STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

SECTION 1 (REG)

19015	TDE	A6951MS	EUVE	961002	276/1530	1542	TLM	N	MA	UNK

* **10/02/1200Z(TTR)**

PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **2**
ELEMENT W/P: **EUVE**
INVESTIGATING ELEMENT: **EUVE**
TIME OF ANOMALY: **15:30:00 - 15:42:30** DURATION: **12:30**
SERVICE LOSS: **12:30** DATA LOSS: **12:30**

PROBLEM DESCRIPTION: THE POCC DID NOT RECEIVE THEIR Q CHANNEL TR DUMP DATA DURING THIS SCHEDULED NON-COHERENT EVENT, (12 MINS 30 SECS 32KB DATA LOSS RECOV). DATA TRANSFER WAS VERIFIED BY NASCOM DURING SUPPORT. POCC SUSPECTS POSSIBLE IN-HOUSE PROBLEM.

NOTE: POST-PASS MS-426 LINE CHECKOUT WAS NOMINAL.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19018	**WPS**	**M8731MS**	**MIR**	**961008**	**282/0652**	**0702**	**TLM**	**N**	**26M**	**CP**

* **10/08/1201Z(TTR)**
PROBLEM TYPE: **COMM PROBLEM**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **MIR**
INVESTIGATING ELEMENT: **WPS**
TIME OF ANOMALY: **06:26:00 - 06:52:00** DURATION: **26:00**
SERVICE LOSS: **26:00** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: 26 MINS SERVICE LOSS, AS A RESULT OF A LOOSE PATCH COORD MOSCOW VOICE TRANSMISSION DID NOT ENABLE U/L TRANSCEIVER. ALL EQUIPMENT WAS FOUND TO BE CONFIGURED CORRECTLY. POST PASS INVESTIGATION REVEALED A SINGLE PATCH CABLE ON THE 59502 LINE MINIMALLY RETRACTED CAUSING LOSS OF VOICE LEVEL TO THE AUTO TRANSMITTER KEY DEVICE. WHEN PATCH CABLE WAS FIRMLY RESEATED, ALL FUNCTIONS PERFORMED NOMINALLY.

* 08/0814Z(WPS)
PRT WPS
1. N/A
2. 8731 MIR 961008 0626Z
3. INFORMATION
4. AT AOS, MOSCOW VOICE TRANSMISSION DID NOT ENABLE U/L TRANSCEIVER. ALL EQUIPMENT WAS FOUND TO BE CONFIGURED CORRECTLY. POST PASS INVESTIGATION REVEALED A SINGLE PATCH CABLE ON THE 5902 LINE MINIMALLY RETRACTED CAUSING LOSS OF VOICE LEVEL TO THE AUTO TRANSMITTER KEY DEVICE. WHEN PATCH CABLE WAS FIRMLY RESEATED, ALL FUNCTIONS PERFORMED NOMINALLY.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

S E C T I O N 2 (REG)

STGT

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

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

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

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

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

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

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

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

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

* **06/21/1300Z(TTR)**
PROBLEM TYPE: **SOFTWARE.**
DR#**28081.** AR PRIORITY: TTR PRIORITY LEVEL: **2.** IMPACT LEVEL: **1.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **14:49:47 - 14:59:00.** DURATION: **10:47**
SERVICE LOSS: **08:04** DATA LOSS: **06:04.**

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

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

* 27/1200Z(POCC)
6 MINS 4 SECS 4KB DATA LOSS NON-RECOVERABLE DUE TO STGT NOT SHOWING LINES CONFIGURED. 2 MINS 4KB DATA INTERMITTANT HITS NO DATA LOSS.

* 27/1301Z(STGT DAILY OPS SUMMARY DOY 172)
HST 14:49:47 - 6 MINS 4 SECS 4KBPS DATA LOSS (3 MINS 1 SEC RECOVERABLE) DUE TO A DIS SOFTWARE ANOMALY. TTR 18426/DR 28081.

