STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

SECTION 1 (REG)

18955	TDW	A6581MS	XTE	960804	217/1544	1638	TLM	N	MA	HW

* **08/04/1200Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **NCC**
INVESTIGATING ELEMENT: **NCC**
TIME OF ANOMALY: **16:00:31 - 16:09:32** DURATION: **09:01**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **NONE.**

PROBLEM DESCRIPTION: 9 MINS 1 SEC NO ODM/GCMR CAPABILITY DUE A NCC EQUIPMENT FAILURE. THE NCC SWO FAILED OVER TO BACKUP EQUIPMENT IN ORDER TO RESTORE SERVICE. THE BELOW LISTED EVENT WERE AFFECTED:

TDW XTE 154407 - 163840 MAR3 32K 9 MINS 1 SEC SVC LOSS
TDW HST 154455 - 163255 MAR2 4K 9 MINS 1 SEC SVC LOSS
TDE EUVE 155000 - 161500 MAR1 32K 9 MINS 1 SEC SVC LOSS

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.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18957	MAD	A6951MS	EUVE	960806	219/2004	2053	TRK	Y	26M	HW

* **08/06/1201Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **3**
ELEMENT W/P: **MAD**
INVESTIGATING ELEMENT: **MAD**
TIME OF ANOMALY: **20:36:28 - 20:41:59** DURATION: **05:31**
SERVICE LOSS: **05:00** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: AS A RESULT OF A MATRIX POINTING ASSEMBLY PROBLEM AT MAD 5 MINS OF COMMAND AND SERVICE LOSS. POCC NOT CALLING ANY DATA LOSS.

* 08/07/1200Z(POCC)
5 MINS TRACKING DATA LOSS, DUE TO MADRID'S MPA (MATRIX POINTING ASSY) PROBLEM.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

SECTION 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
18479	**TDW**	**A3782MS**	**UARS**	**950719**	**200/2112**	**2128**	**TLM**	**N**	**SA**	**SW**

* **07/19/1302Z(TTR)**
PROBLEM TYPE: **SOFTWARE.**
DR#**28542.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **21:22:03 - 21:28:23.** DURATION: **06:20**
SERVICE LOSS: **09:33.** DATA LOSS: **09:33.**

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

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

* 24/1201Z(STGT DAILY OPS SUMMARY DOY 200)
UARS 21:12:53 - 6 MINS 3 SECS 32K RECOVERABLE DATA LOSS (I-CHANNEL) AND 3 MINS 30 SECS 512K (Q-CHANNEL) LOSS DECLARED DUE TO AN STGT SOFTWARE ANOMALY. INITIAL ACQUISITION WAS NOMINAL. THE IR'S DROPPED LOCK ON BOTH CHAINS BRIEFLY, RELOCKED AND THEN DROPPED LOCK FOR GOOD AT 21:22:10Z. A DCE WAS SENT, FORWARD REACQ WAS SENT, AND FROWARD CHANIN FAILOVER A TO B WAS TRIED WITH NO CHANGE IN THE STATUS OF EITHER CHANNEL AND EVENT COMPLETED WITH NO LOCK. INVESTIGATION FOUND THAT THE EXEC SOFTWARE HAD FLAGGED THE EVENT AS NON-COHERENT, WHEN IN FACT THE SHO WAS DG1M4 (COHERENT). AS A RESULT, AN INITIAL DCI WHICH WAS SENT AT 21:14:33Z, WAS ONLY APPLIED TO THE FORWARD SERVICE (WHEN IT SHOULD HAVE BEEN SENT TO BOTH FORWARD AND RETURN). A BOUT 8 MINS LATER (AT 21:22;10Z) THE IR HAD BUILT UP ENOUGH RESIDUAL DOPPLER TO DROP LOCK. ANALYSIS BY EXEC ENGINEER WILL CONTINUE. TTR 18479/DR 28542.

* 24/1301Z(POCC)
6 MINS 3 SECS OF I-CHANNEL AND 3 MINS 30 SECS OF Q-CHANNEL DATA LOSS, REASON UNKNOWN.

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

* **07/20/1304Z(TTR)**
PROBLEM TYPE: **SYSTEM.**
DR#**28571.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **23:04:48 - 23:09:23.** DURATION: **04;35**
SERVICE LOSS: **NONE.** DATA LOSS: **NONE.**

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

* 24/1204Z(STGT DAILY OPS SUMMARY DOY 201)
HST 22:48:31 - POCC REPORTED 4 MINS 35 SECS DEGRADED DATA, NO DATA LOSS, DUE TO INCLEMENT WEATHER AT STGT. TTR 18482/DR 28571.

* 24/1302Z(POCC)
4 MINS 35 SECS OF DEGRADED 32K DATA (DATA INVERSIONS) DUE TO INCLEMENT WEATHER AT WSGT.

* 18/1056Z(STGT TI #1)
THIS IS A SYSTEM PROBLEM AND NOT A "HARDWARE" PROBLEM. WHAT WE KNOW ABOUT IT SO FAR IS AS FOLLOWS:

1. NO MI BETWEEN CAL AND USER
2. ROOFTOP EMMITTERS ARE A-OK (I.E. NO LEAKS OR CABLE PROBLEMS)
3. THE DROP IN CAL C/N WAS COINCIDENT WITH A DROP IN DOWNLINK SIGNAL STRENGTH. THE PROBLEM IS THAT A 5 DB DROP IN DOWNLINK SIGNAL STRENGTH SHOULD NOT HAVE CAUSED THIS TYPE OF PROBLEM, IN THE LINEAR SENSE, BUT THIS PHENOMENOM HAS HAPPENED ON TWO OTHER OCCASIONS BOTH OF WHICH OCCURRED DURING HEAVY RAIN AND CLOUDS WHICH DO AFFECT THE K-BAND SGL.

