FLIGHT READINESS STATEMENT
STS-73/ET-73 AND STS-74/ET-74
EXTERNAL TANK DELTA PROJECT REVIEW

EXTERNAL TANKS ET-73 AND ET-74, AS IDENTIFIED IN THE EXTERNAL TANK PROJECT DELTA FLIGHT READINESS REVIEW DATED AUGUST 24, 1995, ARE CONSIDERED READY TO SUPPORT FLIGHT UPON ACCEPTABLE DISPOSITION OF OPEN WORK AND/OR OPEN ACTIONS.

Michael D. Martin
for J. RANDALL/EB01

M. PESSIN/EE31

Dennis E. Hall
for P. SCHUERER/EH01

M. D. Smith
for J. EHL/CR01

J. STRICKLAND/EL01

M. D. Smith
M. SMILES/CR70

for W. R. Humphries
J. MCCARTY/EP01

J. BLAIR/ED01

Parker V. Counts
P. V. COUNTS/SA31, CHAIRMAN

August 24, 1995

Delta ET Project

Space Shuttle
External Tank

STS-73/ET-73
STS-74/ET-74
Flight Readiness Review

LOCKHEED MARTIN

Manned Space Systems

ET73/74ΔP.8/95.S1.1

Agenda

- ***Overview*** — ***Ben Ferrell***
- ***Prior Mission Performance Summary***
- ***Mission/External Tank Highlights***
- ***Changes***
- ***Senior Management Review NCDs: None***
- SRM&QA Assessment — Frank Ramsey
- KSC Processing — Bill Brandow
- Verification/Certification — Ben Ferrell
- Mission Unique Assessment
- Readiness Statement
- Appendices
  - A: Minor Changes
  - B: SRM&QA Assessment
  - C: KSC Processing
  - D: Previously reviewed material

Overview

- Review covers changes/differences/non-conformances not previously flown and/or reviewed

- This Delta review for STS-73/ET-73 and STS-74/ET-74 includes:
  - Prior mission performance summary
  - Items not previously addressed at the Block 12 ET Project FRR
  - Items specific to mission STS-73 and STS-74
  - Details of previously addressed items are available in appendix D

- **FRR Series**

	STS-73/ET-73	STS-74/ET-74
- Block 12 ET Project (ETs 71-75)	5/3/95	5/3/95
- Mission Specific Reviews		
• ET/SRB Mate	7/31/95	8/23/95
• Delta ET Project (Baseline)	8/24/95	8/24/95
• Associate Administrator FRR	9/7/95	10/12/95
• Mission Management Team (L-2 Day)	9/19/95	10/24/95

Mission STS-70/ET-71 Performance Summary

Launch 7/13/95

System	Performance
OMRSD/LCC	• OMRSD - No violations • LCC for ET RSS receiver signal strength violated when signal strength read less than 2.1 VDC - Preplanned contingency procedure initiated during T-31 sec hold - Confirmed anomaly attributed to multi-path signal during GO2 vent hood retraction - No waiver required - Launch count resumed
Instrumentation	Nominal
MPS	Nominal - First flight of a SSME Block I engine
Hazardous Gas	Nominal
TPS	Nominal
ET Disposal	No issues
Orbiter Tile Damage	Lower surface, below average • >1" = 5 • Total = 81
Post Separation Photos	No issues

Mission/External Tank Highlights

Mission	STS-73	STS-74
• **Launch**	9/21/95	10/26/95
- Window	0931-1357 EDT	TBD
- Pad	B	A
- Orbiter	Columbia (OV-102)	Atlantis (OV-104)
- Orbital inclination	39.0° - Insertion at 150NM	51.6° - Insertion at 160NM
- ET photo coverage	• Umbilical well cameras • Crew photos from cockpit window	• Umbilical well cameras • Crew photos from cockpit window
• **Primary payload**	USML-2 (United States Microgravity Laboratory)	Russian DM (Docking Module) deployment
• **Landing**	10/7/95	11/3/95
- Time	0931 EDT	TBD
- Location	KSC	KSC

External Tank	ET-73	ET-74
• DD250 Acceptance	10/4/94	11/17/94
• Shipped to launch site	4/6/95	6/1/95

Changes/SMR NCDs - List

Description

- **Previously presented at Block 12 FRR, 5/3/95**
  - **ET-73:** None
  - **ET-74:** None
- **New item since Block 12 FRR**
  - Minor documentation change for periodic CIL update (B01788T)

Agenda

• Overview	Ben Ferrell
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SRM&QA Assessment

as of 8/17/95

Item	Status	
	STS-73/ET-73	STS-74/ET-74
• **Alerts**	None	None
• **MRB Assessment**	Complete - No issues/no impact to hazard controls	
• **Hazard Assessment**	Complete - All hazard reports were re-assessed and hazard controls verified	
• **Corrective Action Problem Summary (CAPS)** - GO2 forward pressure line leak test failure at vendor (P-078)	• Deferred - Pending closure at MSFC • Previously presented at Delta ET Project 7/7/95	

Agenda

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KSC Processing - Status

as of 8/17/95

- **Discrepancy Reports (DRs)/Problem Reports (PRs) Review**
  - All PR/MRB * discrepancies/dispositions similar to previously flown vehicles and are within existing database
- **Limited Life Component/ET Status ***
  - All within required life through scheduled launch date plus 90 days
- **Changes ***

	STS-73/ET-73	STS-74/ET-74
- Mod kits	3	2
- DC&R (Discrepancy Check and Report)	1	1
- Bldg 45	1	1
- FEC (Field Engineering Change)	0	1
- Software	0	0
• SIM Load	9/6/95	9/26/95
• SIM Launch	9/1/95	10/12/95
• **OMRSD Exceptions/Waivers**	0	0

* Included in Appendix C

Agenda

- Overview — Ben Ferrell
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- KSC Processing — Bill Brandow
- ***Verification/Certification*** — ***Ben Ferrell***
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Verification/Certification

as of 8/17/95

Item	Status
• **NSTS 07700, Volume X Baseline** - Revision L, Change 211	No constraints
• **Certification documentation** - Hardware Certification Sheets (HCS) - Certificates of Qualification (COQ)	Complete - No issues
• **Waivers/Deviations**	Complete - No issues

Mission Unique Assessment

as of 8/17/95

Category/Item	STS-73/ET-73	STS-74/ET-74
• **Review of MRB actions using updated loads**	Complete - No issues	Complete - No issues
• **MPS Preflight Prediction Package**	ECD 9/11/95	ECD 10/16/95

Agenda

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- Verification/Certification — Ben Ferrell
- Mission Unique Assessment
- ***Readiness Statement***
- Appendices
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  - C: KSC Processing
  - D: Previously reviewed material