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

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18444	**TDW**	**M2071LS**	**STS-71**	**950703**	**184/0558**	**0630**	**TLM**	**N**	**SA**	**FW**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TI #4 - MEETING TO BE HELD TO DISCUSS INCREASING THE CAL EIRP:
A MEETING WILL BE HELD TO DISCUSS OUR PLANS TO INCREASE THE MA CAL EIRP OUT OF THE ROOFTOP EMITTERS TO ABOUT 13 DBW. THIS SHOULD PROVIDE SUFFICIENT MARGIN. MORE TO COME AFTER THE MEETING

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

TI #5 - MEETING:
A MEETING WAS HELD TO DISCUSS THE MA CAL EIRP INCREASE. AS A SHORT TERM "FIX" NASA AGREED TO A CHANGE, HOWEVER, WE NEED TO LOOK INTO THE ROOT CAUSE AS TIME PERMITS. AS A SIDE NOTE, THE IR GURU'S WILL MAKE CHANGES TO THE IR F/W FOR TYING THE REF CNO TO FFT THRESHOLD FOR CAL MODE. MORE TO COME.

TI #6 - GATHERED MORE DATA ON ANOTHER FADE ON 9/20/95:
GATHERED LOTS OF DATA ON A RAIN "FADE" WHICH OCCURRED ON SEPT 20 1995 AT 2000Z.

TI #7 - ADDITIONAL INFO:
TO BRING THE "INCREASED MA CAL EIRP" TO FRUTION, THE FOLLOWING ACTIONS NEED TO BE PERFORMED:
1. MAKE UP LABELS FOR THE SGLT-1 AND 2 MA CAL TX RACKS TO SHOW THE NOMINAL POWER LEVEL FOR INPUT TO THE CABLES LEADING TO THE ROOF. THESE VALUES ARE BASED ON THE LOCATION OF THE RACK AND THE CABLE LOSS TO THE ROOF.
2. MEASURE EACH CAL TX AND DERIVE A FRONT PANEL TABLE THAT SHOWS A "LOW", "MIDPOINT", AND "HIGH" VALUE FOR THE POTENTIOMETER SETTING. THIS WILL BE USED BY THE TECHS TO SET THE CAL TX POWER VIA FRONT PANEL.
3. UPDATE THE "CAL SOURCE TX POWER" HMD PM.
4. UPDATE ANY DOCUMENTS THAT REFERENCE THE ACTUAL CAL TX POWER LEVELS.

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

TI #10 - STGT MA CAL EIRP INCREASED.
ON DAY 348 (DEC 14, 1995) THE STGT CAL EIRP WAS INCREASED TO 12.4 DBW ON BOTH SGLT'S. THIS WILL IMPROVE THE OVERALL CAL PERFORMANCE DURING HEAVY RAIN AT THE SITE. MORE INVESTIGATION INTO THE EXACT CAUSE OF THE CAL C/N DEGRADATION WILL CONTINUE, BUT BASED ON DATA ALREADY COLLECTED, THE CAUSE MAY BE MORE RELATED TO DEPOLARIZATION OF THE SGL DOWNLINK THAN AN ACTUAL SIGNAL FADE.

TI #11 - TEST PLANS:
IN ORDER TO TEST OUT THE "DEPOLARIZATION" THEORY, I WILL ATTEMPT TO COORDINATE A "NO-USER" WINDOW TO RECREATE THE ANOMALY. MORE TO COME.

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

*** 08/19/1302Z(TTR)**
PROBLEM TYPE: **OPERATIONAL.**
DR#**28988** AR PRIORITY: TTR PRIORITY LEVEL: **1.** IMPACT LEVEL: **1.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **00:17:00 - 00:21:00.** DURATION: **04:00**
SERVICE LOSS: **03:30.** DATA LOSS: **03:30.**

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

* 22/1201Z(STGT DAILY OPS SUMMARY DOY 231)
BRTS 00:17:00 - 3 MINS 30 SECS 640 BPS DATA LOSS DECLARED, REASON UNKNOWN. THE EVENT LOCKED ON TIME AND ALL INDICATIONS LOOKED NORMAL AT STGT. POST EVENT, THE BRTS POCC REPORTED RECEIVING TRACKING DATA BUT NO TELEMETRY DATA. A RERUN OF THE EVENT WAS SCHEDCULED AND THE POCC REPORTED RECEIVING BOTH TRACKING AND TELEMETRY DATA. TTR 18513/DR 28988.

