PRE-SERVICE TESTING. TTR 18919/DR 32464.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18938	**TDW**	**A1398MS**	**ERBS**	**960715**	**197/2026**	**2038**	**TLM**	**N**	**SAR**	**OPR**

* **07/15/1404Z(TTR)**
PROBLEM TYPE: **OPERATIONAL**
DR# **32592** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **20:26:32 - 20:30:43** DURATION: **04:11**
SERVICE LOSS: **03:41** DATA LOSS: **03:41**

PROBLEM DESCRIPTION: DATA LOSS DUE TO A LATE ACQ. REASON UNKNOWN. WHEN 2 FWD RE-ACQ FAILED TO LOCK THE EVENT WSGT PERFORMED A FWD LINK (A TO B) FAILOVER, WHICH CLEARED THE PROBLEM. PROBLEM UNDER INVESTIGATION BY WSGT.

* 07/16/1203Z(STGT DAILY OPS SUMMARY DOY 198)
ERBS 20:26:32 - 3 MINS 41 SECS RECOVERABLE DATA LOSS DUE TO A MISCONFIGURATION OF THE FORWARD IF SWITCH AT WSGT. THE FORWARD SWITCH HAD BEEN CONFIGURED FOR AN EXTERIOR SIGNAL SOURCE FOR AN EARLIER DAB TEST. THE CONTROLLER FELT THAT THE IF SWITCH WOULD BE RE-COMMANDED WITH THE NEXT EVENT CONFIGURATION. TTR 18938/DR 32592.

18952	**TDW**	**J4377MS**	**TOPEX**	**960729**	**211/1145**	**1215**	**TLM**	**Y**	**MAR**	**FW**

* **07/27/1306Z(TTR)**
PROBLEM TYPE: **FIRMWARE**
DR# **32712** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **12:10:04 - 12:15:00** DURATION: **04:56**
SERVICE LOSS: **04:56** DATA LOSS: **04:56**

PROBLEM DESCRIPTION: POCC REPORTED A 4 MINUTE AND 56 SECOND SERVICE/DATA LOSS REASON UNKNOWN. TOPEX SENT ONE RETURN REACQ BUT IT WAS UNSUCCESSFUL, WSGT REPORTED TERMINATING AN ONGOING MA-CAL AT THE TIME OF THE DROPOUT, WHICH MAY HAVE CAUSED THE EVENT TO TERMINATE EARLY, WSGT WILL TURN OVER THE ANOMALY TO THEIR ENGINEERS FOR FURTHER INVESTIGATION.

* 31/1207Z(WSC DAILY OPS SUMMARY DOY 211)
TOPEX 11:45:00 - 4 MINS 55 SECS DATA LOST DUE TO A RETURN SERVICE DROPOUT. REASON FOR THE DROPOUT IS UNKOWN. COINCIDENT WITH THE DROPOUT IS THE TERMINATION OF THE MA CALIBRATION IN PREPARATION FOR RANGE ZERO SETS. TTR 18952/DR 32712

* 09/04/1032Z(WSGT TI)
FOUND THAT THE CODE DOES A FINAL CHECK OF IR PN LOCK STATUS AFTER COMPUTING THE CAL VECTOR, BUT BEFORE BROADCASTING IT. IN DISCUSSION WITH L. PATTIE, THE QUESTION WAS RAISED ABOUT THE "AGE" OF THE STATUS WHEN IT IS RETRIEVED. SINCE AT THIS POINT ALL INDICATIONS POINT TO FIRMWARE, PLEASE REASSIGN THIS DR TO THE FIRMWARE GROUP.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18961	**TDW**	**W6064PB**	**MCMUR**	**960808**	**2211900**	**1945**	**TLM**	**N**	**KSA**	**SW**

* **08/08/1203Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **32800** AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **18:54:00 - 20:29:54** DURATION: **01:35:54**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: THE BELOW EVENTS EXPERIENCED SERVICE/DATA LOSS DUE TO A FAILURE OF THE SGLT-5 EXEC ADPE. WSGT OS ADVISES THAT A DATA BASE CHANGE, WHICH WOULD HAVE ALLOWED THE 6064 (MCMURDO) SIC TO BE TREATED AS A STATION VECTOR,CAUSED A PROCESS FAILURE THAT PREVENTED SHO'S FROM DOWNLOADING EXEC TO USS. A COLD START OF THE EXEC CLEARED THE ANOMALY.

TDW MCMURDO 190000-194500 KSAR1 1050K 45 MINS SVC LOSS
TDW XTE 191421-200759 MAR1 32K 53 MINS 38 SECS SVC/DATA LOSS RECOV
TDW HST 194654-202954 MAR3 32K 43 MINS SVC/DATA LOSS *
TDW TOPEX 195800-202800 MAR2 16K 30 MINS SVC/DATA LOSS RECOV
TDW C1310MS 201300-201700 MAR4 640B 3 MINS 30 SECS SVC LOSS *

*PA NOTE: THE HST AT 221/194654Z HAD 39 MINS DATA LOSS (NON-RECOVERABLE) AND 4 MINS DATA LOSS (RECOVERABLE. THE C1310MS EVENT WAS RESCHEDULED FOR 2015Z AND RAN WITHOUT INCIDENT.

TM NOTE: POST ANOMALY WSGT REPORTED THAT WHEN THE MCMURDO SHOW CONFIGURED, THE SOFTWARE PATCH CAUSED THE EXEC ADPE TO DOWNLOAD THE 6064 (MTRS) AS AN EARTH STATION VECTOR. SINCE THE ORIGINAL 6064 (MTRS) VECTOR WAS ALREADY RESIDENT, A CONFLICT DEVELOPED CAUSING THE FAILURE OF THE ADPE PROCESSES.

* 08/13/1301Z(WSC DAILY OPS SUMMARY DOY 221)
XTE 19:14:21 - 53 MINS 38 SECS 32K RECOVERABLE DATA LOSS DUE TO W5EXC FAILURE CAUSED BY A SOFTWARE ANOMALY ASSOCIATED WITH A SOFTARE PATCH THAT ALLOWS THE MCMURDO VECTOR TO BECOME A PERMANENT GROUND STATION VECTOR. TTR 18961/DR 32800

HST 19:46:54 - 43 MINS 32KB DATA LOST (39 MINS NON-RECOVERABLE) DUE TO W5EXC FAILURE.

TOPEX 19:58:00 30 MINS 16K RECOVERABLE DATA LOSS DUE TO W5EXC FAILURE.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18962	**TDW**	**C1314MS**	**BRTS**	**960809**	**222/2011**	**2015**	**TLM**	**N**	**SA**	**HW**

* **08/09/1204Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# **32818** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **WSC**
INVESTIGATING ELEMENT: **WSC**
TIME OF ANOMALY: **19:45:00 - 20:15:00** DURATION: **30:00**
SERVICE LOSS: **03:30** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: WSC OPS REPORTED HAVING A CORRUPTED SA-2 U.S.S. ADPE "B" ON SGLT-5. THIS ANOMALY CAUSED THE BRTS, 1314 EVENT SCHEDULED AT 2011Z TDW SA-2, TO HAVE INVALID RANGING/TRACKING DATA. A FAILOVER WAS IMPLEMENTED BY WSC "B TO A" TO CLEAR THE ANOMALY. A BRTS, 1314 EVENT WAS RESCHEDULED AT 2127Z TDW SA-2 AND IT RAN FLAWLESSLY.

* 08/13/1302Z(WSC DAILY OPS SUMMARY DOY 222)
BRTS 20:11:00 - 3 MINS 30 SECS OF 640 BPS SERVICE LOSS DUE TO A W5SA2B ANOMALY THAT RESULTED IN INVALID TDM'S. EVENT WAS RERUN AFTER THE COMPLETION OF A FAILOVER FROM THE B-NODE TO A-NODE SA2 ADPE. TTR 18962/DR 32818.

