C-A OPERATIONS PROCEDURES MANUAL

4.120.102.c NASA Science Research Laboratory (NSRL)
(Peer 27) Crash Tests

Attachment

C-A-OPM Procedures in which this Attachment is used.		
4.120.102		

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials

Approved: ***Signature on File*** _____
Collider-Accelerator Department Chairman Date

V. Castillo

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title:_____ **Checksum:** _____

Division B Software Filename and Checksum: Title:_____ **Checksum:** _____

Initial testing complete:

Test Team Leader's Name (Print): _____ **Life Number:** _____

Test Team Leader's Name (Sign): _____ **Date:** _____/____/_____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ **Life Number:**_____

Test Team Leader's Name (Sign): _____ **Date:** _____/____/_____

Test results reviewed by:

Safety Section Head's Name (Print):_____ **Life Number:** _____

Safety Section Head's Name (Sign):_____ **Date:** _____/____/_____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print):_____ **Life Number:** _____

RSC Member's Name (Sign):_____ **Date:** _____/____/_____

1.1 Test of Zone NSRL-Z1 Crash Systems in Restricted Access, Mode 8

	CONDUCT	Visual check on Crash systems, following columns 1- 2, Table 1	
☐	**VERIFY**	In column 3, Table 1, all visual-check problems are	**CORRECTED**
	PLACE	Peer 27 in **Restricted Access (RA), Mode 8**	
☐	**VERIFY**	Peer 27 is in **RA**	**MODE 8**
	TEST	**Zone NSRL-Z1** Crash systems following Table 1, columns 4-10, below.	

Crash systems	Visual check √=o.k. x=pblm	Verify all x's corr.	Pull crash cord from far end	Verify crash at MCR	Verify remain in Mode 8	Rearm crash device	Reset crash at MCR	Verify crash reset at MCR	Go to next test
1CO1`(P/B)		☐	**Press**	☐	☐			☐	
1CO2		☐		☐	☐			☐	
1CO3		☐		☐	☐			☐	

Table 1 – Test of Zone NSRL-Z1 Crash Systems in Restricted Access, Mode 8

☐ **Check for acceptance of Test of Zone NSRL-Z1 Crash Systems in Restricted Access, Mode 8**

1.2 Test of Zone NSRL-Z1 Crash Systems in Controlled Access, Mode 16

	PLACE	Peer 27 in **Controlled Access (CA), Mode 16**	
☐	**VERIFY**	Peer 27 is in **CA**	**MODE 16**
	FORCE	**Sweep** of Zone **NSRL-Z1**	
☐	**VERIFY**	**MCR** sees Zone **NSRL-Z1**	**SWEPT**
	TEST	**Zone NSRL-Z1** Crash systems following Table 2, below.	

Crash systems	Pull crash cord from far end	Verify crash at MCR	Verify remain in Mode 16	Verify NSRL-Z1 loses sweep	Rearm and Reset crash at MCR	Verify crash reset at MCR	Force sweep of NSRL-Z1	Verify NSRL-Z1 is swept	Go to next test
1CO1`(P/B)	**Press**	☐	☐	☐		☐		☐	
1CO2		☐	☐	☐		☐		☐	
1CO3		☐	☐	☐		☐		☐	

Table 2 – Test of Zone NSRL-Z1 Crash Systems in Controlled Access, Mode 16

☐ **Check for acceptance of Test of Zone NSRL-Z1 Crash Systems in Controlled Access, Mode 16**

1.3 Test of Zone NSRL-Z2 Crash Systems in Restricted Access, Mode 8

	CONDUCT	Visual check on Crash systems, following columns 1- 2, Table 1	
☐	**VERIFY**	In column 3, Table 1, all visual-check problems are	**CORRECTED**
	PLACE	Peer 27 in **Restricted Access (RA), Mode 8**	
☐	**VERIFY**	Peer 27 is in **RA**	**MODE 8**
	TEST	**Zone NSRL-Z2** Crash systems following Table 1, columns 4-10, below.	