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

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

* **11/05/1305Z(TTR)**
PROBLEM TYPE: **PROCEDURAL.**
DR#**29860.** AR PRIORITY: TTR PRIORITY LEVEL: **4.** IMPACT LEVEL: **1.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **20:26:00 - 20:36:00.** DURATION: **10:00**
SERVICE LOSS: **SEE TEXT.** DATA LOSS: **SEE TEXT.**

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

* 07/1201Z(WSC DISCREPANCY REPROT)
WHILE PERFORMING PROCEDURE 4.29.6.2 FOR S-K FREQUENCY SWITCHOVER ON TDRS7 AND SGLT3 ALL TDRS7 COMMANDS WERE IN PROCEDURE UNTIL STEP 69 THE LAST STEP REFERS TO PARAGRAPH 4.21.6.3 PART OF ETO RECOVERY FOR S-BAND PAYLOAD REACTIVATION IN THIS SECTION NO TDRS7 COMMANDS WERE CALLED OUT ONLY TDRS 1-6 COMMANDS. REFERED TO S0.03 13.3.6.3 FOR S-BAND PAYLOAD ACTIVATION ALSO NO TDRS7 COMMANDS CHECKED SEVERAL COPIES NO JOY HAD TO ASK NCC TO RESCHEDULE TO BRTS EVENTS ON TDRS 7 WHILE WE CONTACTED TA'S FOR ASSISTANCE.

* 07/1202Z(STGT DAILY OPS SUMMARY DOY 309)
C1311 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO PROCEDURE PROBLEM. TTR 18610/DR 29860

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

NO TDRS-7 COMMANDS FOR PAYLOAD ACTIVATION:
DAY 309/2010Z. WHILE PERFORMING VOLUME 5 PROCEDURE 4.29.6.2, S TO K-BAND FREQUENCY SWITCHOVER, THE LAST STEP WAS REACHED WHICH REFERS TO PROCEDURE 4.31.6.3 TO COMPLETE THE S-BAND PAYLOAD ACTIVATION. ALL PROCEDURES USED, TO THAT POINT, HAD THE REQUIRED TDRS-7 COMMANDS. THERE WAS SUFFICIENT TIME TO PERFORM THE PROCEDURE, HAD THE PROCEDURE BEEN COMPLETE. BY THE TIME THE PROPER COMMANDS WERE FOUND, TWO BRTS EVENTS WERE MISSED, TOTALING 7 MINS OF DATA LOSS. TTR 18610. DR 29860.

18652 TDW C1310MS BRTS 951213 347/1820 1824 TLM Y SA OPS

*** 12/13/1201Z(TTR)**
PROBLEM TYPE: **OPERATIONAL.**
DR#**30417.** AR PRIORITY: TTR PRIORITY LEVEL: **3.** IMPACT LEVEL: **1.**
ELEMENT W/P: **STGT.**
INVESTIGATING ELEMENT: **STGT.**
TIME OF ANOMALY: **18:20:00 - 18:29:00.** DURATION: **SEE TEXT.**
SERVICE LOSS: **SEE TEXT.** DATA LOSS: **SEE TEXT.**

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

*** 04/01/1206Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **31669.** AR PRIORITY: TTR PRIORITY LEVEL: **2.** IMPACT LEVEL: **2.**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **04:40:00 - 04:44:00.** DURATION: **04:00.**
SERVICE LOSS: **03:30.** DATA LOSS: **NONE.**

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

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

18836 TDE C1310MS BRTS 960409 100/1601 1605 TLM Y SSAR SW

*** 04/09/1200Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **31780** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **2**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **16:01:00 - 16:06:00** DURATION: **5:00**
SERVICE LOSS: **3:30** DATA LOSS: **NONE**

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

* 16/1204Z(STGT DAILY OPS SUMMARY DOY 100)
BRTS 1310 16:01:00 - 3 MINS 30 SECS SERVICE LOSS DUE TO DIS STATUS AND COMMAND FAILURE. DIS FAILOVER WAS PERFORMED AND 1310 EVENT RE-RUN WAS NOMINAL. TTR 18836/DR 31780.

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

* **04/30/1301Z(TTR)**
PROBLEM TYPE: **SOFTWARE**
DR# **31973** AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **15:29:00 - 16:03:24** DURATION: **34:24**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **NONE**

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

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

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

TOPEX 15:50:00 - 13 MINS 24 SECS SERVICE LOSS DUE TO NO ODM CAPABILITY FROM AOS TO APPROXIMATELY 1603Z DUE TO REASON UNKNOWN.