18967	**TDW**	**A1446MS**	**HST**	**960815**	**228/2031**	**2125**	**TLM**	**N**	**SA**	**OPR**

* **08/15/1203Z(TTR)**
PROBLEM TYPE: **OPERATIONAL**
DR# **32775** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **21:08:47 - 21:23:24** DURATION: **14:37**
SERVICE LOSS: **14:37** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: 14 MINS 37 SECS SSA SERVICE LOSS RECOVERABLE DUE TO WSGT OPERATOR ERROR. NO LOCK WAS ACHIEVED ON THE SSA1R 1024K SERVICE. THE TDRS WEST PDA (PIN DIODE ATTENUATOR) WAS MISCONFIGURED AT WSGT. HST WILL DUMP THE DATA DURING A LATER PASS.

* 08/20/1301Z(WSC DAILY OPS SUMMARY DOY 228)
HST 20:31:35 - 14 MINS 37 SECS SSA1R SERVICE LOSS DUE TO LOW RF ON THE RETURN SERVICE. INVESTIGATION REVEALED THAT THE PDA SETTING HAD BEEN LEFFT AT 255 COUNTS AFTER THE GAIN TRANSFER PROCEDURE. HST TOOK THE DUMP ON THE FOLLOWING TDRS-4 EVENT. TTR 18967/DR 32868

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18973	**TDW**	**J4377MS**	**TOPEX**	**960827**	**240/1720**	**1745**	**TLM**	**N**	**SA**	**SW**

* **08/27/1301Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR#**30924** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **17:20:00 - 17:45:00** DURATION: **25:00**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: AS A RESULT OF THE SCHEDULED SOFTWARE DELIVERY AT WSGT, A KTTC ADPE CLUSTER TRANSITION INHIBITED THE MOVEMENT OF THE SA-2 ANTENNA UNTIL AFTER THE TOPEX EVENT STARTED. THE TOPEX EVENT FAILED TO LOCK AND WAS UNABLE TO RECOVER BEFORE EVENT END. THE DATA IS RECOVERABLE FROM THE SPACECRAFT RECORDERS.

TDW TOPEX 172000-174500 SSAR2 16K 25 MINS SVC/DATA LOSS RECOVERABLE
TDW TOPEX 172000-174500 SSAR2 512K 15 MINS SVC/DATA LOSS RECOVERABLE

TM NOTE: THE KTTC ADPE CLUSTER TRANSITION WAS NOT EXPECTED TO IMPACT S-BAND USERS. THE TRANSITION WAS COMPLETE AT 1721:33Z. AFTER SA-2 ANTENNA SLEW, WSGT SAW GOOD RF BUT WAS NOT ABLE TO LOCK TO THE DATA THROUGH NOMINAL ACQUISITION ATTEMPTS.

* 28/1200Z(WSC DAILY OPS SUMMARY DOY 240)
TOPEX 17:20:00 - THE COHERENT EVENT FAILED TO ACQUIRE RETURN SERVICE LOCK RESULTING IN A 25 MIN OF 16 KBPS AND 15 MINS OF 512 KBPS SERVICE/DATA LOSS. INITIAL INVESTIGATION SHOWS THAT THE WSGT SYSTEM FAILED TO CONFIGURE THE FORWARD SERVICE BECAUSE THE PREVIOUS SUPPORT ON THE SAME ANTENNA RAN PAST ITS SCHEDULED TERMINATION TIME. THIS ANOMALY MAY HAVE BEEN RELATED TO ONGOING SOFTWARE DELIVERY ACTIVITY. ANALYSIS CONTINUES. TTR 18973/DR 32962.

* 09/12/1201Z(SNAC)
DR #32962 IS CLOSED TO MASTER DR #30924.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18974	TDE	M2082SM	STS-82	960827	240/1530	2200	TLM	N	SA	SW

* **08/27/1400Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR#**31902** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **15:20:00 - 15:40:00** DURATION: **20:00**
SERVICE LOSS: **20:00** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: WSGT PERFORMED A POT SEARCH BECAUSE TDRS CMD ERRORS WERE BEING RECEIVED DURING ANTENNA SLEW. THIS CAUSED A 20 MINS DELAY AT THE START OF THE EVENT. REASON UNKNOWN FOR THIS ANOMALY AND BEING INVESTIGATED BY WSGT TC.

* 09/12/1202Z(SNAC)
DR #32959 IS CLOSED TO MASTER DR #31902.

18984	TDW	A6581MS	XTE	960910	254/2320	2340	TLM	N	SA	HW

* **09/10/1200Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR#**33060** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **23:24:21 - 23:25:19** DURATION: **00:58**
SERVICE LOSS: **00:02** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: CSC-5 REPORTED A SSAR-1 CHAIN FAILOVER FROM A TO B RESULTING IN A 2 SECOND SERVICE LOSS. THE ANOMALY IS UNDER INVESTIGATION. XTE POCC DID NOT DECLARE A DATA LOSS.

* 09/17/1500Z(WSC DAILY OPS SUMMARY DOY 254)
XTE 23:21:17 - THE SSA1R CHAIN FAILED FROM A TO B. DELOGS INDICATE LOW EB/N0 FOR 3 SECONDS AND A TIME BIAS DEVIATION. NO IMPACT REPORTED. TTR 18984/DR 33060

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18993	**TDW**	**A6581MS**	**XTE**	**960915**	**259/2328**	**2348**	**TLM**	**N**	**SA**	**OPR**

* **09/15/1406Z(TTR)**
PROBLEM TYPE: **OPERATIONAL**
DR# **33092** AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **2**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **23:33:40 - 23:45:10** DURATION: **11:30**
SERVICE LOSS: **11:30** DATA LOSS: **11:30**

PROBLEM DESCRIPTION: ITU AT WSGT WAS INADVERTENTLY BROKEN DOWN AFTER CHECKS FOR STS-79 LAUNCH WERE FINISHED. 11 MINS AND 30 SECS 1024K DATA LOSS RECOVERABLE.

* 09/17/1502Z(WSC DAILY OPS SUMMARY DOY 259)
XTE 23:28:00 - 11 MINS 30 SECS OF 1024 KBPS RECOVERABLE DATA LOSS DUE TO A WSGT OPERATOR ERROR. ITU 27, WHICH WAS IN USE BY THE POCC WAS INADVERTENTLY TURNED OFF AT 23:33:40Z WHILE ACCOMPLISHING SHUTTLE COMMAND ECHO CHECKOUT. POCC REPORTED DATA DROPOUT AT 23:41:05Z AND ITU WAS RE-ENABLED AT 23:45:10Z. TTR 18993/DR 33092

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

NCC

18976 TDE M2082SM STS-82 960827 240/1530 2200 TLM N SA UNK

* **08/27/1402Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **NCC**
INVESTIGATING ELEMENT: **NCC**
TIME OF ANOMALY: **16:46:50 - 22:00:00** DURATION: **06:23:00**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: WSGT MANUALLY CONFIGURED K-BAND CHNL-3 FOR DATA TRANSMISSION TO STOCC BECAUSE THE NCC WAS SENDING MDM SET-UP PARAMETERS TO THE "DIS"VIA GCM'S. NCC DBM VERIFIED THAT THE PARAMETERS WERE IN THE DATABASE. NCC DBM AND GTD SUSPECT THAT THE CONFIGURATION CODES NEED DEST I/F CHNL'S ADDED TO CHNL-3. THIS WILL BE INVESTIGATED FURTHER.

* 09/12/1203Z(SNAC)
WAITING RESPONSE FROM NCC DATA BASE PERSONNEL.

