

SPACE SHUTTLE PROGRAM Space Shuttle Systems Engineering and Integration Office NASA Johnson Space Center, Houston, Texas



PRCB ACTION S063515R1 1-1

RECOMMEND SPACE SHUTTLE SYSTEM YEAR END ROLLOVER (YERO) REQUIREMENT

January 25, 2007

MS/Darrell Stamper





Recommend YERO Requirement in NSTS 07700

Presenter **MS/Darrell Stamper** Date January 25, 2007 Page 2

- Action
 - Define program requirement for Year-End Rollover (YERO). Present recommendation to the PRCB.
- Recommend adding one requirement NSTS 07700 Vol. X, Book 1 to cover Shuttle flight ٠ hardware, MCC, and LPS.
- Add paragraph 3.2.2.1.26 Year-End Rollover ٠
 - The SSS, including the ground systems, shall support flights spanning the end of the calendar year. Use of automated means, manual means, and ground uplinks may be performed to satisfy this requirement. Specific operational periods when end of year transition should not occur are specified in NSTS 07700 Volume III.
- Recommend updating FDRD to include YERO operational periods as they are defined, e.g.: ٠
 - Not inside T-11 hours ٠
 - No ascent, entry, or docking ٠
 - Allocate time to execute procedure (preferably while docked) ٠





Recommend YERO Requirement in NSTS 07700

• PRCB CR S063553 has been submitted to baseline the requirement.

- Recommendation:
 - Close PRCB action CR S063515R1 1-1 based on this presentation and the submittal of CR S063553.

PCIN				
063553	SPACE SHUTT	PAGE 1 OF 4		
CR NO.	CHANGE F	REQUEST	ACCEPTANCE: N/A	
S063553			Prior-to 🗌 Post 🗌	
INITIATED BY:	OFFICE:	PHONE #:		
Daryl Peltier	MS4	281-483-5362		
CHANGE TITLE:				
BASELINE SPACE SHUTTLE S BOOK 1	SYSTEM YEAR END ROLLOVE	R (YERO) REQUIREMENT	IN NSTS 07700 VOL. X	
CHANGE PROPOSALS/REQU	ESTS IDENT. NO.	SSP DOCUMENTS AFFEC		
DESCRIPTION OF CHANGE:				
(See attached pages 3 ar	nd 4.)			

REASON FOR CHANGE :

This change baselines a Space Shuttle System requirement to support flights spanning the end of the calendar year.

SSP-MG/MANAGEMENT INTEGRATION USE ONLY

OUTSIDE BOARD: _____ EVALUATION DUE: _____ BOARD DATE: _____

SSP Form 4000A (Rev Oct 95)

PCIN 063553 CR NO. S063553			JTTLE P GE REQI		M	PAGE 2 OF	4	
SYSTEM ELEMENT(S) AFFEC System Integration Orbiter/GFE EVA/Crew Equipment Space Shuttle Main Engine External Tank Solid Rocket Booster		KSC Projects Paylo System Software Oper Flight Support Equipment Space				ations		
CHANGE IMPACT: Safety Flight Manifest Performance Payloads Reliability Certification/Recertification Maintainability Required-Method- Spares Test GSE Analysis GFE Similarity Security Flight Operations Mod/Mission Kit Ground Operations				ators & Trai are S B around ties	ners non	FECTIVITY: on-flight specific LESTONE: Delta LSFR SRB Stack ET/SRB Mate Orbiter Rollout/Mate		
SAFETY AND MISSION ASSURANCE: SCHEDULE IMPACT: CRITICALITY YES No flight or industrial safety impact 1, 1R, 1S X Flight & industrial safety impacts 2, 2R X have been identified & incorporated					VAB Rollout TRR/FRF FRR/Launch Ferry Flight			
COST IMPACT:SSUN/AAPA (Production)N/AAPA (Operations)V/A	FY <u>07</u> TBD	FY <u>08</u> TBD	FY	FY	FY	FY	TOTAL	
<pre>IMPACT DESCRIPTION: Baselines SSP requirement to support flights spanning the end of the calendar year. IMPACT OF NONINCORPORATION: No SSP requirement would exist that specifically states that flights spanning the end of the calendar year shall be supported.</pre>								
					COMMENDED HANDLING: Routine Expedite to			
FORWARDING AUTHORIZATION								
SIGNATURE (SPACE SHUTTL Original signed by Don		EMBER)				DATE 1/23/200	7	