4. SYSTEM ENGINEERING WILL LOOK INTO WHY THE MABE'S CAL ROUTINE (I.E. THE CORRELATION BETWEEN PN CODES RECEIVED BACK FROM THE IR AND THE DOWNLINK PN CODES) ARE AFFECTED IN THIS MANNER.

TI #4 - MEETING TO BE HELD TO DISCUSS INCREASING THE CAL EIRP:
A MEETING WILL BE HELD TO DISCUSS OUR PLANS TO INCREASE THE MA CAL EIRP OUT OF THE ROOFTOP 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.

18528	**TDW**	**J4377MS**	**TOPEX**	**950904**	**247/0145**	**0210**	**TLM**	**N**	**SA**	**SW**

* **09/04/1303Z(TTR)**
PROBLEM TYPE: **SOFTWARE.**
DR#**29168.** AR PRIORITY: TTR PRIORITY LEVEL: **4.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **01:45:00 - 02:08:39** DURATION: **23:39.**
SERVICE LOSS: **NONE.** DATA LOSS: **23:09.**

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

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

*** 09/20/1300Z(TTR)**
PROBLEM TYPE: **SOFTWARE.**
DR#**29328.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **20:11:30 - 20:15:00** DURATION: **03:30.**
SERVICE LOSS: **03:30.** DATA LOSS: **03:30.**

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

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

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.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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

* 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

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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.

* 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.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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.

* 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

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18833	**TDW**	**A1446MS**	**HST**	**960405**	**096/1925**	**2006**	**TLM**	**Y**	**MA**	**SW**

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

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

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

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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 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 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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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 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.

18863 TDW C1311MS BRTS 960426 117/1432 1436 TRK N SA SW

*** 04/26/1400Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **31995** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **14:32:00 - UNKNOWN** DURATION:
SERVICE LOSS: **03:00** DATA LOSS: **03:00**

PROBLEM DESCRIPTION: FDF IS REPORTING INVALID TRACKING DATA. THE TRACKING DATA BECOMES INVALID WHEN CONSECUTIVE SSA TRACKING SERVICES ON THE SAME SA ANTENNA ARE SCHEDULED LESS THAN 6 MINS APART. RANGE AND DOPPLER ARE FLAGED INVALID EVEN THOUGH PN AND CARRIER ARE LOCKED. THE ANOMALY IS BEING INVESTIGATED BY STGT ENGINEERING.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18885	**TDE**	**M2077LS**	**STS-77**	**960520**	**141/0725**	**0759**	**TLM**	**Y**	**SA**	**SW**

*** 05/20/13108Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **32095** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **07:25:30 - 07:35:00** DURATION: **09:30**
SERVICE LOSS: **09:30** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: 4MB DATA WAS BEING RECEIVED DEGRADED. POCC NOT CALLING ANY DATA LOSS. STAT MUX WAS RESET AT STGT AND THIS SEEMED TO CLEAR PROBLEM.

* 06/19/0939Z(STGT TI #3)
TI TITLE: PROBLEM WAS REPRODUCED, KEEP OPEN, SW FIX RECOMMENDED:
AFTER EARLIER ATTEMPTS TO REPRODUCE THIS PROBLEM FAILED, WE WERE ABLE TO REPRODUCE IT BY SWITCHING BETWEEN TWO FREQUENCIES ON THE CHANNEL INPUT. THIS IS A REALISTIC SCENARIO AT BEGINNING OF MISSION, FIRST PASS, THE BIT SYNC MAY HAVE BEEN AT A DIFFERENT FREQUENCY AND THIS WAS SEEN BY THE MUX. THE SWITCHING BETWEEN FREQUENCIES CAN CAUSE THE TX PORT TO "HANG" UP, USUALLY, BUT NOT ALWAYS, WITH THE FREQUENCY STATIC. A TX PORT RESET CLEARED THE PROBLEM, BUT TURNING THE PORT OFF AND BACK ON DID NOT. THERE FORE RECOMMEND A SW FIX TO RESET THE TX PORT EACH TIME IT IS ENABLED. WE MAY NEED TO BE CAREFUL OF THE TIMING HERE.

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
18894	**TDE**	**A1446MS**	**HST**	**960527**	**148/1200**	**1212**	**TLM**	**Y**	**MA**	**SW**

* **05/27/1301Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **32148** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **1**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **12:00:09 - 12:04:12** DURATION: **04:03**
SERVICE LOSS: **04:03** DATA LOSS: **04:03**

PROBLEM DESCRIPTION: AT 1154Z STGT GOT AN INDICATION OF NO USER EPHEMERIS. THE HST EVENT DID NOT LOCK AT SCHEDULED AOS. STGT VERIFIED THE VECOTR WAS RESIDENT PRIOR TO THE EVENT START. NCC RETRANSMITTED THE HST TYPE1 VECOTR AND THE SIGNAL WAS ACQUIRED. IT SHOULD BE NOTED THAT THE EVENT STARTED 9 SECS AFTER THE 148/1200Z. VECTOR SHOULD HAVE TAKEN AFFECT. PROBLEM IS UNDER INVESTIGATION BY STGT.