18997 TDW A1398MS ERBS 960916 260/2127 2137 TLM N SA UNK

* **09/16/1409Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# **33099** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **STGT/NCC**
TIME OF ANOMALY: **21:27:00 - 21:31:02** DURATION: **04:02**
SERVICE LOSS: **01:32** DATA LOSS: **01:32**

PROBLEM DESCRIPTION: SVC/DATA LOSS DUE TO A LATE ACQ. REASON UNK. ERBS SENT TWO (2) FWD RE-ACQ TO ACQUIRE LOCK. REASON FOR LATE ACQ UNK.

* 09/17/1405Z(WSC DAILY OPS SUMMARY DOY 260)
ERBS 21:27:00 - 3 MINS 32 SECS SERVICE LOSS WAS DECLARED DUE TO THE FACT THAT 2 FORWARD REACQS WERE REQUIRED TO ACHIVE LOCK. TTR 18997/DR 33099.

* 09/17/1212Z(STGT TI)
THIS EVENT MEETS ALL GENERIC TTR STIPULATIONS EXCEPT ONE. THE EVENT WAS A COHERENT SSA, AN ACQUISITION FAILURE MESSAGE WAS RECEIVED, TWO REACQS WERE SENT AND NO EQUIPMENT FAILOVERS WERE PERFORMED. THE FIRST REACQ WAS RECEIVED 1 MINUTE AND 38 SECONDS AFTER RETURN SERVICE START, WITH THE SECOND REACQ NOT RECEIVED UNTIL 3 MINUTES AND 8 SECONDS AFTER RETURN SERVICE START. GOOD LOCK WAS NOTED LESS THAN 30 SECONDS LATER. WITH THE EXCEPTION OF THE LENGTH OF SERVICE LOSS, THIS IS A GENERIC LATE ACQUISITION. THIS EVENT WOULD FULLY MEET GENERIC GUIDELINES HAD GCMR'S BEEN TRANSMITTED IN A MORE TIMELY MANNER. RECOMMEND CLOSURE POST SNAC.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

NASCOM

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

POCCs

18935 TDW A1446MS HST 960713 195/1741 1834 TLM Y MAR SCA

* 07/12/1402Z(TTR)
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **HST**
INVESTIGATING ELEMENT: **HST**
TIME OF ANOMALY: **17:41:00 - SEE TEXT** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: PROJECT REPORTED 15 MINS 58 SECS DATA LOSS (NON-RECOVERABLE) FOLLOWING A LATE ACQUISITION DURING THE 195/1741Z EVENT. AFTER SEVERAL FAILED ATTEMPTS TO RE-ACQAUIRE INCLUDING AN OPM-02 AND A MAR CHAIN FAILOVER, DATA WAS RESTORED AT 1756:58Z. WHEN THE PROJECT SENT A GCMR TO 4K FOLLOWED BY A RETURN RE-ACQUISITION. FOLLOWING THE LATE ACQUISITION THE PROJECT REPORTED THAT THE SPACECRAFT HAD ENTERED AND INERTIAL SAFEMODE AT 1731Z. INVESTIGATION INTO THE CAUSE OF THE ANOMALY CONTINUES, AND NO RECOFERY EFFORST WERE UNDERWAY AS OF THE END OF THE RADAY. PROJECT DID NOT DECALRE DATA LOSSES FOR ANY OF THE SUBSEQUENT EVENTS. ALL EVENTS SUPPORTED FOLLOWING THE INITIAL ANOMALY ARE LISTED BELOW.

TDW HST 174100-183400 MAR4 32K 14 MINS 39 SECS DATA LOSS NON-RECOV.
TDE HST 183431-184400 MAR4 4K
TDW HST 192300-195300 SSAR2 4K
TDW HST 200000-201500 SSAR2 4K
TDE HST 201700-210000 SSAR2 4K
TDW HST 213000-214500 SSAR1 4K
TDE HST 214700-215300 SSAR2 4K
TDW HST 221700-224300 SSAR1 4K

* 07/16/1202Z(WSGT DAILY OPS SUMMARY DOY 195)
HST 195/17:41:00 - 14 MINS 39 SECS NON-RECOVERABLE DATA LOSS DUE TO NEGATIVE ACQ. TWO RETURN REACQS WERE SENT WITHOUT SUCCESS. NO MAR RF WAS SEEN. A FAILOVER WAS PERFORMED FROM MAR4 TO MAR5 WITHOUT LOCK. POCC RECONFIGURED FOR LOW GAIN ANTENNA WHICH RESULTED IN LOCK AT 17:55:39Z. POCC REPORTED HST IN SAFE HOLD TTR 18935.

* 07/16/1301Z(POCC)
HST 1741 - 14 MINS 39 SECS 32K DATA LOSS NON-RECOVERABLE. HST IS IN AN INERTIAL SAFEMODE. THE FLIGHT OPERATIONS TEAM IS NOT DECLARING ANY DATA LOSSES.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 07/16/1400Z(HST)
HST ENTERED INERTIAL HOLD SAFEMODE AT 195/17:31Z, DUE TO FAILING THE EARTH/MOON BRIGHT OBJECT PROTECTION SAFEMODE TEST. TEST FAILED DUE TO CORRUPTION OF THE ON-BOARD ATTITUDE QUATERNION (BIT FLIP), CAUSING A DISCREPANCY OF SEVEN DEGREES BETWEEN THE ON-BOARD QUATERNION AND THE ACTUAL VEHICLE ATTITUDE. SAFEMODE ENDED AT 196/14:00Z. CAUSE OF THE BIT FLIP IS STILL UNDER INVESTIGATION.

18551 TDW A3782MS UARS 950928 271/0057 0112 TLM N SA MAS

***M 09/28/1304Z(TTR)**
PROBLEM TYPE: **UNKNOWN.**
DR#. AR PRIORITY: TTR PRIORITY LEVEL: **4.** IMPACT LEVEL: **4.**
ELEMENT W/P: **UNKNOWN.**
INVESTIGATING ELEMENT: **UARS.**
TIME OF ANOMALY: **12:56:27 - 13:08:27.** DURATION: **SEE TEXT.**
SERVICE LOSS: **NONE.** DATA LOSS: **NONE.**

PROBLEM DESCRIPTION: UARS POCC IS REPORTING THAT TPF IS SEEING CRC ERRORS THROUGHOUT THEIR 512 KB DUMP. STGT AND NASCOM DO NOT SEE THE ERRORS. POST PASS, THE DUMP WAS PLAYED BACK FROM STGT AND NO ERRORS WERE SEEN. NO DATA LOSS IS BEING CLAIMED. REFERENCE TTR #18548. THE BELOW LISTED EVENTS WERE AFFECTED:

TDW UARS 005700-011230 SSA2 512KB
TDE UARS 050730-052300 SA1 512KB
TDE UARS 100411-101941 SA1 512KB

NOTE: TPF SAW LESS ERRORS ON THEIR BACKUP SYSTEM THAN ON THEIR PRIME SYSTEM.

PA NOTE: TPF CAN PROVIDE NO REASON FOR THE CRC ERRORS CLEARING UP AFTER THE TDE EVENT 100411-101941. THEY FURTHER INDICATE THAT THEY HAVE CHANGED NO EQUIPMENT. REASON UNKNOWN.

* 03/1304Z(STGT DAILY OPS SUMMARY DOY 271)
UARS 00:57:00 - 40 SECS OF 32K RECOVERABLE DATA LOSS DUE TO GNERIC LATE ACQ. 1 FWD REACQ WAS REQUIRED TO ACHIEVE LOCK. GENERIC TTR 14170. ADDITIONALLY, DURING THE Q CH DUMP, TPF REPORTED SEEING CRC ERRORS. STGT AND COMM MGR BOTH REPORTED EVERYTHING NOMINAL. ASSIGNED TTR 18551 TO CRC ERRORS.