ET-73 Readiness Statement

The External Tank, ET-73 is hereby certified and ready for STS-73 flight pending completion/closure of open and planned work

Dennis R. Deel
Vice President, External Tank Project
Lockheed Martin Manned Space Systems

ET-74 Readiness Statement

The External Tank, ET-74 is hereby certified and ready for STS-74 flight pending completion/closure of open and planned work

Dennis R. Deel
Vice President, External Tank Project
Lockheed Martin Manned Space Systems

Appendices

- **A: Minor Changes**
- **B: SRM&QA Assessment**
  - NCD Assessment Criteria
- **C: KSC Processing**
  - Processing/Planned Work Schedules
  - PR/MRB Summaries
  - OMRSD Exceptions/Waivers: None
  - Limited Life Components
  - Modification Summary/Status
  - Software Changes: None
- **D: Previously reviewed material**
  - Waivers/Deviations

Class II or JS/DCN Changes

- Class I/II JS/DCN changes that have been reviewed by MSFC Resident Office
- All Class II STP/STM/Standards changes have been reviewed by MSFC M&P Lab
- These changes are acceptable for flight and summarized in this appendix (presentation not required)
  - Presentation criteria - Selection for presentation based on changes affecting:
    - Processes
    - Configuration
    - Material
    - Alternate Hardware
  - Presentation rejection criteria - All changes that do not affect configuration, material or processes
    - Revise Point of Incorporation
    - Drawing Clarification
    - Non-Flight Hardware Installation/Removal
    - Datum Changes
    - Update Usage/List of Materials (L/M)
    - Drawing Incorporation Errors
    - Manufacturing Aid
    - Drawing Errors
    - Fastener Type/Grip
    - Tolerance Change
    - Productivity
    - Minor changes taken care of by initial release of Class I Change (Same categories as above)

Class I/II or JS/DCN Changes - List, Structures

Change No.	Description	Effectivity
H34809-721	Replaced AN960KD416 and AN960KD416L washer with 21L2-4C (countersunk) washer	ET-73 and subs
H34809-452	Clarified flange dimensions and added tooling holes	ET-73 and subs
H34809-764	Reduced required minimum thickness	ET-73 and subs
H50001-604	Added dimension to clarify minimum weld land width for closeout panel	ET-73 and subs
H50001-621	Revised fastener locations to provide clearance for installation of Intertank stringer panel	ET-73 and subs
H34809-733	Added -269 to view CK to clarify location of aft GH2 pressure line fairing	ET-74 and subs
H34809-777	Revised fastener gaging requirements for cable tray support installation on Intertank	ET-74 and subs
H50001-491	Reduced areas of bare metal around faying surfaces prior to assembly and removed 2 fixture holes no longer required for production operations	ET-74 and subs
H50001-517	Changed method of surface prep from wet adhesive to dry adhesive (STP 5013)	ET-74 and subs

Class I/II or JS/DCN Changes - List

Change No.	Description	Effectivity
Systems		
H34809-738	Relaxed tolerances on drawings	ET-73 and subs
TPS		
H34809-737	Increased radius of SLA on lower SRB fitting	ET-73 and subs
H34809-774	Added flush dimension for foam closeout of cryoflex panel	ET-73 and subs
H34809-882	Added clarification notes to drawing	ET-73 and subs
H34809-827	Increase net foam thickness on LO2 tank ogive	ET-74 and subs
Material		
H34809-630/ STP 2006	Replaced Cherry rivet with Huck Bolt rivet	ET-73 and subs

Class I/II or JS/DCN Changes - List

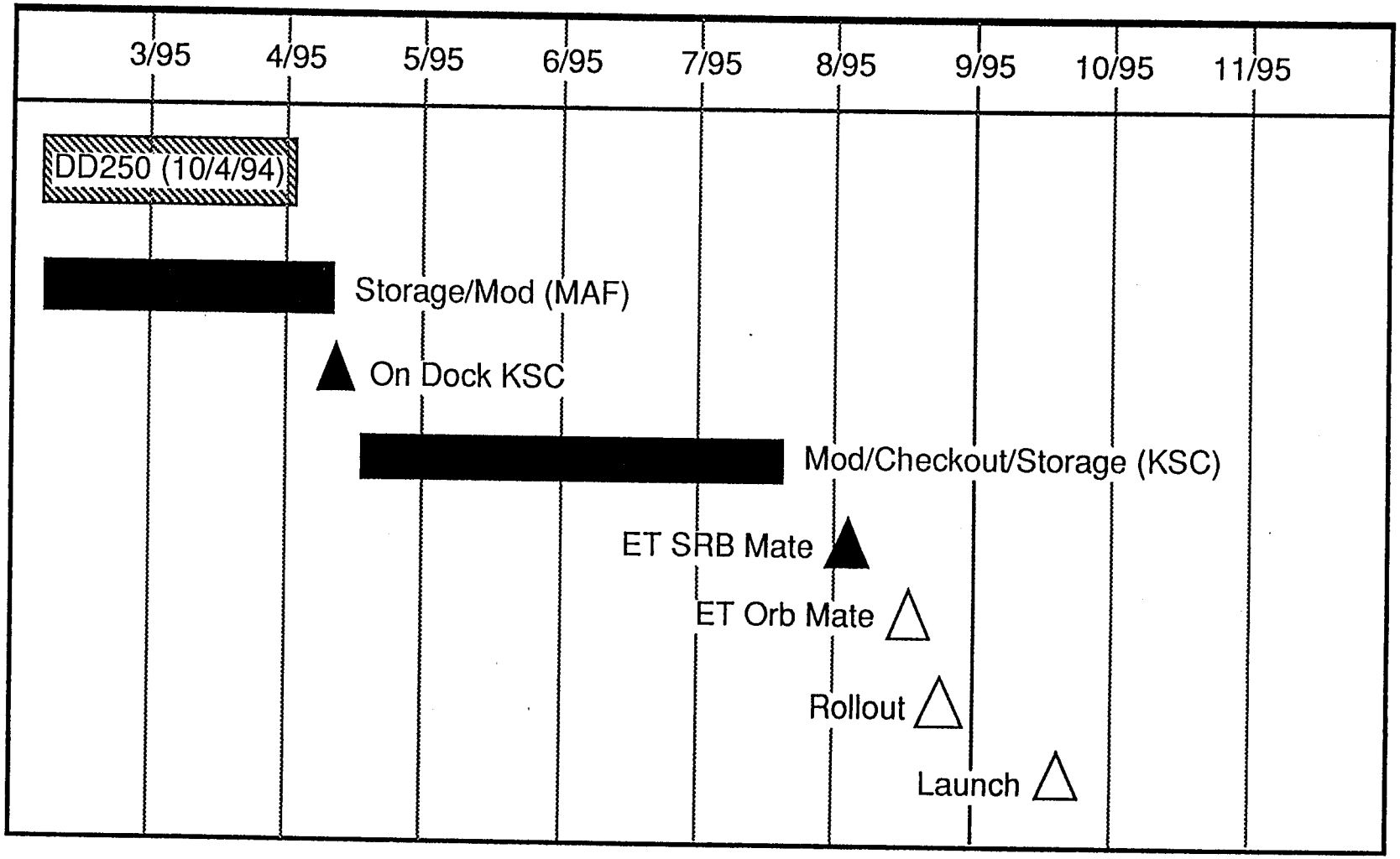
Change No.	Document	Description
H35809-035	STP 6506	Specification reactivation and general update of requirements and reformatting to boilerplate due to loss of 58L7 seals
H35809-146	STP 7523	Revise test requirements to be consistent with allowables
H35809-168	STP 6510	• Clarify adhesive requirements • Update format • Replace Freon TMC • Improve consistency
H35809-179	STP 5506	Reinstate acceptance criteria was inadvertently omitted in Rev C
H35809-184	K1A3 Code sheet	Created new code sheet for new mold release agent - Old mold release agent no longer available
H35809-186	EQTP 1003	Add new data for SS-11771 foam
H35809-188	A1A1 Code sheet	Revised code sheet to include two additional release films with smaller and no perforations
H35809-194	826-3600	Update document to current methodology
H35809-199	Y452/Y454	Revise documents - Rev letter not required on procurement specification
H35809-201	EQTP 1003	Update NCFI 24-124 fingerprint requirements
J31150	33L Standard	Control lubrication and cleanliness