* 05/28/1201Z(POCC)
4 MINS 3 SECS 32K DATA LOSS NON-RECOVERABLE DUE TO BAD EPHEMERIS IN STGT SYSTEM.

* 05/28/1202Z(STGT DAILY OPS SUMMARY DOY 148)
HST 12:00:09 - 4 MINS 3 SECS 32K NON-RECOVERABLE DATA LOSS DUE TO PROBABLE VECOTR PROCESSING PROBLEM. DURING SHO DOWNLOAD, RECEIVED A DOPPLER FACTOR TABLE GENERATION ERROR DUE TO NO USER EPHEMERIS AVAILABLE UNTIL 12:00:00Z. ALERT INDICATED SERVICE WOULD CONTINUE. AT AOS, EVENT FAILED TO LOCK. A NEW HST VECTOR WAS THEN SENT IN AND LOCK WAS ATTAINED WITH NO FURTHER ACTION. TTR 18894/DR 32148.

18934	**TDS**	**C1310MS**	**BRTS**	**960713**	**195/0037**	**0041**	**TLM**	**N**	**SSAR**	**OPR**

* **07/12/1401Z(TTR)**
PROBLEM TYPE: **OPERATIONAL**
DR# **32568** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **00:37:00 - 00:47:00** DURATION: **10:00**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: BRTS POCC REPORTED 3 MINS 30 SECS SERVICE LOSS (NO TRACKING DATA MESSAGES) ON BOTH OF THE ABOVE LISTED EVENTS, DUE TO THE FULL PERIOD CIRCUIT NOT BEING CONNECTED BETWEEN THE TRACKING DATA FORMATTER (TDF) AND THE "B" SIDE LOW RATE DATA SWITCH (LRDS). STGT REPORTED THAT ON DOY 194, SEVERAL FAULTS AND ALARMS WERE RECEIVED FOLLOWING COMPLETION ON AN ENGINEERING CHANGE ON THE "B" SIDE LRDS. A FAILOVER TO THE "A" SIDE WAS ACCOMPLISHED, AND THE ON DUTY SHIFT PROCEEDED TO RE-ESTABLISH ALL OF THE FULL PERIOD CIRCUIT CONNECTIONS ON THE "B" SIDE THAT HAD BEEN LOST. THEY THEN FAILED BACK OVER TO THE "B" SIDE FOR OPERATIONS. IT WAS DISCOVERED FOLLOWING THESE FAILED EVENTS, THAT THE CONNECTION BETWEEN THE TDF TO THE LRDS HAD NOT BEEN RE-ESTABLISHED. THE BELOW LISTED EVENTS WERE AFFECTED:

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

TDS C1310MS 003700 - 004100 SSAR2 640B 3 MINS 30 SECS SVC LOSS
TDS C1319MS 004300 - 004700 SSAR2 640B 3 MINS 30 SECS SVC LOSS

* 07/16/1201Z(STGT DAILY OPS SUMMARY DOY 195)
BRTS 1310 00:38:00 - 3 MINS 30 SECS SERVICE LOSS DUE TO FDF NOT RECEIVING TEM'S. A BRTS 1319 EVENT AT 0043Z WAS ALSO IMPACTED FOR 3 MINS 30 SECS. INVESTIGATION FOUND THAT LRDS SWITCH CONNECTIONS BETWEEN THE TDF AND ITU WERE NOT MADE, RELATED TO AN EARLIER PROBLEM WHILE INSTALLING EC 8138. SWITCH CONNECTIONS WERE MANUALLY MADE AND THE EVENTS WERE SUCCESSFULLY RERUN. TTR 18934/DR 32568.

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.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

WSGT

18799 TD7 LDBP 960304 064/0641 0642 TLM N ?? SW

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

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

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.

18918	**TDE**	**M2078MS**	**STS-78**	**960629**	**181/1612**	**1650**	**TLM**	**N**	**KSAF**	**HW**

* **06/29/1305Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# **32392** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **16:00:00 - UNKNOWN** DURATION:
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: AN INTERMITTENT ANOMALY WITH THE SHUTTLE DIGITAL VOICE PROCESSOR CAUSES THE K-BAND FWD DQMS TO DROP OUT. A MANUAL WORK AROUND AT WSGT IS IN PROGRESS.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
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.

18939	TDE	ISS		960716	198/1700	2000	TLM	N	KSAR	SCA

* **07/16/1406Z(TTR)**
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# **32601** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **3**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **17:10:00 - 17:50:00** DURATION: **40:00**
SERVICE LOSS: **00:40** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: RFSOC REPORTED A 3 DB SIGNAL LOSS ON THE KU-BAND FWD LINK, AFTER WSGT RECONFGURED FROM AUTO-TRACK TO PROGRAM-TRACK VIA GCMR, WSGT ANNOUNCED THAT THIS PROBLEM MAY BE CAUSED BY A POINTING ERROR THAT WAS OBSERVED ON THE TDE SA-2 ANTENNA (SAT-4) ON DAOY 197. WSGT RECOMMENDED THAT NO NULL SEARCH BE PERFORMED AT THIS TIME DUE TO A TEMPERATURE CONSTRAINT ONBOARD TDRS-4 (TDE) SATELLITE.

18949	TDW	C1310MS	BRTS	960726	208/2010	2025	TLM	N	MAR	UNK

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* **07/26/1304Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **20:10:30 - 23:59:59** DURATION: **03:49:29**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: POCC REPORTED RECEIVING DEGRADED DATA (640BPS) NON-RECOVERABLE REASON UNKNOWN. THE BELOW LISTED EVENTS WERE AFFECTED:

TDW C1310MS 201000-202530 MAR3 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDW C1310MS 204100-204500 MAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDW C1310MS 213700-214100 MAR3 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV.