SSP Form 4000B (Rev Jul 02)

PCIN

063553

SPACE SHUTTLE PROGRAM DOCUMENT CONTINUATION SHEET

PAGE <u>3</u> OF <u>4</u> DATE

1/25/07

S063553

DOCUMENT:

BASELINE SPACE SHUTTLE SYSTEM YEAR END ROLLOVER (YERO) REQUIREMENT IN NSTS 07700 VOL. X BOOK 1

NSTS 07700, Volume X, Book 1 Add paragraph 3.2.2.1.26

3.2.2.1.26 Year-End Rollover

The SSS, including the ground systems, shall support flights spanning the end of the calendar year. Use of automated means, manual means, or ground uplinks may be performed to satisfy this requirement. Specific operational periods when end of year transition should not occur are specified in NSTS 07700 Volume III.

Update: Table 4.1 VERIFICATION RESPONSIBILITY MATRIX (See attached page 4)

TABLE 4.1

VERIFICATION RESPONSIBILITY MATRIX – Continued

SECTION 3.0 <u>REQUIREMENT</u>	MOD	<u>ORB</u>	EVA & CREW <u>EQUIP</u>	<u>SSME</u>	<u>ET</u>	<u>SRB</u>	<u>SCA</u>	<u>L&LS</u>	COMBINED ELEMENTS	<u>N/A</u>
3.2.2.1.9		Х		Х	Х	Х				
3.2.2.1.10		Х		Х		Х				
3.2.2.1.11		Х			Х					
3.2.2.1.12		Х			Х				Х	
3.2.2.1.13		Х			Х			Х	Х	
3.2.2.1.14					Х				Х	
3.2.2.1.15								Х		Х
3.2.2.1.15.1					Х			Х	Х	
3.2.2.1.15.2		Ň		Ň	Х			Х	Х	
3.2.2.1.16		Х		Х	Х					X
3.2.2.1.17		Ň	X	X	X	N/			X	Х
3.2.2.1.17.1		Х	Х	Х	Х	Х			Х	
3.2.2.1.17.1.1		X	X X	X	X	X	V		V	
3.2.2.1.17.2 3.2.2.1.17.2.1		X X	Χ.	X X	X X	X X	Х		X X	
3.2.2.1.17.2.1		^		^	x	~			^	
3.2.2.1.17.3		Х		Х	x	Х				
3.2.2.1.17		X		X	X	X		Х		
3.2.2.1.19		X		~	X	X		~	Х	
3.2.2.1.20		Λ			Λ	Χ			Λ	Х
3.2.2.1.20.1					Х	Х			Х	Λ
3.2.2.1.20.2		Х			X	X			X	
3.2.2.1.21		X		Х	X	Х				
3.2.2.1.22						X				
3.2.2.1.22.1(Deleted)										
3.2.2.1.22.2		Х				Х				
3.2.2.1.22.3						X X				
3.2.2.1.22.4		Х				Х				
3.2.2.1.22.5		Х								
3.2.2.1.23		Х		X X		Х				
3.2.2.1.24		Х		Х	Х	Х		Х		
3.2.2.1.25	Х	Х	Х					Х	Х	
3.2.2.1.26	Х	Х	Х	Х	Х	Х		Х	Х	
3.2.2.2								Х		
32221										

3.2.2.2.1



SPACE SHUTTLE PROGRAM Space Shuttle Systems Engineering and Integration Office NASA Johnson Space Center, Houston, Texas



PRCB CR S063553

BASELINE SPACE SHUTTLE SYSTEM YEAR END ROLLOVER (YERO) REQUIREMENT IN NSTS 07700 VOL. X BOOK 1

January 25, 2007

MS/Darrell Stamper





Baseline YERO Requirement in NSTS 07700

- Purpose
 - Baseline a program requirement for Year-End Rollover (YERO).
- Recommend adding one requirement NSTS 07700 Vol. X, Book 1 to cover Shuttle flight ٠ hardware, MCC, and LPS.
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Baseline YERO Requirement in NSTS 07700

- **Mandatory Evaluations:** ٠
 - Approve ٠
 - Approve with comment ٠
 - Disapprove -٠
- Comments to S063553: •

- **Recommendation:** •
 - Approve PRCB CR S063553 to add Year-End Rollover requirement in NSTS 07700 ٠ Volume X, Book 1.