Crash systems	Visual check √=o.k. x=pblm	Verify all x's corr.	Pull crash cord from far end	Verify crash at MCR	Verify remain in Mode 8	Rearm crash device	Reset crash at MCR	Verify crash reset at MCR	Go to next test
2CO1`		☐		☐	☐			☐	
2CO2		☐		☐	☐			☐	
2CO3		☐		☐	☐			☐	

Table 3 – Test of Zone NSRL-Z2 Crash Systems in Restricted Access, Mode 8

☐ **Check for acceptance of Test of Zone NSRL-Z2 Crash Systems in Restricted Access, Mode 8**

1.4 Test of Zone NSRL-Z2 Crash Systems in Controlled Access, Mode 18

	PLACE	Peer 27 in **Controlled Access (CA), Mode 16**	
☐	**VERIFY**	Peer 27 is in **CA**	**MODE 16**
	FORCE	**Sweep** of Zone **NSRL-Z2** and Zone **NSRL-Z3**	
☐	**VERIFY**	**MCR** sees Zone **NSRL-Z2** ☐ and Zone **NSRL-Z3** ☐	**SWEPT**
	PLACE	Peer 27 in **Controlled Access (CA), Mode 18**	
☐	**VERIFY**	Peer 27 is in **CA**	**MODE 18**
	TEST	**Zone NSRL-Z2** Crash systems following Table 2, below.	

Crash systems	Pull crash cord from far end	Verify crash at MCR	Verify goes to Mode 2	Verify NSRL-Z2 loses sweep	Rearm and Reset crash at MCR	Verify crash reset at MCR	Force sweep of NSRL-Z2	Verify NSRL-Z2 is swept	Go to Mode 18	Go to next test
2CO1`		☐	☐	☐		☐		☐		
2CO2		☐	☐	☐		☐		☐		
2CO3		☐	☐	☐		☐		☐		

Table 4 – Test of Zone NSRL-Z2 Crash Systems in Controlled Access, Mode 18

☐ **Check for acceptance of Test of Zone NSRL-Z2 Crash Systems in Controlled Access, Mode 16**

1.5 Test of Zone NSRL-Z3 Crash Systems in Restricted Access, Mode 8

	CONDUCT	Visual check on Crash systems, following columns 1- 2, Table 1	
☐	**VERIFY**	In column 3, Table 1, all visual-check problems are	**CORRECTED**
	PLACE	Peer 27 in **Restricted Access (RA), Mode 8**	
☐	**VERIFY**	Peer 27 is in **RA**	**MODE 8**
	TEST	**Zone NSRL-Z3** Crash systems following Table 1, columns 4-10, below.	

Crash systems	Visual check √=o.k. x=pblm	Verify all x's corr.	Pull crash cord from far end	Verify crash at MCR	Verify remain in Mode 8	Rearm crash device	Reset crash at MCR	Verify crash reset at MCR	End of test
3CO1`		☐		☐	☐			☐	

Table 5 – Test of Zone NSRL-Z3 Crash Systems in Restricted Access, Mode 8

☐ **Check for acceptance of Test of Zone NSRL-Z3 Crash Systems in Restricted Access, Mode 8**

1.6 Test of Zone NSRL-Z3 Crash Systems in Controlled Access, Mode 17

	PLACE	Peer 27 in **Controlled Access (CA), Mode 16**	
☐	**VERIFY**	Peer 27 is in **CA**	**MODE 16**
	FORCE	**Sweep** of Zone **NSRL-Z3**	
☐	**VERIFY**	**MCR** sees Zone **NSRL-Z3**	**SWEPT**
	PLACE	Peer 27 in **Controlled Access (CA), Mode 17**	
☐	**VERIFY**	Peer 27 is in **CA**	**MODE 17**
	TEST	**Zone NSRL-Z3** Crash systems following Table 2, below.	

Crash systems	Pull crash cord from far end	Verify crash at MCR	Verify system goes to Mode 2	Verify NSRL-Z3 loses sweep	Rearm and Reset crash at MCR	Verify crash reset at MCR	Force sweep of NSRL-Z3	Verify NSRL-Z3 is swept	Go to Mode 16	End of test
3CO1`		☐	☐	☐		☐		☐		

Table 6 – Test of Zone NSRL-Z3 Crash Systems in Controlled Access, Mode 17

☐ **Check for acceptance of Test of Zone NSRL-Z3 Crash Systems in Controlled Access, Mode 17**

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: _____/____/_____

TTL: Sign for completion of final testing: _____

Date: _____/_____/_____