NOTE: WSGT REPORTED SUSPECTED MI FROM HST ON THE EVENT STARTING AT 2010Z BUT HAS NO REASON FOR DEGRADED DATA ON THE EVENT STARTING AT 2041. WSGT ALSO RAN A 1310 EVENT INHOUSE ON TDE SSA1 AND TDE MA2 WHICH WERE GOOD.

* 31/1205Z(WSGT DAILY OPS SUMMARY DOY 208)
BRTS 1310 - 3 MINS 30 SECS DEGRADED DATA ATTRIBUTED TO MUTUAL INTERFERENCE. TTR 18949

* 08/01/1204Z(SNAC)
TTR 18949 MAY BE RELATED TO TTR 18950. WAITING WSGT'S RESPONSE.

18950 TDW C1310MS BRTS 960727 209/0015 0019 TLM N MAR HW

* **07/27/1305Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# **32701** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **3**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **00:15:30 - 01:48:00** DURATION: **01:32:31**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: POCC STILL NOT RECEIVING VALID C1310MS TELEMETRY. BRTS POCC ADVISES THAT TRACKING DATA IS COMING NOMINALLY. AT 0148Z WSGT FAILED THE MAF CHAIN ON SGLT-2 FROM A TO B. THIS IMPROVED THE TELEMETRY 100 PERCENT. WSGT IS STILL INVESTIGATING THE CAUSE OF THE ANOMALY. THE FAILED BRTS EVENTS BELOW WERE RESCHEDULED AND RAN SUCCESSFULLY.

TDW C1310MS 001500-001900 MAR3 640B 3 MINS 30 SECS SVC LOSS
TDW C1311MS 010100-010500 MAR2 640B 3 MINS 30 SECS SVC LOSS
TDW C1314MS 010600-011000 MAR 2 640B 3 MINS 30 SECS SVC LOSS

* 31/1206Z(WSC DAILY OPS SUMMARY DOY 209)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

BRTS C1310 00:15:00 - 3 MINS 30 SECS OF 640B BPS SERFVICE LOSS DUE TO DEGRADED DATA. TTR 18950/DR 32701

BRTS 1311 01:01:00 - 3 MINS 30 SECS OF 640 BPS SERVICE LOSS DUE TO DEGRADED DATA. EVENT WAS RERUN. TTR 18950/DR 32701.

BRTS 1314 01:06:00 - 3 MINS 30 SECS OF 640 BPS SERIVE LOSS DUE TO DEGRADED DATA. EVENT WAS RERUN. INVESTIGATION DURING THE PRECEEDING THREE EVENTS ISOLATED THE ANOMALY TO THE MA FORWARD. A FAILOVER TO THE MAF B-CHAIN RESULTED IN GOOD TELEMETRY. TTR 18950/DR 32701.

* 08/01/1205Z(SNAC)
REPLACED PLO TO RESTORE SERVICE. LEAVING OPEN PENDING INVESTIGATION OF TTR 18949.

18954 TDE A4652MS GRO 960730 212/1707 1804 TLM Y MAR HW

*** 07/30/1308Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# **32726** AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **1**
ELEMENT W/P: **WSGT**
INVESTIGATING ELEMENT: **WSGT**
TIME OF ANOMALY: **17:46:06 - 17:57:31** DURATION:
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: MA DIVIDER SWITCH AT WSGT INADVERTENLY SWITCHED TO AN UNUSED PATH ON ITS OWN, RASON UNKNOWN. PROBLEM IS UNDER INVESTIGATION.

TDE GRO 170700-180400 MAR4 32K 8 MINS SVC/DATA LOSS NON-RECOVERABLE
TDE HST 171214-181114 MAR2 32K 10 MINS 34 SECS SVC/DATA LOSS NON-RECOVERABLE.

THE FOLLOWING SERVICE/DATA LOSSES RESUTLED:

GRO TDE 174606Z - 175406Z 8 MINS NON-RECOVERABLE
HST TDE 174643Z - 175359Z 7 MINS 16 SECS NON-RECOVERABLE
HST TDE 175413Z - 175731Z 3 MINS 18 SECS NON-RECOVERABLE

HST HAD TWO SEPARATE DROPOUTS DURING THE SAME EVENT.

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18890	**TDE**	**TRMM**		**960521**	**142/1640**	**1700**	**TLM**	**N**	**SA**	**UNK**

* **05/21/1313Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# **32113** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **NCC TEST DIRECTOR**
TIME OF ANOMALY: **16:40:00 - 17:00:00** DURATION: **20:00**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: Q CHANNEL DECODER CHANNEL ERRORS WERE OBSERVED AT STGT WITH SN CONFIGURATION OF DG1 MODE 3, 32 KBPS ON I CHANNEL, AND 2048KB ON Q CHANNEL. ERROR RATES OF 100 TO 500 ERROR/.SECOND WITH SPACECRAFT TRANSMITTER 1 AND 1000-5000 ERRORS/SECOND WITH SPACECRAFT TRANSMITTER 2, TRMM MOC REPORTS ERRORS AT THE MOC REED SOLMAN DECODER DURING SOME EVENTS. TRMM SPACECRAFT I&T WILL PROVIDE A PROBLEM REPORT AND STGT WILL PROVIDE A DR.