NCD Assessment Criteria

- Assessment of all MRB NCD Items
  - Adequacy of technical dispositions
  - Completeness of required repair/retest
  - First time occurrences/SMR
  - Verification of margin of safety assessment/documented
  - Review of impact to hazards
  - Engineering review for impact to loads

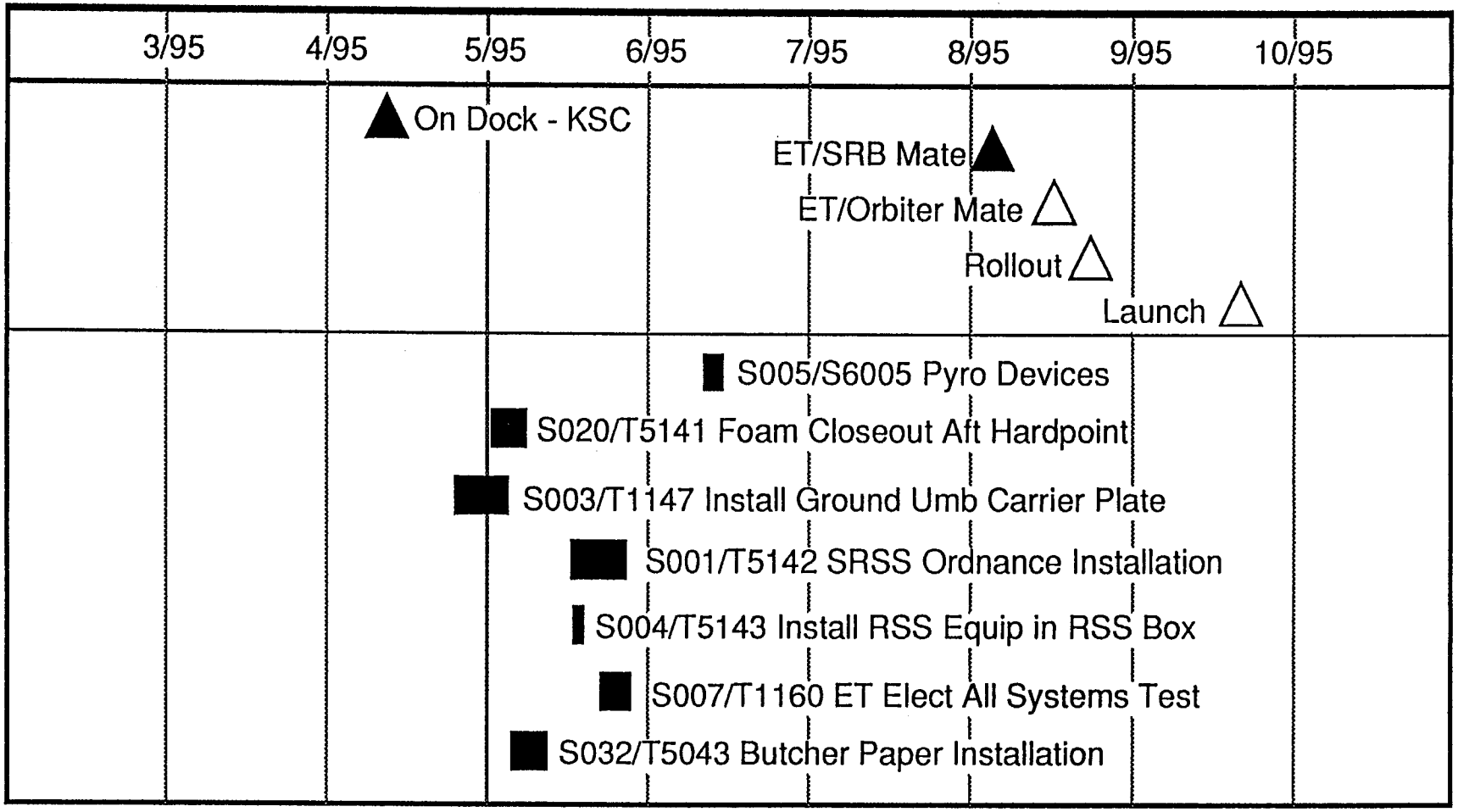
ET-73 Processing Schedule

C1



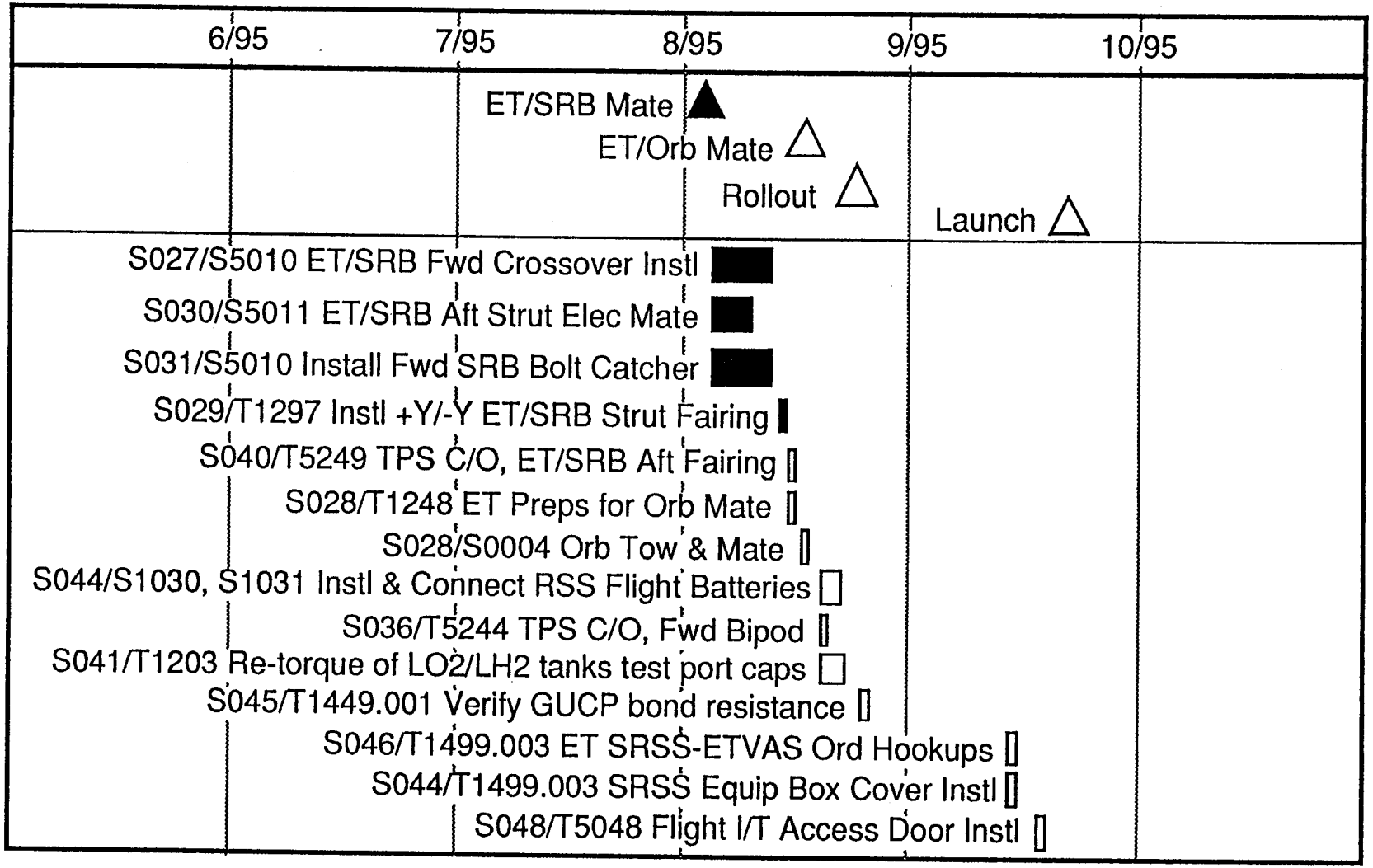
ET-73 Planned Work

C2

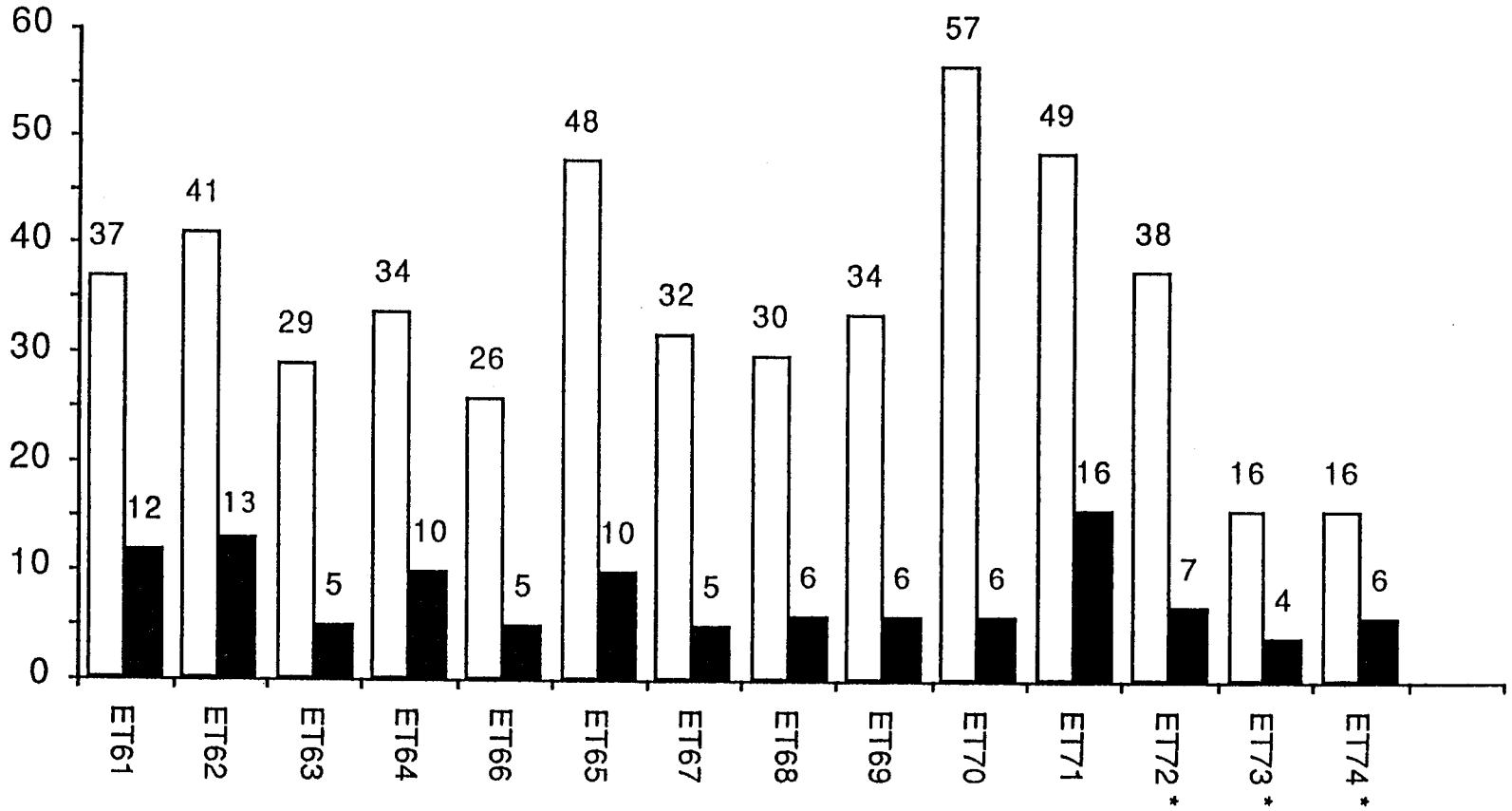


ET-73 Planned Work

C3



PR/MRB History (1994 - 1995)