UARS 05:07:30 - POCC REPORTED SEEING CRC ERRORS DURING 7 MINS 32 SECS OF 512K DUMP. STGT WAS SEEING BEST CASE LOCK AND NASCOM REPORTED CLEAN DATA LEAVING THEIR EQUIPMENT. TTR 18551.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

UARS 10:04:11 - POCC REPORTED SEEING CRC ERRORS DURING 7 MINS 29 SECS OF 512K DUMP. STGT WAS SEEING BEST CASE LOCK AND NASCOM REPORTED CLEAN DATA LEAVING THEIR EQUIPMENT. TTR 18551.

* 12/1212Z(SNAC)
THIS TTR WILL SERVE AS A MASTER FOR CRC ERRORS. ASSOCIATED TTR'S ARE 18553, 18554, 18556, 18558, 18561, 18563, 18564, AND 18565. STGT'S DR #29468 IS CLOSED AS NON-DISCREPANT.

* 19/1204Z(TNA)
UARS POCC SUSPECTS TAPE RECORDER A PROBLEM.

* 02/1205Z(SNAC)
CAN POCC CONFIRM TAPE RECORDER PROBLEM? WAITING RESPONSE.

18899 TDE A3782MS UARS 960605 157/2200 2216 TLM Y SSA UNK

*** 06/03/1300Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **UARS**
TIME OF ANOMALY: **22:00:30 - 22:15:30** DURATION: **15:00**
SERVICE LOSS: **00:15:00** DATA LOSS: **00:15:00**

PROBLEM DESCRIPTION: 15 MINS OF RECOVERABLE 32KB DATA LOSS RESULTING FROM A NEGATIVE ACQUISITION, REASON UNKNOWN. THE POCC CHANGED THIS EVENT AT APPROXIMATELY 1900Z TO A 32/512KB SUPPORT VICE A 32/32KB (NON-COHO). THE POCC ATTEMPTED TO COMMAND THE SPACECRAFT IN THE BLIND TO 22/512KB AND SENT SEVERAL REACQS. WSGT DID A FORWARD FAILOVER. ALL FAULT ISOLATION WAS TO NO AVAIL.

* 06/05/1200Z(MSOCC REPORT)
R/T 32KB DATA LOSS, REASON UNKNOWN. POSSIBLE SPACECRAFT MISCONFIGURATION (15 MINS).

* 06/13/1200Z(TNA)
POCC AGREED TO SPACECRAFT MISCONFIGURATION.

* 06/13/1201Z(SNAC)
WAITING FURTHER POCC RESPONSE TO WHETHER THIS WAS A POCC OPERATOR ERROR.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18945	**TDW**	**A3782MS**	**UARS**	**960724**	**206/0115**	**0131**	**TLM**	**N**	**SAR**	**SW**

* **07/24/1301Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **UARS**
INVESTIGATING ELEMENT: **UARS**
TIME OF ANOMALY: **01:15:41 - 01:25:02** DURATION: **09:21**
SERVICE LOSS: **NONE** DATA LOSS: **15:00**

PROBLEM DESCRIPTION: UARS HIGH GAIN ANTENNA FAILED TO SLEW AT AOS DUE TO SOFTWARE PROBLEM AT POCC. POCC COMMANDED OMNI ANTENNA ON AND ACQUIRED 1KB DATA. THE ANOMALY IS UNDER INVESTIGATION. THIS RESULTED IN 32KB DATA LOSS. AT 012502Z POCC COMMANDED THE OMNI ON TO MAINTAIN CONTACT WITH THE SPACECRAFT.

* 31/1201Z(WSC DAILY OPS SUMMARY DOY 206)
UARS 01:15:41 - EVENT FAILED TO ACQUIRE AND THERE WAS NO DETECTABLE RF AT WSGT. THE POCC COMMANDED ON THE OMNI ANTENNA AND CONFIGURED FOR 1 KPBS AND LOCK OCCURRED AFTER THE GROUND STATION WAS RECONFIGURED FOR 1 KBPS. POST EVENT, THE POCC ADVISED THAT A HI-GAIN ANTENNA SWITCH COMMAND DID NOT GET INTO THE SPACECRAFT MEMEORY THUS THE ANTENNA FAILED TO TRACK THE TDRS. A 15 MINUTE DATA LOSS WAS RECOVERED ON A SUBSEQUENT TDRS-4 EVENT. TTR 18945.

18953	**TDE**	**A3782MS**	**UARS**	**960730**	**212/0526**	**0541**	**TLM**	**N**	**SAR**	**UNK**

* **07/30/1307Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **UARS**
INVESTIGATING ELEMENT: **UARS**
TIME OF ANOMALY: **05:26:00 - 05:41:30** DURATION: **15:30**
SERVICE LOSS: **NONE** DATA LOSS: **15:00**

PROBLEM DESCRIPTION: AT AOS POCC REPORTED NOT REC'ING TLM, WSGT REPORTED GOOD LOCK AND VERIFIED TLM LEAVING STA., COMM/MG VERIFIED TLM LEAVING NASOM. MULTISAT STATED THEY WERE REC'ING TLM BUT UARS POCC WAS NOT, REASON UNKNOWN. PROBLEM UNDER INVESTIGATION.

NOTE: COMM/MGR CONFIGTURED LINES 434 & 437 FOR THE NEXT PASS. (212/064100Z-065100Z), THIS EVENT RAN OK ON NASCOM 434.

* 31/1208Z(WSC DAILY OPS SUMMAY DOY 212)
UARS 05:26:00 - 15 MINS DATA LOSS DECLARED. WSGT VERIFIED LOCK AT EVENT START, HOWEVER, POCC DID NOT RECEIVE DATA FOR ENTIRE EVENT. NASCOM VERIFIED DATA BEING SENT TO POCC. TTR 18953.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18956	**TDW**	**A6951MS**	**EUVE**	**960805**	**218/0304**	**0334**	**TLM**	**N**	**SA**	**UNK**

*** 08/05/1201Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **EUVE**
INVESTIGATING ELEMENT: **EUVE**
TIME OF ANOMALY: **03:04:00 - 24:000:00** DURATION: **SEE TEXT**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: EUVE REPORTED S/C WENT INTO A SAFE MODE CONDITION DURING THE 030400Z-033400Z EVENT, REASON UNKNOWN AT THIS TIME. NO DATA LOSS DECLARED FOR THIS EVENT. EVENT 218/045000Z-051000Z NO RF PRESENT THROUGH OUT THE EVENT, POCC WENT TO THE OMNI ANT AT APPROX 045430Z WITH NO LUCK. EUVE DECLARED S/C EMERGENCY AT 1700Z.

TDW EUVE 030400 - 033400 SSAR2 32K
TDW EUVE 045000 - 051000 SSAR1 32K 19 MINS 40 SECS SVC/DATA LOSS RECOVERABLE.

* 08/05/1300Z(WSC DAILY OPS SUMMARY DOY 218)
EUVE 03:04:00 - A SAFEHOLD CONDITION RESULTED IN ERRORS REPORTED BY THE POCC ON THE 32 KBPS I-CHANNEL DATA. WSGT SAW NO ERRORS OR EQUIPMENT PROBLEMS. AFTER A 512 KBPS Q-CHANNEL DUMP WAS OBTAINED THE POCC VERIFIED THAT THE SPACECRAFT WAS IN SAFEHOLD. TTR 18956/NO DR WRITTEN.

EUVE 04:50:00 - NEGATIVE ACQUISITION ON THE 32 KBPS I-CHANNEL AND 1024 KBPS Q-CHANNEL DUE TO SAFEHOLD. TTR 18956/NO DR WRITTEN.