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

* 05/09/1205Z(STGT TI #1)
WE ENTERED AN MA EET SHO ON SGLT-2 TO ATTEMPT TO FAULT ISOLATE THE SOURCE OF THE RDD 1/2 BIT DELAY FOR DR 31888. THERE WERE NO OTHER SGLT-2 MA USERS ACTIVE AT EET SHO START. DURING THE COURSE OF THE EET SHO, THREE OTHER SGLT-2 MA USERS STARTED SERVICES. TWO OF THE THREE USERS REPORTED ODM PROBLEMS. OTHER SN USERS WERE GETTING ODM'S OK. WHEN THE EET SHO WAS CANCELLED, THE TWO USERS REPORTED GOOD ODM'S. IT APPEARED THE EET SHO HAD CAUSED THE ANOMALY OR THE ANOMALY HAD COINCIDENTLY CELARED WHEN THE EET SHO WAS CANCELLED. DELOGS FROM THE EXEC AND DIS INDICATE ODM'S WERE LEAVING STGT OK. WHILE LOOKING AT THE DELOGGED ODM'S, MARY BROCK NOTICED THE EET SHO HAD A LOGICAL MA RETURN LINK ID OF 08.. SHE SAID THE RANG EHAD BEEN REDUCED FROM 1-10 TO 1-5 A COUPLE YEARS AGO. WE DID FIND REFERENCE TO THIS IN THE PHASE II SPEC, BUT YOU WOULDN'T KNOW THE RANGE WAS 1-5 FROM OUR SOFTWARE INTERFACE. ANYWAY, I TRIED TO RECREATE THE ANOMALY BY ASKING NCC TO SCHEDULE A BRTS DURING A NO MA USER WINDOW AND ENTEREING THE EET SHO. ODM PROCESSING AT THE NCC WAS GOOD. I FORGOT TO MENTION

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

ABOVE THAT THE NCC WAS ALSO UNABLE TO PROCESS ODM'S FOR THE TWO USERS HAVING PROBLEMS. WE HAVE SINCE RUN THE EET SHO WITH ON ORBIT USERS WITHOUT PROBLEM, ALTHOUGH I DID CHANGE THE LINK ID TO 1-5. SO, DELOGS SHOW NO PROBLEM HERE AND ATTEMPTS TO DUPLICATE THE PROBLEM FAILED, THERES NOTHING TO SAY IT WAS THE LINK ID IN THE EET SHO. NO PROBLEM FOUND/UNABLE TO DUPLICATE. PLEASE CLOSE, AS REASON UNKNOWN.

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

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

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

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

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

* 05/13/1200Z(STGT DAILY OPS SUMMARY DOY 130)
HST 12:05:29 - 17 MINS 36 SECS SERVICE LOSS
XTE 12:15:00 - 12 MINS 44 SECS SERVICE LOSS
GRO 12:20:00 - 7 MINS 44 SECS SERVICE LOSS
THE ABOVE LOSSES WERE DUE TO NO ODM/GCMR CAPABILITY CAUSED BY STGT OPERATOR ERROR RESULTING IN THE OPS PATH BEING MISCONFIGURED. TTR 18865/DR 32

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

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

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

***M** **05/10/1302Z(TTR)**
PROBLEM TYPE: **SYSTEM**
DR# **32030** AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **1**
ELEMENT W/P: **STGT**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **00:00:00 - 23:59:59** DURATION:
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

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

TDS C1310MS 082100 - 082400 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE
TDS C1310MS 085000 - 085400 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE
TDS C1310MS 220500 - 221100 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE
TDS C1311MS 223500 - 223900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

* 05/14/1200Z(STGT DAILY OPS SUMMARY DOY 131)
BRTS 1310 08:21:00 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO A NEGATIVE ACQUISITION, REASON UNKNOWN. NCC RESCHEDULED A 1310 BRTS SHO WITH THE SAME RESULTS. A LOCALLY ENTERED BRTS 1311 ALSO DID NOT LOCK BUT A SUBSEQUENT LOCAL BRTS 1319 SHOW WAS NOMINAL. ALTHOUGH NOTHING COULD BE FOUND WRONG AT STGT, DR 32030 WAS WRITTEN.

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

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

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

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

* **05/12/1307Z(TTR)**
PROBLEM TYPE: **SYSTEM**
DR# **32047** AR PRIORITY: TTR PRIORITY LEVEL: **3** IMPACT LEVEL: **1**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **STGT**
TIME OF ANOMALY: **04:21:00 - 04:25:00** DURATION: **SEE TEXT**
SERVICE LOSS: **SEE TEXT** DATA LOSS: **SEE TEXT**

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

TDS C1312MS 081500 - 081900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE
TDS C1311MS 202500 - 202900 SSAR2 640B 3 MINS 30 SECS SVC/DATA LOSS NON-RECOVERABLE

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

* 05/14/1207Z(STGT DAILY OPS SUMMARY DOY 133)
BRTS 1312 08:15:00 - 3 MINS 30 SECS 640 BPS NON-RECOVERABLE DATA LOSS DUE TO A FAILURE TO ACQUIRE. NCC SCHEDULED A SECOND 1312 BRTS EVENT AT 0836Z WHICH FAILED TO ACQUIRE. TTR 18872 (WILL BE USED FOR TDRS-1/BRTS ACQUISITION ANOMALIES) DR 32047.