* Incomplete data

Total PRs

Total MRBs

ET-73 DR/PR/OMRSD Waiver/Exception-Summary C5

as of 8/17/95

System	Discrepancy Total	Problem Total	MRB Items Total	MRB Items Open	Waivers/Exceptio Total	Waivers/Exceptio Open
• Electrical	0	0	**0**	**0**	0	0
• Propulsion/ Pneumatics	0	2	**2**	**0**	0	0
• Range Safety	0	1	**0**	**0**	0	0
• Structures	5	5	**2**	**0**	0	0
• Thermal (TPS)	0	8	**0**	**0**	0	0
Total	**5**	**16**	**4**	**0**	**0**	**0**

ET-73 PR/MRBs - Summary

PR No./Status	Title/Description	Disposition
Structure		
PET-73-ST-0003 Closed	Bipod yoke assembly - Scratches/raised metal on both bipod yoke flanges	• Use as repaired - Raised metal removed on fixed (titanium) flange - Swivel flange accepted as is - Critical FS unchanged
PET-73-ST-0010 Closed	ET/SRB aft fairing - ET/SRB -Y aft fairing forward flow restrictor has small gouge	• Use as is - Does not penetrate completely - Does not affect air flow - Structural integrity not adversely affected

ET-73 Limited Life Components

Cycle Sensitive

Description	Part No.	Serial No.	Limit	Required	Remaining
LH2 Manhole Cover Assy	80914081488 -019	00000197	100	1	100
LO2 Tank Mechanical Assy	80912002000 -019	00000068	100	1	100
LH2 Tank Mechanical Assy	80914002000 -009	00000066	100	1	100
LO2 Manhole Cover Assy	80911001205 -010	00079330	100	1	100
LO2 Fwd Ogive Cover Plate	80911001207 -029	00000207	100	1	100
LH2 Manhole Cover Assy (Aft Dome)	80911001444 -010	00000364 00000365	100 100	1 1	100 100

ET-73 Limited Life Components

Age Sensitive

Description	Part No.	Serial No.	Limit	Initiation	Expiration
External Tank	80901000000 -270	00000066	6 Yrs	10/94	10/2000
RSS Battery A	10406-0133 -801	Not installed	2 Yrs * 90 Days **		
RSS Battery B	10406-0133 -801	Not installed	2 Yrs * 90 Days **		

* Shelf Life
** Operating Limit

ET-73 Limited Life Components

Age Sensitive Pyrotechnics - 10 Years Life/Requires Lot Verification Tests After 4 and 7 Years

Description	Part No.	Lot No.	Serial No.	Latest Retest	Expiration
Confined Detonating Fuse	10315-0002				
	-825	AAB	311	1/93	3/96
	-826	AAB	264	1/93	3/96
	-827	AAB	230	1/93	3/96
	-828	AAB	177	1/93	3/96
	-831	AAB	452	1/93	3/96
Confined Detonating Fuse Manifold	10312-0001-106	AAT	2002028	11/94	3/98
	10312-0001-107	AAT	2002029	11/94	3/98
Safe & Arm Device	10311-0001-803	AAG	1000383	6/91	8/98 *
NSD	SEB26100094	JHS	0268	7/92	7/96
	-201	JHS	0269	7/92	7/96

* Extension tests sucessfully completed 6/20/95 per WL-001.95. Request to extend expiration date will be presented to Level II PRCB per PRCBD S094962F on 8/31/95

ET-73 Limited Life Components

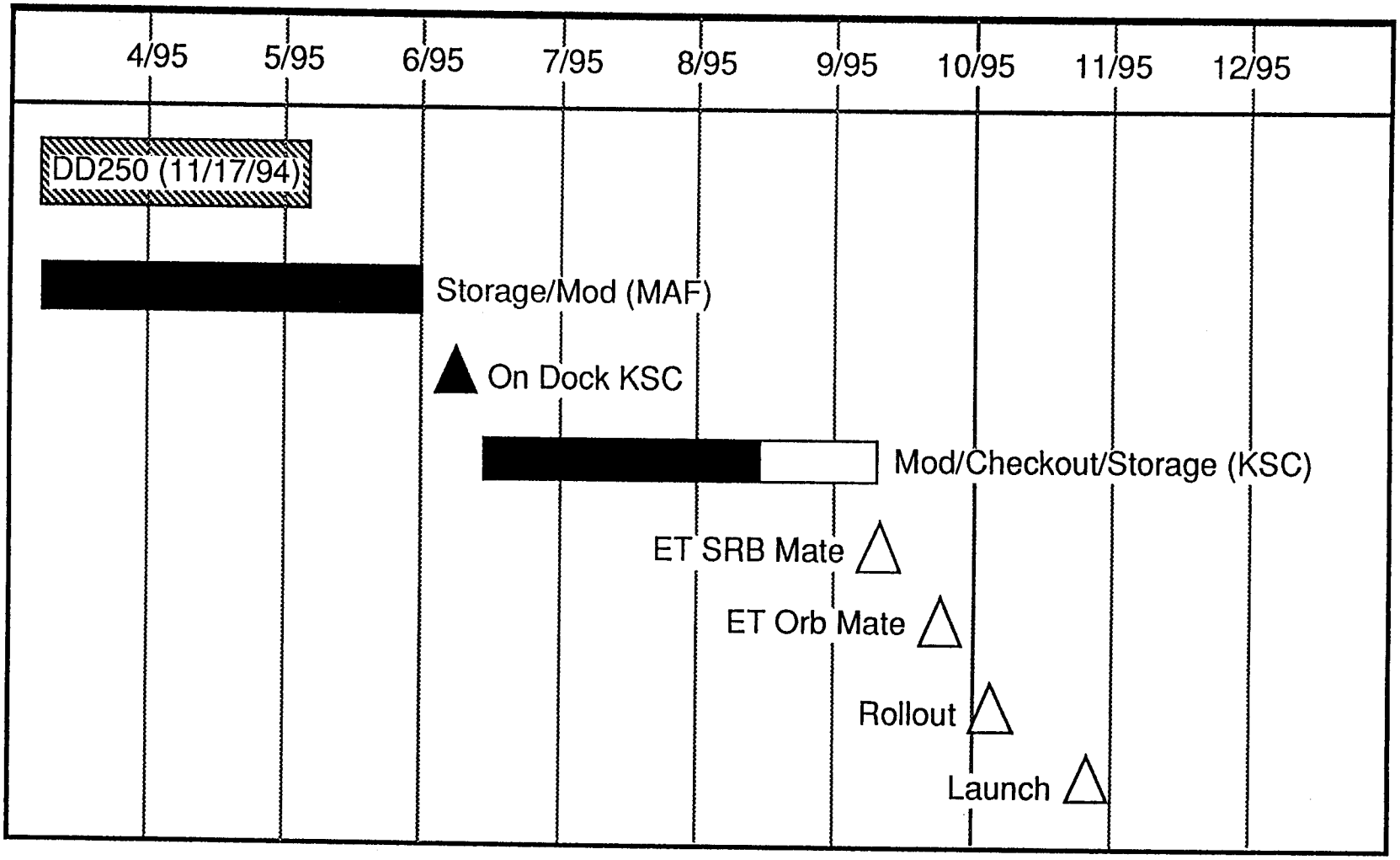
Age Sensitive Pyrotechnics - 10 Years Life/Requires Lot Verification Tests After 4 and 7 Years