18960	**TDW**	**A6951MS**	**EUVE**	**960808**	**221/0530**	**0545**	**TLM**	**N**	**SA**	**SCA**

*** 08/08/1202Z(TTR)**
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **EUVE**
INVESTIGATING ELEMENT: **EUVE**
TIME OF ANOMALY: **00:00:00 - 21:54:00** DURATION: **21:54**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: EUVE REPORTED S/C HAS BEEN IN A SAFE MODE CONDITION SINCE DAY 218/030400Z-033400Z EVENT. REASON UNK AT THIS TIME. EUVE POCC HAS SCHEDULED THIER EVENT'S USING THE OMNI ANTENNA. DURING THE 221/151900-155600Z EVENT EUVE EXPERIENCED DROPOUT'S THROUGHOUT TOTALING 17 MINS 1K DATA LOSS NON-RECOV. WSC REPORTED SEEING RF OCCASSIONALLY FOR THIS PARTICULAR EVENT. POCC REPORTED AT APPROX. 2154Z THEY ARE OUT OF SAFEMODE. THE POCC REPORTED THEY WILL PROVIDE MORE DETAILS ON THE DAYSHIFT. THE BELOW LISTED EVENTS WERE AFFECTED:

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

TDW EUVE 053000-054500 SSAR1 1K
TDW EUVE 085000-091000 MAR4 1K
TDE EUVE 110300-112800 SSAR2 1K
TDE EUVE 125000-131000 MAR2 1K
TDW EUVE 151900-155600 SSAR2 1K 17 MINS DATA LOSS NON-RECOV.
TDE EUVE 161000-163000 MAR5 1K
TDE EUVE 193000-195000 MAR2 1K
TDE EUVE 211200-214200 SSAR2 1K

* 08/13/1300Z(WSC DAILY OPS SUMMARY DOY 221)
EUVE 15:19:00 17 MINS 1 KBPS NON-RECOVERABLE DATA LOSS. EB/N0 AND RF WERE DEGRADED, REACQS AND A FORWARD CHAIN FAILOVER WERE UNSUCCESSFUL. AFTER SIGNAL GRADUALLY IMPROVED LOCK WAS ACHIEVED. TTR 18960.

18963 TDE A6951MS EUVE 960810 223/2043 2106 TLM Y SA UNK

*** 08/10/1205Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **EUVE**
INVESTIGATING ELEMENT: **EUVE**
TIME OF ANOMALY: **20:43:30 - 21:06:00** DURATION: **22:30**
SERVICE LOSS: **22:30** DATA LOSS: **22:30**

PROBLEM DESCRIPTION: DUE TO A NEG ACQ 22 MINS 30 SECS OF 32KB DATA LOSS RESULTED. WSGT REPORTED NO RF AND NCC ODM BEAM ANGLES WERE COMPARED WITH TOPSAS PREDICTS AND LOOKED GOOD. THE POCC SENT TURN ON COMMANDS TO THE TRANSPONDER WITH NO ACQUISITION SUCCESS.

* 08/20/1200Z(POCC)
22 MINS 30 SECS R/T 32 KB DATA LOSS, REASON UNKNOWN.

* 08/22/1206Z(SNAC)
DUE TO HW LIMITS OF HGA AND THE ATTITUDE OF THE EUVE S/C FROM A SAFEHOLD ON DAY 221, EUVE WAS UNABLE TO ACQUIRE. WAITING FOR A POCC COMMENT ON WHY S/C DID NOT HAVE THE CORRECT ATTITUDE.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18964	TDW	A6951MS	EUVE	960814	227/0316	0346	TLM	N	SA	HW

* **08/14/1200Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **EUVE**
INVESTIGATING ELEMENT: **EUVE**
TIME OF ANOMALY: **03:16:00 - 03:46:00** DURATION: **30:00**
SERVICE LOSS: **NONE** DATA LOSS: **29:30**

PROBLEM DESCRIPTION: THE POCC DID NOT HAVE COMMAND CAPABILITY THROUGHOUT THEIR EVENT BECAUSE BOTH THE PRIME AND BACK-UP AP'S (APPLICATION PROCESSOR) FAILED ON THE TAC. REASON UNKNOWN AT THIS TIME FOR THE AP FAILURES. A H/W RESET WAS SUCCESSFULLY PERFORMED POST-EVENT ON AP-1 (PRIME) BUT AP-5 (B/UP) WOULD NOT BOOT UP. AP-5 IS UNDER INVESTIGATION.

18971	TDW	A3782MS	UARS	960820	233/1141	1156	TLM	N	SA	SCA

* **08/20/1205Z(TTR)**
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **UARS**
INVESTIGATING ELEMENT: **UARS**
TIME OF ANOMALY: **11:40:30 - 11:56:30** DURATION: **16:00**
SERVICE LOSS: **NONE** DATA LOSS: **21:00**

PROBLEM DESCRIPTION: 15 MINS OF RT 32KB DATA LOSS AND 6 MINS OF 512 KB DATA LOSS (RECOVERABLE) AS A RESULT OF A NEGATIVE ACQUISITION. WSGT DID NOT SEE RF DUE TO A POSSIBLE BAD MEMORY LOAD ABOARD SPACECRAFT. AFTER FURTHER INVESTIGATION THE POCC REPORTED THE ATC (ABSOLUTE TIME COMMAND) MEMEORY HALTED. THE SPACECRAFT ANTENNA WAS POINTING INCORRECTLY AND ON THE NEXT EVENT AT 1241Z THE POCC SENT COMMANDS TO THE SPACECRAFT TO REPOSITION THE ANTENNA CORRECTLY.

TDW UARS 114100-115630 SSAR2 32K 15 MINS DATA LOSS RECOVERABLE
TDW UARS 114100-115630 SSAR2 512K 6 MINS DATA LOSS RECOVERABLE

* 08/21/1200Z(WSC DAILY OPS SUMMARY DOY 233)
UARS 11:41:00 - THE SUPPORT FAILED TO ACQUIRE WITH NO RF SEEN BY WSGT UNTIL LATE IN THE EVENT. POST EVENT WSGT WAS ADVISED THAT THE USER SPACECRAFT HAD BEEN POINTED AT TDE VICE TDW DUE TO A "BAD COMMAND UPLOAD". TTR 18971.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18979	TDW	C1311MS	BRTS	960902	246/1215	1219	TLM	Y	SA	UNK

* **09/02/1400Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **BRTS**
INVESTIGATING ELEMENT: **BRTS**
TIME OF ANOMALY: **12:15:00 - 12:19:00** DURATION: **04:00**
SERVICE LOSS: **03:30** DATA LOSS: **03:30**

PROBLEM DESCRIPTION: POCC REPORTED NOT RECEIVING TDM'S FOR THIS EVENT, REASON UNK, A POST EVENT C1311MS WAS SCHEDULED ON THE SAME CHAIN OF EQUIPMENT AT 1901-1905 WITH NOMINAL RESULTS.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18980	TDW	A1446MS	HST	960903	243/1040	1049	TLM	Y	MA	OPR

* **09/03/1401Z(TTR)**
PROBLEM TYPE: **OPERATIONAL**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **HST**
INVESTIGATING ELEMENT: **HST**
TIME OF ANOMALY: **10:40:35 - 10:49:53** DURATION: **09:18**
SERVICE LOSS: **NONE** DATA LOSS: **09:18**

PROBLEM DESCRIPTION: THE EVENT WAS SCHEDULED ON TDW WHICH DID NOT HAVE VIEW OF THE HST SPACECRAFT. ACCORDING TO THE ACRS SYSTEM TDW COULD NOT SEE HST FROM 1022 TO 1104Z.