* 06/12/1240Z(STGT TI 1)
ALL SSAR CHAINS EXHIBITED THE SAME SYMPTOMS. PROBLEM APPEARS UNRELATED TO THE DMSS IMPLEMNTATION LOSS STUDY CURRENTLY ONGOING.

* 06/12/1241Z(STGT TI 2)
SUGGEST CLOSURE OF DR 32113. DISCUSSED DR WITH ORIGINATOR. THIS HIGH CER COUNT WAS SEEN ON ALL SSAR CHAINS. ORIGINATOR AGREED THAT PROBLEM WAS AT THE SPACECRAFT.

* 06/13/1206Z(SNAC)
STGT CLOSING AS NON-DISCREPANT. POSSIBLE S/C ANOMALY WITH TRMM. WAITING NCC TEST DIRECTOR'S RESPONSE.

* 06/27/1308Z(TEST DIRECTOR)
TRMM PROJECT HAS REQUESTED AN ETE TEST USING THEIR S/C ON JULY 17, 1996 TO CHECKOUT THE DG1 MODE 3 Q CH DATA RATES HIGHER THAN 1MBPS. THIS TEST WILL/SHOULD DETERMINE WHERE THIS PROBLEM IS AND HOPEFULLY A SOLUTION TO THE PROBLEM. PLEASE KEEP THIS TTR OPEN UNTIL AT LEAST AFTER JULY 17, 1996.

18901	**TDW**	**A4625MS**	**GRO**	**960612**	**164/1733**	**1828**	**TLM**	**N**	**MA**	**UNK**

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* **06/12/1300Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **3**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **TNA**
TIME OF ANOMALY: **18:25:14 - 20:31:42** DURATION: **SEE TEXT**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: NO ODM/GCMR CAPABILITY DUE TO WSC "ISC" LINE OUTAGE. NCC AND WSGT CHANGED TO BACKUP OPS PATH EQUIPMENT AND PROBLEM CLEARED. POST PASS WSGT CHECKED THEIR OPS PATH AND FOUND NO PROBLEM. AT 2218Z WSGT FAILED BACK TO THEIR PRIME OPS PATH AND THERE WAS NO PROBLEM. REASON FOR THE ORIGINAL FAILURE IS UNKNOWN. THE BELOW LISTED EVENTS WERE AFFECTED:

TDW GRO 173300 - 182800 MAR5 2 MINS 46 SECS SVC LOSS
TDW XTE 180519 - 190013 MAR3 34 MINS 59 SECS SVC LOSS
TDW UARS 182500 - 184000 SSAR2 14 MINS 46 SECS SVC LOSS
TDE GRO 183000 - 190600 MAR2 36 MINS SVC LOSS
TDW HST 183157 - 192558 MAR1 54 MINS 1 SEC SVC LOSS
TDW ERBS 184827 - 190027 SSAR1 12 MINS SVC LOSS
TDE UARS 190500 - 192030 SSAR1 15 MINS 30 SECS SVC LOSS
TDW TOPEX 190700 - 193700 MAR2 30 MINS SVC LOSS
TDE XTE 191013 - 193754 MAR2 27 MINS 41 SECS SVC LOSS
TDW GRO 191200 - 200700 MAR4 55 MINS SVC LOSS
TDE HST 193558 - 200806 MAR5 32 MINS 8 SECS SVC LOSS
TDW XTE 194852 - 200852 SSAR1 20 MINS SVC LOSS
TDE GRO 200900 - 203700 MAR1 22 MINS 42 SECS SVC LOSS
TDW HST 201520 - 210839 MAR3 16 MINS 22 SECS SVC LOSS
TDW XTE 201852 - 204312 MAR4 12 MINS 50 SECS SVC LOSS
TDW ERBS 202630 - 203830 SSAR1 5 MINS 12 SECS SVC LOSS

18946 TDE A1446MS HST 960723 205/0753 0834 TLM Y MAR UNK

* **07/23/1405Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **1**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **NCC/HST**
TIME OF ANOMALY: **07:53:02 - 08:34:31** DURATION: **40:29**
SERVICE LOSS: **23:28** DATA LOSS: **23:28**

PROBLEM DESCRIPTION: HST POCC ADVISED THAT THE ABOVE EVENT WAS STILL RESIDENT IN THEIR DATA BASE EVEN AFTER THEY TRANSMITTED A DELETE REQUEST FOR IT ON DOY 202/2322:48Z. POCC SCHEDULING ADVISED NCC THAT SINCE A DELETE REQUEST WAS TRANSMITTED TO THE NCC BUT THEY DID NOT RECEIVE AN ACKNOWLEGEMENT, HST ASSUMED THAT THE EVENT WAS STILL VALID AND HAD THEIR S/C CONFIGURED FOR R/T SUPPORT. REASON UNKNOWN AT THIS TIME AS TO WHY HST POCC DID NOT RECEIVE A DELET CONFIRMATION MSG FROM NCC NOR WHY THE ASSUMPTION WAS MADE THAT THE EVENT WAS STILL VALID.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

POCCs

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18927	**TDE**	**C1319MS**	**BRTS**	**960705**	**187/0406**	**0410**	**TLM**	**Y**	**MAR**	**UNK**

* **07/05/1312Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **BRTS**
INVESTIGATING ELEMENT: **WSGT/TNA**
TIME OF ANOMALY: **04:06:00 - SEE TEXT** DURATION: **SEE TEXT**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: NEGATIVE ACQUISITION ON BRTS 1319/1312 "ASCENSION" TRANSPONDERS. EVENTS SCHEDULED AT BOTH WSC AND STGT WERE UNSUCCESSFUL. ASCENSION PERSONNEL REPORTED A POWER OUTAGE BETWEEN 0145Z-0200Z. THE BELOW LISTED EVENTS WERE AFFECTED:

TDE C1319MS 040600-041000 MAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1319MS 041700-042100 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1319MS 050500-050900 MAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1319MS 054500-054900 SSAR2 640N 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1312MS 070500-070900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1312MS 071200-071600 MAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1319MS 081200-081600 SSAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1312MS 082700-083100 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1312MS 120100-120500 SSAR1 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1319MS 120600-121000 MAR3 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1312MS 123300-123700 MAR3 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1319MS 123800-124200 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1319MS 160600-161000 MAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1312MS 162600-163000 MAR4 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1312MS 200600-201000 MAR5 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDS C1319MS 201700-202100 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV

NOTE: THE ASCENSION PERSONNEL WILL CHECK THE TRANSPONDERS AT 188/1200Z AND THE NCC WILL CONTACT THEM AT 1700Z FOR A STATUS UPDATE. ALL C1319 AND C1312 HAVE BEEN DELETED UNTIL 188/1600Z.

* 07/05/1400Z(STGT DAILY OPS SUMMARY DOY 187)
BRTS 1319 12:38:00 - THIS EVENT, AND ALL SUBSEQUENT WSGT/STGT MA/SSA EVENTS, FOR BRTS 1319 AND BRTS 1312, FAILED TO ACQUIRE DUE TO A PROBLEM AT ACN. CORRECTIVE ACTION EXPECTED NO EARLIER THAN 188/1200Z. TTR 18927.

* 08/02/1100Z(TNA)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

THE POWER OUTAGE AT ASCENSION ON DAY 187/0145Z-0200Z IMPACTED BOTH BRTS TRANSPONDERS (1312 AND 1319) FROM FUNCTIONING PROPERLY. ON DAY 188 AT 1200Z, ASCENSION PERSONNEL STARTED TROUBLESHOOTING BOTH TRANSPONDRES AND GOT THE 1319 TRANSPONDER WORKING BY RESETTING AND ENTERING THE CORRECT TELEMETRY PARAMETERS. APPARENTLYK, THEY THOUGHT THE 1312 TRANSPONDER WAS FUNCTIONING PROPERLY AT THIS TIME, ALSO.

ALL 1312 AND 1319 EVENTS WERE DELETED UNTIL DAY 188 AT 1600Z. AFTER DAY 188 AT 1600Z, EVIDENTLY ALL 1319 EVENTS WERE SUCCESSFUL. HOWEVER, THE 1312 EVENTS WERE STILL EXPERIENCING NEGATIVE ACQUISITIONS (REFERENCE TTR #18929). ASCENSION PERSONNEL WERE NOTIFIED BY S. LESLIE AND BEGAN TROUBLESHOOTING THE 1312 TRANSPONDER AGAIN. THEY DISCOVERED THAT SEVERAL VOLTAGE TEST POINTS WERE OUT OF TOLERANCE ON THE 1312 TRANSPONDER. S. LESLIE ADVISED THE ASCENSION PERSONNEL TO SEND THE 1312 TRANSPONDER BACK TO GSFC FOR REPAIR. AT THIS TIME THIS 1312 TRANSPONDER IS STILL ENROUTE TO GSFC BRTS ENGINEERING FOR HARDWARE REPAIR. AS FAR AS I CAN TELL NO 1312 TRANSPONDER EVENTS HAVE BEEN SCHEDULED OR SUPPORTED SINCE THIS ANOMALY.

I WOULD RECOMMEND CHANGING THE PROBLEM TYPE TO H/W AND THE ELEMENT WITH PROBLEM TO ACN ON BOTH OF THESE TTR'S. IF THIS INFOMRATION IS SUFFICIENT BOTH TTR'S CAN BE CLOSED. UNLESS YOU WANT TO WAINT UNTIL THE 1312 TRANPONDER HAS BEEN REPAIRED AND IS SUCCESSFULLY SUPPORTED BY A TDRS AGAIN.

18929 TDS C1312MS BRTS 960706 188/1610 1614 TLM Y MAR UNK

* **07/06/1313Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **BRTS**
INVESTIGATING ELEMENT: **BRTS**
TIME OF ANOMALY: **16:10:00 - 16:14:00** DURATION: **14:00**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

PROBLEM DESCRIPTION: A SUSPECTED POWER OUTAGE RESULTED IN NEGATIVE ACQ ON C1312, HOWEVER BRTS POCC DID RECEIVE TDMS. THE ANOMALY IS UNDER INVESTIGATION BY ACSENSION SITE PERSONEL. THE BELOW LISTED EVENTS WERE AFFECTED:

TDS C1312MS 161000-161400 MAR3 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV
TDE C1312MS 201000-201400 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOV.

* 07/06/1401Z(STGT DAILY OPS SUMMARY DOY 188)
BRTS 1312 20:10:00 - THIS EVENT FAILED TO ACQUIRE DUE TO A TRANSPONDER PROBLEM AT ACN. TTR 18929.

* 08/02/1100Z(TNA)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

THE POWER OUTAGE AT ASCENSION ON DAY 187/0145Z-0200Z IMPACTED BOTH BRTS TRANSPONDERS (1312 AND 1319) FROM FUNCTIONING PROPERLY. ON DAY 188 AT 1200Z, ASCENSION PERSONNEL STARTED TROUBLESHOOTING BOTH TRANSPONDRES AND GOT THE 1319 TRANSPONDER WORKING BY RESETTING AND ENTERING THE CORRECT TELEMETRY PARAMETERS. APPARENTLYK, THEY THOUGHT THE 1312 TRANSPONDER WAS FUNCTIONING PROPERLY AT THIS TIME, ALSO.