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

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

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

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

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

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

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

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

WSGT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

* 09/26/1208Z(SNAC)
WAITING OE REPORT FROM WSGT.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
18952	TDW	J4377MS	TOPEX	960729	211/1145	1215	TLM	Y	MAR	FW

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

18993	**TDW**	**A6581MS**	**XTE**	**960915**	**259/2328**	**2348**	**TLM**	**N**	**SA**	**OPR**

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

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

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

* 09/26/1211Z(SNAC)
WSGT IS UNABLE TO TROUBLE SHOOT A PROBLEM UNLESS THEY ARE NOTIFIED THAT A PROBLEM EXISTS. THE FOLLOWING DATA LOSS ASSESSMENT IS PROPOSED PENDING VERIFICATION FROM WSGT AND XTE.

23:28:00 - 23:33:40 5:40 NOMINAL - NO DATA LOSS
23;33:40 - 23:41:05 7:25 XTE NOT RECEIVING DATA STGT NOT NOTIFIED. RECOMMED ONLY ASSESSING 2 MINS D/L TO WSGT BECAUSE OF LATE NOTIFICATION BY THE POCC. THE REMAINING 5:25 D/L CHARGED TO XTE.
23:41:05 - 23:45:10 4:05 4:05 D/L CHANGED TO WSGT FOR ITU DOWNTIME.
23:45:10 - 23:48:00 2:50 NOMINAL - NO DATA LOSS

TOTAL WSGT DATA LOSS: 6:05
TOTAL XTE DATA LOSS : 5:25

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

NCC

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

NASCOM

19010 JSC M2079MS STS-79 960925 269/???? ???? TLM N ?? CP

* 09/25/1202Z(TTR)
PROBLEM TYPE: **COMM PROBLEM**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **NASCOM**
TIME OF ANOMALY: **14:24:00 - 14:33:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

PROBLEM DESCRIPTION: DURING THE L-1 INTERFACE CHECKS FOR STS-79 JSC BEGAN EXPERIENCING DATA LOSS WHEN MIL, GDS, AND DFRC ENABLED DATA SIMULTANEOUSLY. PROBLEM CLEARED WHEN MIL DISABLED DATA. NASCOM TROUBLESHOOTING DETERMINED CAUSE OF PROBLEM TO BE OVERFLOW OF MDM/SATELLITE CHANNEL TO JSC. AT THE TIME OF THE OVERFLOW, SUNNYVALE WAS USING 1024/KB/S OF BANDWIDTH VIA THE PTP CIRCUIT.

NOTE: NO EVENTS OF ANY KIND WERE SCHEDULED THEREFORE NO IMPACT TO SUPPORTS. THIS TTR IS FOR INFO PURPOSES.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

POCCs

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)
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.

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

19000	**TDE**	**J4377MS**	**TOPEX**	**960919**	**263/1133**	**1158**	**TLM**	**N**	**SA**	**MAS**

***M 09/19/1200Z(TTR)**
PROBLEM TYPE: **SPACECRAFT ANOMALY**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **1** IMPACT LEVEL: **1**
ELEMENT W/P: **TOPEX**
INVESTIGATING ELEMENT: **TOPEX**
TIME OF ANOMALY: **11:33:00 - 23:59:00** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **NONE**

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

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

* 09/26/1200Z(SNAC)
TOPEX IS OPERATING THE SOLAR ARRAY IN BACKUP MODE PENDING RESOLUTION AND SWITCHING TO "B" SIDE SYSTEM AS OF 9/26.

* 09/26/1300Z(SNAC)
THIS TTR WILL SERVE AS A MASTER TTR FOR TOPEX SPACECRAFT ANOMALY. ASSOICATED TTR'S ARE 19002, 19003, 19004, 19006, AND 19009.