* 09/09/1200Z(POCC)
9 MINUTES 18 SECONDS 32K DATA LOSS NON-RECOVERABLE DUE TO TDW NOT BEING VISABLE TO HST.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18990	TDE	A6581MS	XTE	960914	258/1410	1430	TLM	N	SA	UNK

* **09/14/1403Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **XTE**
TIME OF ANOMALY: **14:10:56 - 14:13:44** DURATION: **02:38**
SERVICE LOSS: **02:38** DATA LOSS: **02:38**

PROBLEM DESCRIPTION:XTE REPORTED 2 MINS 38 SECS 32KB RECOVERABLE DATA LOSS RESUTLING FROM A LATE ACQ. REASON UNKNOWN. THE POCC SENT A FWD REACQ AFTER PERFORMING SOME IN-HOUSE CHECKS AND LOCK WAS ACHEIVED.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

JPL

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

FDF

18969	GDS	TDRS-6	960817	230/0415	0445	TLM	N	PDFC	UNK

* **08/17/1204Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **FDF**
INVESTIGATING ELEMENT: **FDF**
TIME OF ANOMALY: **03:30:00 - 04:45:00** DURATION: **01:15:00**
SERVICE LOSS: **30:00** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: 30 MINUTES RANGING SERVICE LOSS. THE MPA (METRIC POINTING ANTENNA) AT DSS16 COULD NOT GENERATE ANGLES ACCORDING TO THE PREDICTS FOR TDRS-6. THE Y-AXIS NEEDED FOR THE 26M WAS 75.8. THE ANTENNA LIMIT WAS 75.5

STORE TDRS-6 0415-0445 PDF-C 30 MINS SVC LOSS

NOTE: DSS16 SUGGESTS USING THE 9M ANTENNA TO AVOID THE KEYHOLE, OR SCHEDULE LATER EVENTS.

TM NOTE: FDF CURRENT PREDICTS AND MATRICS HAS DSS-16 AS HAVING VIEW OF TDRS-6.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

GN

18844	BDA	B3557MT	GPS-25	960326	086/1300	2130	TLM	N	??	CP

* **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.

* 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.

	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

* 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.
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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.

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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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.

18856 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: **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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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.

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.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18924	**BDA**	**M2078MS**	**STS-78**	**960628**	**180/0958**	**1005**	**TLM**	**N**	**TT**	**SW**

*** 06/28/1304Z(TTR)**

PROBLEM TYPE: **SOFTWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **BDA**
INVESTIGATING ELEMENT: **BDA**
TIME OF ANOMALY: **09:58:00 - 10:05:00** DURATION: **07:00**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: EQUIPMENT AFFECTED: RTPS NORAD-B3 LOWSPEED OUTPUT DATA. WE WERE NOTIFIED OUR NORAD B3 DATA CONTAINED THE WRONG DAY TIME GROUP. AFTER RESETTING THE RTPS THE PROBLEM WAS STILL APPARENT. THE INCORRECT DAY TIME GROUP SHOULD HAVE READ 01/1257 JUL 97 GBDA. THE CORRECT DAY TIME GROUP SHOULD HAVE READ 01/1257 JUL 96 SHOW SYSTEM STATUS ON THE RADAR CONSOLE READ 1997. AT THE RTPS CONSOLE WE CHANGED THE YEAR TO 1996. THE RADAR CONSOLE REFLECTED THE CHANGE IN THE YEAR TO 1996. AT THAT POINT WE NOTICED THE IIRV'S WERE NOT CORRECTLY PROCESSED. WE THEN CLEARED NVRAM AND REBOOTED THE COMPUTER AND ALL PROBLEMS DISAPPEARED. THERE WAS NO IMPACT TO THE TRACKING DATA CONTENT. ONLY THE NORAD-B3 DATA HEADER WAS AFFECTED AS IT IS THE ONLY DATA STREAM THAT CONTAINS A DATE TIME GROUP AT THE START OF MESSAGE AND END OF MESSAGE. THANKS TO NASCOM AND THEIR ALERT THE ONLY DAY AFFECTED WAS 28 JUNE. WE HAVE NOT OBSERVED THIS PROBLEM IN THE PAST. A SOFTWARE ANOMALY HAS BEEN GENERATED AND THE PROGRAMMER NOTIFIED. REFERENCE SOFTWARE ANOMALY DTG 01/2112Z JULY 1996. REF BDA'S PRT DTG 01/1952Z JULY

* 01/1952Z(BDA)

PRT BDA
1. NA
2. M2078-LS, STS-78, 960628, 0958Z
3. SUSPECTED SOFTWARE PROBLEM/INFORMATION
4. EQUIPMENT AFFECTED: RTPS NORAD-B3 LOWSPEED OUTPUT DATA. WE WERE NOTIFIED OUR NORAD B3 DATA CONTAINED THE WRONG DAY TIME GROUP. AFTER RESETTING THE RTPS THE PROBLEM WAS STILL APPARENT. THE INCORRECT DAY TIME GROUP SHOULD HAVE READ 01/1257 JUL 97 GBDA. THE CORRECT DAY TIME GROUP SHOULD HAVE READ 01/1257 JUL 96 SHOW SYSTEM STATUS ON THE RADAR CONSOLE READ 1997. AT THE RTPS CONSOLE WE CHANGED THE YEAR TO 1996. THE RADAR CONSOLE REFLECTED THE CHANGE IN THE YEAR TO 1996. AT THAT POINT WE NOTICED THE IIRV'S WERE NOT CORRECTLY PROCESSED. WE THEN CLEARED NVRAM AND REBOOTED THE COMPUTER AND ALL PROBLEMS DISAPPEARED.

THERE WAS NO IMPACT TO THE TRACKING DATA CONTENT. ONLY THE NORAD-B3 DATA HEADER WAS AFFECTED AS IT IS THE ONLY DATA STREAM THAT CONTAINS A DATE TIME GROUP AT THE START OF MESSAGE AND END OF MESSAGE. THANKS TO NASCOM AND THEIR ALERT THE ONLY DAY AFFECTED WAS 28 JUNE. WE HAVE NOT OBSERVED THIS PROBLEM IN THE PAST. A SOFTWARE ANOMALY HAS BEEN GENERATED AND THE PROGRAMMER NOTIFIED.

REFERENCE SOFTWARE ANOMALY DTG 01/2112Z JULY 1996.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18896	WPS	TDRS1		960601	153/2030	2132	TRK	N	??	UNK

* **06/04/1400Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR#. AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **WPS**
TIME OF ANOMALY: **20:30:00 - 23:43:40** DURATION:
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: NEG ACQ WITH WPS DURING A NORMAL RNG PASS. BOTH ETGT AND WPS DID EXTENSIVE FAULT ISXOLATION BUT WAS UNABLE TO ACQUIRE LOCK. REASON UNKNOWN. TROUBLE SHOOTING WAS TERMINATED AT 2343Z, BOTH STATIONS WILL BE LOOKING INTO THE PROBLEM. NO DATA/SVC LOSS DECLARED.

PA NOTE: AFTER FURTHER INVESTIGATION PROBLEM APPEARS TO BE A VECTOR PROBLEM WITH A BIAS OF 2.1 IN THE (X) COMPONENT AND A 1.7 BIAS IN THE (Y) COMPONENT IN THE TDRS VECTOR WPS WAS USING.