ALL 1312 AND 1319 EVENTS WERE DELETED UNTIL DAY 188 AT 1600Z. AFTER DAY 188 AT 1600Z, EVIDENTLY ALL 1319 EVENTS WERE SUCCESSFUL. HOWEVER, THE 1312 EVENTS WERE STILL EXPERIENCING NEGATIVE ACQUISITIONS (REFERENCE TTR #18929). ASCENSION PERSONNEL WERE NOTIFIED BY S. LESLIE AND BEGAN TROUBLESHOOTING THE 1312 TRANSPONDER AGAIN. THEY DISCOVERED THAT SEVERAL VOLTAGE TEST POINTS WERE OUT OF TOLERANCE ON THE 1312 TRANSPONDER. S. LESLIE ADVISED THE ASCENSION PERSONNEL TO SEND THE 1312 TRANSPONDER BACK TO GSFC FOR REPAIR. AT THIS TIME THIS 1312 TRANSPONDER IS STILL ENROUTE TO GSFC BRTS ENGINEERING FOR HARDWARE REPAIR. AS FAR AS I CAN TELL NO 1312 TRANSPONDER EVENTS HAVE BEEN SCHEDULED OR SUPPORTED SINCE THIS ANOMALY.

I WOULD RECOMMEND CHANGING THE PROBLEM TYPE TO H/W AND THE ELEMENT WITH PROBLEM TO ACN ON BOTH OF THESE TTR'S. IF THIS INFOMRATION IS SUFFICIENT BOTH TTR'S CAN BE CLOSED. UNLESS YOU WANT TO WAINT UNTIL THE 1312 TRANPONDER HAS BEEN REPAIRED AND IS SUCCESSFULLY SUPPORTED BY A TDRS AGAIN.

18914 TDW A1398MS ERBS 960626 178/0052 0113 TLM N MAR OTH

* **06/26/1300Z(TTR)**
PROBLEM TYPE: **OTHER**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **ERBS**
INVESTIGATING ELEMENT: **ERBS**
TIME OF ANOMALY: **00:52:00 - 00:58:03** DURATION: **06:03**
SERVICE LOSS: **NONE** DATA LOSS: **05:33**

PROBLEM DESCRIPTION: 5 MINS 33 SECS 32KB DATA LOSS DUE (RECOV) TO A LATE ACQ. LATE ACQ WAS DUE TO A S/C MISCONFIGURATION. EVENT WAS SKED MODE-2 (NON-COHERENT), S/C WAS CONFIGURED MODE-1 (COHERENT), POCC CONFIGURED S/C TO MODE-2 (NON-COHERENT) AND THE EVENT LOCKED.

* 06/26/1200Z(STGT DAILY OPS SUMMARY DOY 178)
ERBS 00:52:00 - 5 MINS 33 SECS 32KB DATA LOSS (RECOVERABLE) ATTRIBUTED TO A SPACECRAFT MISCONFIGURATION. THE EVENT WAS SCHEDULED MODE-2, HOWEVER THE SPACECRAFT WAS CONFIGURED MODE-1. THE POCC CONFIGRED THE SPACECRAFT TO MODE-2 FOR LOCK. NO DR WRITTEN/TTR 18914.

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* **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)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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.

* 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.

18951 TDE J4377MS TOPEX 960727 209/1743 1808 TLM Y SAR UNK

*** 07/27/1306Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **1**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **TOPEX/TNA**
TIME OF ANOMALY: **17:45:36 - 17:46:17** DURATION: **00:41**
SERVICE LOSS: **00:41** DATA LOSS: **00:41**

PROBLEM DESCRIPTION: POCC REPORTED 41 SECS DEGRADED 512KB DATA DURING THE EVENT, REASON UNKNOWN. WSGT'S DQM'S AND EB/N0 READINGS INDICATED A DEGRADED SIGNAL STARTING AT 174536Z.

* 08/01/1206Z(SNAC)
POSSIBLE MI, WAITING TOPEX AND TNA'S RESPONSE.

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

*** 07/27/1306Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
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)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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.

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)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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.

18945 TDW A3782MS UARS 960724 206/0115 0131 TLM N SAR SW

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* **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)

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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.

* 06/13/1300Z(WSC DAILY OPS SUMMARY DOY 165)
WSGT - OPS PATH FAILURE:
DAY 164/1824Z. THE OPS PATH 2 BETWEEN WSGT AND NCC FAILED. TROUBLESHOOTING AT WSGT WAS INITIATED BY PERFORMING A LOCAL LOOPBACK IN THE VAULT WHICH WAS SUCCESSFUL. NEXT, WSGT REQUESTED AND RECEIVED A NASCOM LOOPBACK WHICH WAS UNSUCCESSFUL. WITH NCC CONCURRENCE, THE OPS PATH WAS RELEASED TO NASCOM WHO REQUESTED A P.N. GNERATOR TEST TO BE RUN. NASCOM RECEIVED WSGT DATA ON THE PRIME AND ALTERNATE CIRCUITS AND WSGT RECEIVED THE NASCOM PN PATTERN ERROR FREE. WSGT REQUESTED THAT THE CIRCUIT BE RETURN TO OPERATIONS AT WHICH TIME THE OPS PATH LOCKED-UP. AFTER APPROXIMATELY 15 MINUTES, THE OPS PATH FAILED AGAIN AND WSGT REQUESTED AN OPS PATH SWITCHOVER TO PATH 1. THE OPS PATH WAS RE-ESTABLISHED FOLLOWING THE OPS PATH SWITCHOVER FROM PATH 2 TO PATH 1 AT WHICH TIME NCC ALSO FAILED OVER TO THEIR ALTERNATE PATH. AFTER A THOROUGH CHECKOUT OF THE WSGT PATH 2, THE PATH WAS MADE PRIME WITH NCC CONCURRENCE AND THE OPS PATH LOCKED-UP. TTR 18901.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