Description	Part No.	Lot No.	Serial No.	Latest Retest	Expiration
Separator Assy GUCP	PD500020 -059	AAF	0000825	5/92	5/96
Cartridge Assy	PD500020 -030	AAF AAF	69979 69980	5/92 5/92	5/96 5/96
Linear Shaped Charge	PD500016 -050	AAJ	0001715	6/95	6/98

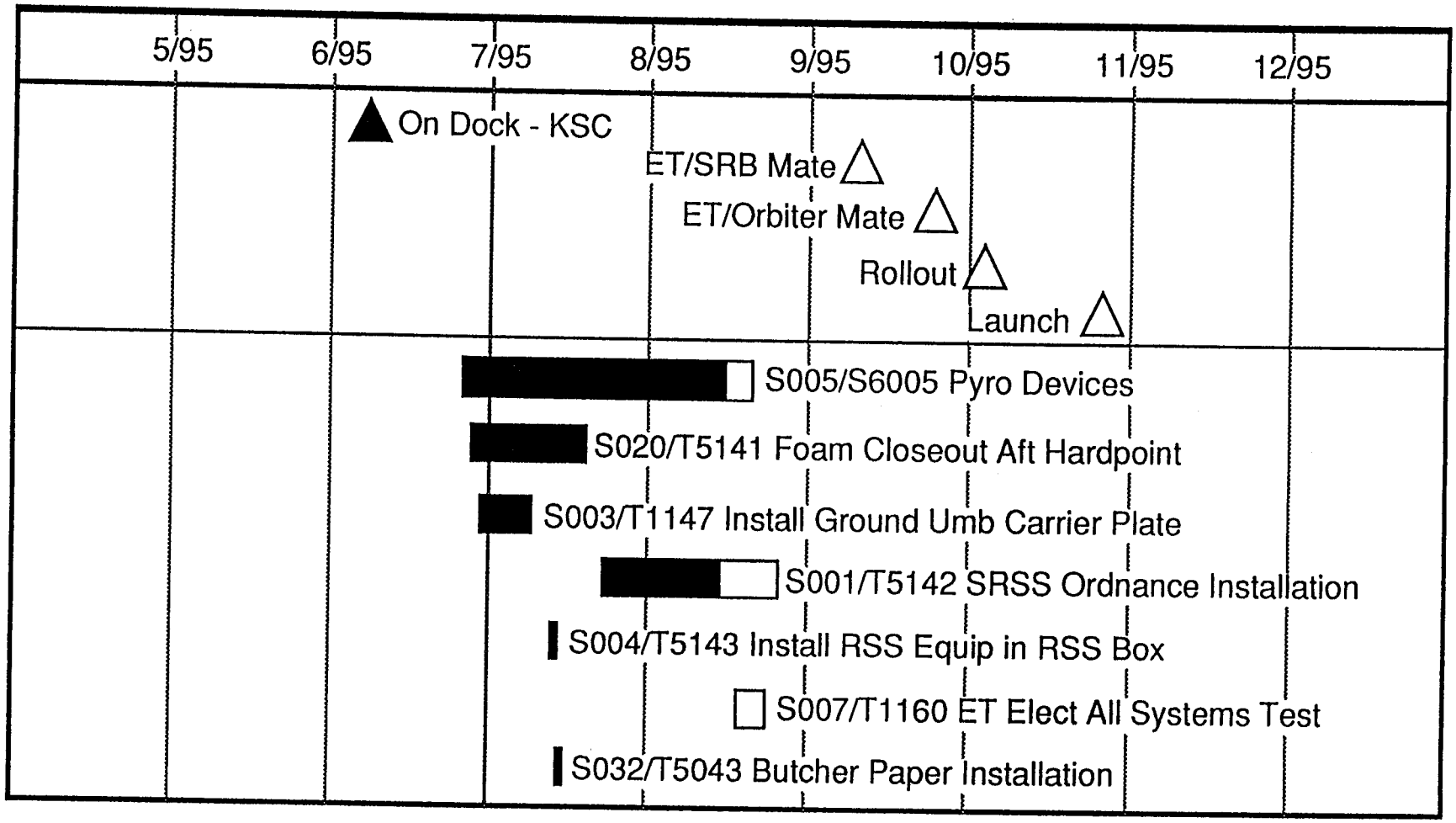
ET-73 Modification Summary

No.	Description	Status
Mod Kit		
• B491/B01945B	Enhanced jack pad closeout process at KSC	• Part 1 - BX trim complete • Part 2 - To be complete after S0004
• B935/B02006	RSS ground checkout cable assembly mod	Work Complete
DC&R		
• P-95-001	Inspect helium inject tube assembly	MRB to use as is • Tube assembly diameter measured 0.566" to 0.580" • Should be 0.480" or greater
Bldg. 45		
• B0682R1	KSC scale weigh non-flight items	In work at KSC - Will continue after S0004