18942	WPS	A1398CS	ERBS	960721	203/0226	0238	TLM	N	6M	UNK

* **07/21/1402Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **WPS**
TIME OF ANOMALY: **02:26:00 - 02:38:00** DURATION: **12:00**
SERVICE LOSS: **12:00** DATA LOSS: **12:00**

PROBLEM DESCRIPTION: ERBS-OCC REPORTED 12 MINS (1.6K) FORMAT "A" DATA LOSS, REASON UNKNOWN. WPS INDICATED THAT THEY WERE RECEIVING DATA AND TRANSMITTING OFF-SITE. ERBS CONTROL REPORTS THAT THEIR TAC (TELEMETRY AND COMMAND COMPUTER) NEVER LOCKED ON DATA. THEY FURTHER INDICATED THAT THEY WERE RECEIVING EMPTY BLOCKS. A POST EVENT TEST WAS PERFORMED WITH NO PROBLEMS ENCOUNTERED. BOTH ERBS-OCC AND WPS REPORTED THAT THEIR RESPECTIVE EQUIPMENT WAS NOMINAL.

* 22/1125Z(WPS)
PRT WPS
1. N/A
2. A1398CS, ERBS, 960721, 0226Z
3. INFORMATION
4. TM OPERATOR WAS UNABLE TO CONFIGURE FOR DUAL S-BAND SUPPORT FOLLOWING A 4 MIN TURNAROUND. ASSIGN TTR NUMBER 18942

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 07/25/1110Z(POCC)
12 MINS R/T 1.6KB DATA LOSS REASON UNKNOWN.

* 08/01/1218Z(SNAC)
NASCOM WAS TRANSFERRING BLOCKS, BLOCKS WERE EMPTY. WAITING WPS RESPONSE.

18998 BDA M2079LS STS-79 960916 260/1515 1524 TLM Y 9M HW

*** 09/16/1410Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **BDA**
INVESTIGATING ELEMENT: **BDA**
TIME OF ANOMALY: **15:15:56 - 15:24:56** DURATION: **09:00**
SERVICE LOSS: **NONE** DATA LOSS: **08:00**

PROBLEM DESCRIPTION:AT ONE MINUTE TO AOS OF ORBIT NUMBER 5 ON THE OR4BITER RTHE BERMUDA RADAR TRANSMITTER FAILED. THE PROBLEM WAS TWO SHORTED CLIPPER DIODE STACKS. THE DIODES WERE REPLACED AND THE TGRANSMITTER WAS BROUGHT UP AND TESTED BUT THE TRANSMITTER IS STILL ARCHING IN THE HIGH VOLTAGE AREA. TROUBLESHOOTING CONTINUES. ORBITS 5 AND 6 WERE MISSED. NO VALID DATA WAS OBTAINED. EIGHT MINUTES OF DATA WAS LOST FOR ORBIT 5 AND ORBIT 6. REF BDA PRT DTG 16/1700Z AND BDA'S ESR 060 DTG 16/1649Z.

* 16/1700Z(BDA)
1. RDAR:01-T1
2. M2079LS, STS-79, 960916, AOS 151556Z
3. EQUIPMENT FAILURE
4. EQUIPMENT AFFECTED: BDA RADAR TRANSMITTER
COMMENTS: AT ONE MINUTE TO AOS OF ORBIT NUMBER 5 ON THE OR4BITER RTHE BERMUDA RADAR TRANSMITTER FAILED. THE PROBLEM WAS TWO SHORTED CLIPPER DIODE STACKS. THE DIODES WERE REPLACED AND THE TGRANSMITTER WAS BROUGHT UP AND TESTED BUT THE TRANSMITTER IS STILL ARCHING IN THE HIGH VOLTAGE AREA. TROUBLESHOOTING CONTINUES. ORBITS 5 AND 6 WERE MISSED. NO VALID DATA WAS OBTAINED. EIGHT MINUTES OF DATA WAS LOST FOR ORBIT 5 AND ORBIT 6.

* 16/1649Z(BDA)
ESR BDA 060
RDAR:01-T1 R 09161640 09170500 1PEIA M2079LS, TRANSMITTER HAS NO RF OUTPUT. DIODE STACKS SHORTED, AND ARCHING HEARD INSIDE TRANSMITTER. TROUBLESHOOTING CONTINUES

* 17/0534Z(BDA)
ESR BDA 061
RDAR:01-T1 RY09161640 09271200 9PEOA M2079LS, THE RADAR IS TRANSMITTING LOWER RF OUTPUT POWER. 1.9 MEGA WATT PEAK.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18999	**BDA**	**M2079LS**	**STS-79**	**960916**	**260/0153**	**0223**	**TLM**	**N**	**9M**	**HW**

* **09/16/1411Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **BDA**
INVESTIGATING ELEMENT: **BDA**
TIME OF ANOMALY: **01:30:00 - 14:00:00** DURATION:
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE MOTOR/BRAKE ASSEMBLY ON THE ELEVATION AXIS DID NOT ROTATE. TROUBLESHOOTING SHOWED THAT THE BRAKE WAS RUSTED, DID NOT RELEASE AND WOULD NOT ALLOW THE MOTOR TO TURN. AFTER REPLACING THE MOTOR/BRAKE ASSEMBLY, INDICATIONS OF UPPER LIMIT IN ELEVATION AND COUNTER-CLOCKWISE LIMIT IN AZIMUTH DISPLAYED ON THE THE ANTENNA CONTROL CONSOLE. THE ANTENNA WAS NOT IN EITHER LIMIT AND WOULD NOT MOVE IN THOSE DIRECTIONS. IT DID MOVE DOWN IN ELEVATION AND CLOCK-WISE IN AZIMUTH. TROUBLESHOOTING INDICATES A CABLE PROBLEM BETWEEN THE BUILDING AND THE ANTENNA PEDESTAL. TROUBLESHOOTING IN PROGRESS. REF BDA'S PRT DTG 16/1253Z AND BDA'S ESR 062 DTG 17/1330Z.

* 16/1253Z(BDA)
PRT BDA
1. ANTA:01-X1
2. M2079LS, STS-79, 960916, 0130Z
3. EQUIPMENT FAILURE
4. EQUIPMENT AFFECTED: BDA T&C#1 ANTENNA (BACKUP AIR TO GROUND)
COMMENTS: THE MOTOR/BRAKE ASSEMBLY ON THE ELEVATION AXIS DID NOT ROTATE. TROUBLESHOOTING SHOWED THAT THE BRAKE WAS RUSTED, DID NOT RELEASE AND WOULD NOT ALLOW THE MOTOR TO TURN. AFTER REPLACING THE MOTOR/BRAKE ASSEMBLY, INDICATIONS OF UPPER LIMIT IN ELEVATION AND COUNTER-CLOCKWISE LIMIT IN AZIMUTH DISPLAYED ON THE THE ANTENNA CONTROL CONSOLE. THE ANTENNA WAS NOT IN EITHER LIMIT AND WOULD NOT MOVE IN THOSE DIRECTIONS. IT DID MOVE DOWN IN ELEVATION AND CLOCK-WISE IN AZIMUTH. TROUBLESHOOTING INDICATES A CABLE PROBLEM BETWEEN THE BUILDING AND THE ANTENNA PEDESTAL. TROUBLESHOOTING IN PROGRESS.

* 16/0730Z(BDA)
ESR BDA 059
ANTA:01-X1 R 09160250 09171400 1PWIA M2079LS, ANT WON'T MOVE REPLACED DRIVE MOTOR ON BACKUP ANT. SUSPECT PROBLEM WITH CABLE BETWEEN ANTENNA AND BUILDING.

* 17/1330Z(BDA)
ANTA:01-X1 R 09160250 09251400 1PEIA M2079LS, ANTENNA UPPER ELEVATION AND CCW AZIMUTH LIMIT INDICATIONS ARE STILL ON AND WILL NOT RELEASE EACH AXIS. TROUBLESHOOTING IN PROGRESS.