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.
1448Z - LTAS ON NASA-1 ID GOOD. NO TROUBLE FOUND.
1558Z - LEMON ONE REPORTS FPQ-6 MDDF DATA IS STALE ON THE BACK UP CIRCUIT. TRIED ANOTHER SLEW AND MDDF IS STILL STALE.
1607Z - TRIED ANOTHER TIMEPLEX CHANNEL AND MDDF DATA IS STILL STALE.
1612Z - TRIED THE WALLOPS CIRCUIT AND MDDF IS STILL STALE.
1630Z - TECH CONTROL REPORTED GSFC HAD RELEASED OUR CIRCUIT ON 16 APRIL TO "ALL TEL" OFFICE IN NEW YORK TO INSTALL AN OPERATIONAL AMPLIFIER. NO DELAY MEASUREMENT WAS MADE AFTER THE INSTALLATION.
1653Z - CAPE & GSFC TECH CONTROL SPLIT THE PRIME MDDF FROM BDA AND PUT THE DATA ON TWO CIRCUITS GOING FROM GSFC TO THE CAPE.
1658Z - RE-RAN THE SLEW AND IT WAS GOOD. BOTH CIRCUITS HAVE 400 MILLISECONDS DELAY.
2040Z - LOST DATA ON THE PRIME CIRCUIT. GSFC HAS ALSO LOST IT.
2054Z - PRIME LTAS IS GOOD. ROCC COMM CROSS PATCHED THE PRIME AND BACKUP AT ROCC COMM AND NOW BOTH CIRCUITS ARE GOOD.

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

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

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

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

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

* 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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

OPEN STS TTRS
AS OF: 08/06/96

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: 08/06/96

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
18841	DR#31801	04/11/96	TOPEX	SYS	STGT	1	A
18587	DR#29656	10/23/95	STS-73	FW	STGT	4	A
18798	DR#31424	03/12/96	STS	HW	STGT	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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

GRO REMOTE TERMINAL SYSTEM

(GRTS) REPORT

SEC 1: PAGE 56 SEC 2: PAGES 57 - 58

JULY 31 THRU AUGUST 06, 1996.
JULIAN DATES: 213 THRU 219 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

S E C T I O N 1 (GRTS)

NO REPORTABLE ANOMALIES FOR DOY 213 THRU 219

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

SECTION 2 (GRTS)

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

* **12/20/11202Z(TTR)**
PROBLEM TYPE: **SOFTWARE.**
DR#**30474.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **3.**
ELEMENT W/P: **RGRT.**
INVESTIGATING ELEMENT: **RGRT.**
TIME OF ANOMALY: **03:18:53 - 03:21:47.** DURATION: **02:54.**
SERVICE LOSS: **02:54.** DATA LOSS: **02:54.**

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

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

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

* 26/1210Z(POCC)
2 MINS 54 SECS R/T 32KB DATA LOSS, REASON UNKNOWN.

* 26/1301Z(STGT DAILY OPS SUMMARY DOY 354)
GRO/GRTS 03:00:00 - 2 MINS 54 SECS 32KB NON-RECOVERRABLE DATA LOSS, REASON UNKNOWN. NOMINAL SUPPORT UNTIL 0318Z, WHEN THE POCC REPORTED LOSING DATA. BOTH TURFTS-A (SSA) AND B (MA) SHOWED GOOD PN AND CARRIER LOCK; HOWEVER, TURFTS-B, CONNECTED THROUGH COMM PROC-B HAD NO BIT SYNC LOCK. RECONFIGURED BASE-BAND SWITCH TO COMM PROC-A AND GRO REPORTED GOOD LOCK AT 0321Z. TTR 18664/DR 30474

* 27/1200Z(WSC/GTE)
THIS IS A KNOWN SOFTWARE PROBLEM WITH THE TURFTS. IF A GLITCH IN THE DOWNLINK OCCURS, THE TURFTS WILL FLAG AN OUT-OF-LOCK CONDITION ON THE BIT SYNC AND DECODER EVENT THOUGH THE RECEIVED POWER AND EB/N0 NUMBERS ARE GOOD AND IT HAS CARRIER AND PN CODE LOCKED. A RE-ACQ WILL CLEAR THE FAULT.

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 15/1218Z(SNAC)
WAITING TO FIND OUT IF THE SW WILL BE UPDATED FOR THE TURFTS. ALSO PER THE TNA THEIRS NO PLAN AT THIS TIME TO MAKE THIS A GENERIC TTR.

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

18864 CAN TDRS-3 960509 130/0225 0550 TLM N ?? HW

*** 05/09/1400Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR#. AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **4**
ELEMENT W/P: **CAN**
INVESTIGATING ELEMENT: **CAN**
TIME OF ANOMALY: **02:36:00 - 02:40:00** DURATION: **04:00**
SERVICE LOSS: **04:00** DATA LOSS: **NONE**

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