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

JPL

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

FDF

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

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

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

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

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

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

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

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

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

	STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL
19014	BDA	M2079MS	STS-79	960925	269/0319	0326	TLM	Y	TT	HW

* **09/25/1203Z(TTR)**
PROBLEM TYPE: **HARDWARE**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **4** IMPACT LEVEL: **4**
ELEMENT W/P: **BDA**
INVESTIGATING ELEMENT: **BDA**
TIME OF ANOMALY: **03:19:36 - UNKNOWN** DURATION: **SEE TEXT**
SERVICE LOSS: **NONE** DATA LOSS: **07:00**

PROBLEM DESCRIPTION: AT AOS OF ORBIT NUMBER 139 ON THE OBITER, THE BERMUDA RADAR RECEIVER WOULD NOT AUTOTRACK THE SHUTTTLE. THE PROBLEM WAS TRACED TO A STATION INTERCOM UNIT CAUSING INTERFERENCE WITH THE IF RECEIVER. THE INTERCOM, (LOCATED IN THE SAME AREA AS THE IF RECEIVER), HAS BEEN DISCONNECTED. TWO MINUTES OF VALID TRACKING DATA WERE SENT NEAR THE END OF THE PASS AND SEVEN MINUTES OF TRACKING DATA WAS LOST ON ORBIT 139. REF BDA PRT DTG 25/1045Z AND ESR DRG 25/0452Z.

* 25/1045Z(BDA)
PRT BDA
1. RDAR:01-T1
2. M2079LS, STS-79, 960925, AOS 031936Z
3. EQUIPMENT FAILURE
4. EQUIPMENT AFFECTED: BDA RADAR RECEIVER
COMMENTS: AT AOS OF ORBIT NUMBER 139 ON THE OBITER, THE BERMUDA RADAR RECEIVER WOULD NOT AUTOTRACK THE SHUTTTLE. THE PROBLEM WAS TRACED TO A STATION INTERCOM UNIT CAUSING INTERFERENCE WITH THE IF RECEIVER. THE INTERCOM, (LOCATED IN THE SAME AREA AS THE IF RECEIVER), HAS BEEN DISCONNECTED. TWO MINUTES OF VALID TRACKING DATA WERE SENT NEAR THE END OF THE PASS AND SEVEN MINUTES OF TRACKING DATA WAS LOST ON ORBIT 139.

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

* 25/0452Z(BDA)
ESR BDA 065
RDAR:01-T1 RY09161640 09271200 1PEOA M2079LS, DISCONECTED INTRCOM IN RCVR RACK TO FIX RCVR PROB. OPERATING AT 1.9 MEGA WATT

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

OPEN STS TTRS
AS OF: 10/08/96

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: 10/08/96

TTR NO.	DR. NO	DATE OPENED	USER	PROBLEM TYPE	ELEMENT W/ PROBLEM	LEVEL	CAT.
18795	DR#31412	03/11/96	UARS	HW	STGT	2	A
18674	DR#30551	01/01/96	XTE	SYS	STGT	4	A
18675	DR#30551	01/01/96	XTE	SYS	STGT	4	A
18576	DR#29625	10/20/95	STS-73	FW	STGT	4	A
18587	DR#29656	10/23/95	STS-73	FW	STGT	4	A
18798	DR#31424	03/12/96	STS	HW	STGT	4	A
18939	DR#32601	07/16/96	ISS	SCA	WSGT	4	A
18545	DR#29328	09/20/96	BRTS	SW	STGT	3	A

LEGEND:

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

STA SUPIDEN USER YRMODA START STOP TYP L SVC EVAL

GRO REMOTE TERMINAL SYSTEM

(GRTS) REPORT

SEC 1: PAGE 48 SEC 2: PAGE 49

OCTOBER 02THRU OCTOBER 08, 1996.
JULIAN DATES: 276 THRU 282 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 276- 282

STA	SUPIDEN	USER	YRMODA	START	STOP	TYP	L	SVC	EVAL

SECTION 2 (GRTS)

18994	TDZ	M2079LS	STS-79	960916	260/0931	0933	TLM	Y	SA	UNK

* **09/16/1302Z(TTR)**
PROBLEM TYPE: **UNKNOWN**
DR# AR PRIORITY: TTR PRIORITY LEVEL: **2** IMPACT LEVEL: **3**
ELEMENT W/P: **UNKNOWN**
INVESTIGATING ELEMENT: **RGRT**
TIME OF ANOMALY: **09:31:38 - 09:33:40** DURATION: **02:02**
SERVICE LOSS: **02:02** DATA LOSS: **02:02**

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

* 09/26/1223Z(RGRT)
THE SIGNAL RECEIVED BY RGRT WAS BELOW THE RECEIVER THRESHOLD.