* 21/1230Z(BDA)
ESR BDA 063
ANTA:01-X1 G 09160250 09211200 OBECA REPLACED CABLE ASSY, MOTOR/BRAKE ASSY, GIRCUIT CARD S/D. AND U10 & U11 ON TWO EL CIRCUIT CARD ASSEMBLIES.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

OPEN STS TTRS
AS OF: 09/24/96

TTR NO.	ELEM. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18223		03/10/95	STS-67	UNK	UNK	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
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
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

DISCREPANCY RESOLVED TTRS
AS OF: 09/24/96

TTR NO.	DR. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18795	DR#31412	03/11/96	UARS	HW	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
18587	DR#29656	10/23/95	STS-73	FW	STGT	4	A
18798	DR#31424	03/12/96	STS	HW	STGT	4	A
18939	DR#32601	07/16/96	ISS	SCA	WSGT	4	A
18545	DR#29328	09/20/96	BRTS	SW	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

GRO REMOTE TERMINAL SYSTEM

(GRTS) REPORT

SEC 1: PAGES 63 - 65 SEC 2: PAGE 66

SEPTEMBER 18 THRU SEPTEMBER 24, 1996.
JULIAN DATES: 262 THRU 268 1996.

NAME	CODE/SECTION	COPIES
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

SECTION 1 (GRTS)

19001 TDZ M2079LS STS-79 960919 263/0320 0325 TLM Y SA HW

* 09/19/1400Z(TTR)
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **JPL/OXFORD**
INVESTIGATING ELEMENT: **JPL**
TIME OF ANOMALY: **00:39:00 - 12:16:00** DURATION: **11:47:00**
SERVICE LOSS: **05:00** DATA LOSS: **05:00**

PROBLEM DESCRIPTION: THE GRTS-1 LINE ON CIRCUIT 8856 WAS LOGGED OUT AT 263/0039Z DUE TO A TIMING PROBLEM AT THE NASCOM SWITCHING CENTER IN CANBERRA. THE LINK TO JPL WAS BACK UP AT 0327Z, BUT WHILE TROUBLESHOOTING THE JPL TIMEPLEXER MEMEORY WAS ERASED AND THE GRTS-1 224K (DUPLEX) WENT DOWN. CANBERRA WAS PREPARED TO RECORD STS DEBLOCKED DATA, BUT DISCOVERED THE COMM PROCESSOR WILL NOT RECORD IF THE MODEM IS NOT LOCKED. THE PROCEDURE FOR RECORDING AT CANBERRA WILL BE CHANGED TO RECORD DATA PRIOR TO THE MODEM. THE SECOND STS ZOE EVENT 0455-0505Z WAS CANCELLED BY JSC.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

SECTION 2 (GRTS)

18983 TDZ A4625MS GRO 960908 252/0418 0444 TLM Y SA UNK

* **09/08/1301Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **3**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **TNA**
TIME OF ANOMALY: **04:18:30 - 04:41:50** DURATION: **26:15**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: GRO POCC REPORTED RECEIVING DEGRADED DATA DURING THIS EVENT. IT STARTED AT APPROXIMATELY 0418:30Z. THERE WERE NUMEROUS DROPOUTS, REASON UNKNOWN. ETGT (SATCON) PERFORMED MULTIPLE REACQS AND A FAILOVER OF THE KU-BAND LNA "A" TO "B" TO NO AVAIL. LOCK ON DATA WAS FINALLY ACQUIRED AT 0441:50Z. BOTH ETGT AND RGRT ARE INVESTIGATING THE PROBLEM.

EVENT 252/125900-133300. GRO REPORTED 7 MINS 18 SECS DEGRADED DATA NON-RECV & 1 MIN 3 SECS DATA LOSS NON-REC DUE TO A TURFTS FAIL OVER FOR A TOTAL OF 8 MINS 21 SECS. POCC REPORTED DEGRADED DATA AT 132807-132927 FOR A TOTAL OF 1 MIN 20 SEC (RECV), A PLAY BACK WAS PERFORMED AFTER THE EVENT AND DATA WAS RECOVERED.

NOTE: EVENT 252/143800-151200Z RAN WITH ANY PROBLEMS BEING NOTED. NO MAINT ACTION WAS TAKEN BEFORE THIS EVENT. REASON FOR THE PROBLEM IS UNK AT THIS TIME.

* 09/10/1400Z(POCC)
GRO 0418 - 23 MINS 20 SECS R/T 32KB DATA LOSS, REASON UNKNOWN.
GRO 1259 - 9 MINS 48 SECS R/T 32KB DATA DEGRADED, REASON UNKNOWN.

* 09/10/1300Z(STGT DAILY OPS SUMMARY DOY 252)
GRO/GRTS 12:59:00 - 12 MINS AFTER EVENT START THE POCC REPORTED DEGRADED DATA FROM TURFTS-B. WSGT SAW DROPOUTS ON BOTH TURFTS WITH TURFTS-A MARGINALLY BETTER. A FAILOVER TO TURFTS-A INITIALLY RESULTED IN A GOOD LOCK, HOWEVER DROPOUTS RETURNED, AND A FAILOVER BACK TO TURFTS-B WAS INITIATED. TURFTS-B RE-LOCKED AND REMAINED SOLID FOR THE LAST 4 PLUS MINUTES OF THE EVENT. POCC REPORTED 7 MINS 18 SECS DEGRADED 32KB DATA, AND 2 MINS 23 SECS LOSS OF 32KB DATA, ALL NON-REC. POST EVENT INVESTIGATION DID NOT UNCOVER ANY GROUND OR TDRS-3 PROBLEMS, HOWEVER PLAYBACK OF TURFTS-B RECOVERED 1 MIN 20 SECS OF THE DATA LOSS. TTR 18983.

* 09/12/1206Z(RGRT)
TTR IS STILL BEING INVESTIGATED; HOWEVER WE HAVE NOT BEEN ABLE TO UNCOVER ANY PROBLEMS WITH RGRT OR TDRS-3.

* 09/19/1216Z(SNAC)
RGRT FOUND NOTHING, POCC REPORTED THEY WERE IN A DATA CHECKING MODE. WAS POCC POINTED CORRECTLY.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18989	TDZ	A4625MS	GRO	960914	258/0128	0154	TLM	N	SA	SW

* **09/14/1301Z(TTR)**

PROBLEM TYPE: **SOFTWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **RGRT**
INVESTIGATING ELEMENT: **RGRT**
TIME OF ANOMALY: **00:04:00 - 01:47:00** DURATION:
SERVICE LOSS: **19:00** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: THE OMCS WORK STATIONS AT RGRT, ETGT, AND NCC WERE INOPERATIVE DUE TO CORRUPT DATA BASE POINTS AT RGRT. THE INPUT/OUTPUT CONTROLLERS (IOC) WOULD NOT RESET. CANBERRA ENGINEERING WAS CALLED IN TO INVESTIGATE THE ANOMALY. BASIVALLY, THE IOC'S HAD TO BE MANUALLY RESET IN ORDER TO RESTORE THE OMCS. THE ABOVE MENTIONED SERVICE LOSS REFERS TO THE INABILITY OF BOTH THE NCC AND ETGT TO MONITOR THE LISTED GRO EVENT.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18994	TDZ	M2079LS	STS-79	960916	260/0931	0933	TLM	Y	SA	UNK

* **09/16/1302Z(TTR)**

PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **3**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **RGRT**
TIME OF ANOMALY: **09:31:38 - 09:33:40** DURATION: **02:02**
SERVICE LOSS: **02:02** DATA LOSS: **02:02**

PROBLEM DESCRIPTION: CANBERRA ADVISED THEY COULD NOT LOCK ON THE RETURN LINK (MICRODYNE RECEIVER) DUE TO LOW SIGNAL STRENGTH. REASON FOR THE LOW SIGNAL STRENGTH IS UNKNOWN.