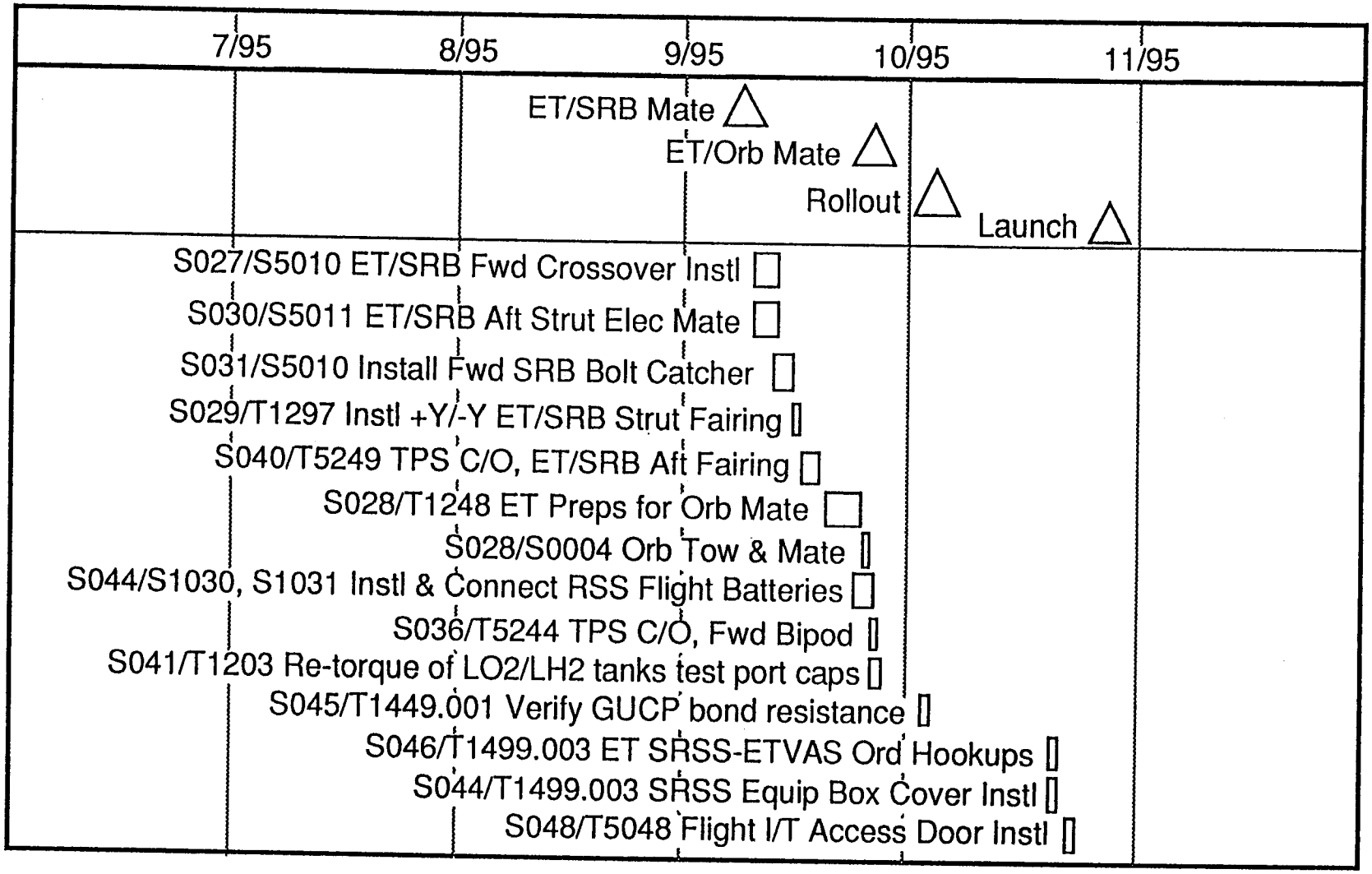
ET-74 Processing Schedule



ET-74 Planned Work



ET-74 Planned Work



ET-74 DR/PR/OMRSD Waiver/Exception - Summary

as of 8/17/95

System	Discrepancy Total	Problem Total	MRB Items Total	MRB Items Open	Waiver/Exceptions Total	Waiver/Exceptions Open
• Electrical	2	0	**0**	**0**	0	0
• Propulsion/ Pneumatics	2	1	**0**	**0**	0	0
• Range Safety	0	0	**0**	**0**	0	0
• Structures	4	10	**4**	**0**	0	0
• Thermal (TPS)	0	5	**2**	**0**	0	0
Total	**8**	**16**	**6**	**0**	**0**	**0**

ET-74 PR/MRBs - Summary

PR No./Status	Title/Description	Disposition
Structure		
PET-74-ST-0008 Closed	Aft hardpoint - Several scratches in transportation pad areas of aft hardpoint - Worst defect = 0.004" deep	• Use as is - No crack or cracklike indications - No raised metal - Thick metal area
PET-74-ST-0010 Closed	Adjustable bipod strut flange - Small ding on outer edge of bipod mating flange 0.026" x 0.028"	• Use as is - No crack or cracklike indications - No raised metal - Surface finish restored - Critical FS unchanged
PET-74-ST-0012 Closed	Bipod yoke assembly - 2 small scratches on the titanium mating flange of the bipod yoke - Worst defect = 0.003" deep	• Use as is - No crack or cracklike indications - No raised metal - Critical FS unchanged

ET-74 PR/MRBs - Summary

PR No./Status	Title/Description	Disposition
Structure		
PET-74-ST-0014 Closed	Adjustable bipod strut - Strut to clevis is attached using 26L2P10H16 bolts (drilled head) - Should be 26L2P1016 (non-drilled head bolts)	• Use as installed - Technically acceptable - Functionally interchangeable
Thermal		
PET-74-TS-0005 -1 Closed	Aft hardpoint closeout - Low area of BX-250 foam in lower portion of aft hardpoint - Actual: 0.93" - Should be 1.00" min	• Use as is - Adequate foam remaining for ascent and entry heating environments - Not in debris zone
PET-74-TS-0005-2 Closed	Aft hardpoint closeout - Low area of CPR-488/BX-250 foam violates 10 sq in. max repair area - Actual = 15.2 sq in.	• Repair using PDL foam - Acceptable foam repair material - Not in debris zone

ET-74 Limited Life Components

Cycle Sensitive

Description	Part No.	Serial No.	Limit	Required	Remaining
LH2 Manhole Cover Assy	80914081488 -019	00000198	100	1	100
LO2 Tank Mechanical Assy	80912002000 -019	00000069	100	1	100
LH2 Tank Mechanical Assy	80914002000 -009	00000067	100	1	100
LO2 Manhole Cover Assy	80911001205 -010	00103540	100	1	100
LO2 Fwd Ogive Cover Plate	80911001207 -029	00000209	100	1	100
LH2 Manhole Cover Assy (Aft Dome)	80911001444 -010	00000368 00000369	100 100	1 1	100 100

ET-74 Limited Life Components

Age Sensitive

Description	Part No.	Serial No.	Limit	Initiation	Expiration
External Tank	80901000000 -270	00000067	6 Yrs	11/94	11/2000
RSS Battery A	10406-0133-801	Not installed	2 Yrs * 90 Days **		
RSS Battery B	10406-0133-801	Not installed	2 Yrs * 90 Days **		

* Shelf Life
** Operating Limit

ET-74 Limited Life Components

Age Sensitive Pyrotechnics - 10 Years Life/Requires Lot Verification Tests After 4 and 7 Years

Description	Part No.	Lot No.	Serial No.	Latest Retest	Expiration
Confined Detonating Fuse	10315-0002				
	-825	AAB	312	1/93	3/96
	-826	AAB	265	1/93	3/96
	-827	AAB	222	1/93	3/96
	-828	AAB	178	1/93	3/96
	-831	AAB	453	1/93	3/96
Confined Detonating Fuse Manifold	10312-0001-106	AAT	002066	11/94	3/98
	10312-0001-107	AAT	002067	11/94	3/98
Safe & Arm Device	10311-0001-803	Not installed			
NSD	SEB26100094 -201	Not installed			

ET-74 Limited Life Components

Age Sensitive Pyrotechnics - 10 Years Life/Requires Lot Verification Tests After 4 and 7 Years

Description	Part No.	Lot No.	Serial No.	Latest Retest	Expiration
Separator Assy GUCP	PD500020-059	AAF	0000827	5/92	5/96
Cartridge Assy	PD500020-030	AAF	69983	5/92	5/96
		AAF	69984	5/92	5/96
Linear Shaped Charge	PD500016-050	AAJ	0001769	6/95	6/98

ET-74 Modification Summary

No.	Description	Status
Mod Kit		
B492/B01945B	Enhanced jack pad closeout process at KSC	• Part 1 - BX trim complete • Part 2 - To be complete after S0004
B936/B02006	RSS ground checkout cable assembly mod	To be worked
DC&R		
P-95-001	Inspect helium inject tube assembly	Work complete
Bldg. 45		
B0682R1	KSC scale weigh non-flight items	In work, will continue after S0003
FEC		
KET-0029	Prime third hardpoint alignment pin locations	Work complete

Level II Waivers - Baseline

Document/ Requirement	Authority	Paragraph	Waiver No.	Effectivity
NSTS 07700 Vol. V - Information Management Requirements				
Generic part name, type, common designation, and part manufacturer H4 code are not required for EEE parts status printout	S00127B 6/28/88	Table C.5 Item 2SR-10	6	ETs 49 and up
Data required in limited life status report is supplied in acceptance data package	S00127B 6/28/88	Table C.6 Item 2SR-7	8	ETs 49 and up
Requirement to deliver element pressure vessel historical data to EPO will remain at contractor facility	S00127B 6/28/88	Table C.6 Item 2SR-7	10	ETs 49 and up

Level II Waivers - Baseline

Document/ Requirement	Authority	Paragraph	Waiver No.	Effectivity
NSTS 07700 Vol. X - Space Shuttle Flight and Ground System Specification , Book 1 Requirements				
Electrical wiring of redundant systems NSTS 08080-1, 20A/4B	S40732G 6/18/88	Table 2.0	362	ETs 23, 27-29, 31 and up
Electrical bonding per MIL-B-5087B (2)	S040732M 9/9/88	3.6.14	378	ETs 23, 27-29, 31 and up
Soldering, circuit boards & connectors	S040732M 9/9/88	3.6.15.1.1	379	ETs 23, 27-29, 31 and up
PD7400106 circuit boards	S040732M 9/9/88	3.6.15.2.1	382	ETs 23, 27-29, 31 and up
PCM MUX and pressure transducer circuit boards	S040732M 9/9/88	3.6.15.2.1	383	ETs 23, 27-29, 31 and up
Range safety system compliance with AFETRM 127-1 and SAMTECM 127-1	S94934 9/10/88	3.5.4.12	388	ETs 23, 27-29, 31 and up

Level II Waivers - Baseline

Document/ Requirement	Authority	Paragraph	Waiver No.	Effectivity
NSTS 07700 Vol. X - Space Shuttle Flight and Ground System Specification , Book 1 Requirements				
CIL fail safe and redundancy requirements	S040201E 4/3/87	3.5.1.1.1 Thru 3.5.1.1.3	401	ETs 23, 27-29, 31 and up
Soldering of electrical connectors	S094779C 2/21/91	3.6.15.1.1	573	ETs 37, 41 and up

Level II Waivers - Baseline

Document/ Requirement	Authority	Paragraph	Waiver No.	Effectivity
NSTS 08060, Rev. F - System Pyrotechnic Specification				
Design pyrotechnics for reliability - No redundant tumble valve	S003422E 6/24/88	3.1	60	ETs 23, 27-29, 31 and up
Use 40M36298 connectors	S040732F 6/24/88	3.4.1	61	ETs 23,27-29, 31 and up
Epoxy to separate dissimilar metals on LSCs	S040732F 6/24/88	3.5.8	62	ETs 23, 27-29, 31 and up
Circuit resistance check not required after connector mate in tumble system	S040732F 6/24/88	7.3	63	ETs 23, 27-29, 31 and up
Prevent adverse effects of common mode currents	S040732F 6/24/88	8.2.1	64	ETs 23, 27-29, 31 and up

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Document/ Requirement	Authority	Paragraph	Waiver No.	Effectivity
NSTS 08060, Rev. F - System Pyrotechnic Specification				
Fire circuit wiring shall be routed separately	S040732F 6/24/88	8.2.3	65	ETs 23, 27-29, 31 and up
NSTS 07700-10-MVP-01 - Shuttle Master Verification Plan				
Environmental acceptance of ET components	S002130H 3/7/89	3.7.1	13	ETs 23, 27-29, 31 and up
NSTS 08123, Rev. B - Certification of Flexible Hoses and Bellows				
LH2 feedline bellows	S0052023G-R1 8/2/91	1.2	3	ETs 42 - 45, 47 and up
SL-E-0001 - Specification Electromagnetic Compatibility Requirement				
Wire marking is not applicable to the ET	S40732K 9/27/88	3.2.5	3	ETs 23, 27-29, 31 and up
SW-E-0002 - Ground Support Equipment General Design Requirements				
Factor of safety applied to yield for GUCP leg	S87020L 8/17/88	3.4.2.1	21	ETs 23, 27-29, 31 and up

Level III Deviations - Baseline

Document/Requirement	Paragraph	DAR No.	Effectivity
Ultimate and yield factors of safety below requirement for pressurized lines less than 1.5" dia • Actual: 1.37 and 1.01 • Requirement: 1.5 and 1.25	3.2.1.5.2.2	219	ETs 66 and 71 thru 75