C-A OPERATIONS PROCEDURES MANUAL

4.96.1 Peers 3, 23 and 25 Crash Subsystem Test

Text Pages 1 through 3

Hand Processed Changes

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Revision 01

Approved by:_____ _____
AGS Department Chairman Date

Approved by:_____ _____
RHIC Project Head Date

A. McGeary

4.96.1 PEERS 3, 23 and 25 Crash Subsystem Test

1. Purpose and Scope

Specifies the procedure to be employed during periodic validation of the g-2, U up, V T, U-Dn and V P area CRASH portion of the RHIC Particle Accelerator Safety System (PASS).

2. Responsibilities

2.1 The AGS or RHIC Safety Systems Group Leader shall ensure that this procedure is executed, at no greater than six month intervals, or at such times as required by the Radiation Safety Committee (RSC).

2.2 The AGS or RHIC Safety Systems Group Leader shall review and initial this completed procedure checklist.

2.3 The AGS or RHIC RSC Chairman (or designee) shall review the test results.

2.4 Members of the AGS or RHIC Safety System Groups shall, as designated, conduct and document this procedure.

3. Prerequisites

3.1 This procedure may only be executed by members of the AGS or RHIC Safety System Groups whose training is shown as “valid” in the RHIC Project Training Database. Their training shall include AGS OPM 9.1.16, "Lockout/Tagout for Radiation Safety (RS LOTO)."

3.2 This procedure requires two trained individuals.

3.3 A copy of this procedure for the Signal Verifier to complete while performing this test. Crash Activator should radio his data to the Signal Verifier.

3.4 Prior to the execution of this procedure, the beam line shall be placed in a safe off condition by performing “Lockout/Tagout for Radiation Safety (RS LOTO)” (AGS OPM 9.1.16), RS LOTO of BTA Beam or other equivalent devices approved by RSC chair. RS LOTO applied _____

3.5 Notify the Operations Coordinator (OC) or the Head of the Main Control Room (MCR) that the CRASH System is being tested.

3.6 Programs loaded Divisions A & B for Peer 3, 23, and 25 and recorded in PASS Engineering Change Log Book.

3.7 Peer 3, 23, and 25 enclosure RSC is RS LOTO by AGS Safety Systems Group Leader Engineers.
Peer 3, 23, and 25 (Tag #) _____
Peer 3, 23, and 25 (Tag #) _____
RS LOTO Development System Access Connector (Tag #) _____

3.8 Prior to the execution of this procedure, the beam line shall be placed in a safe off condition by performing RS LOTO. RS LOTO of Booster F6 and BTA DH2&3 or equivalent approval by chair RSC prior to execution of this procedure.
RS LOTO applied _____

4. Precautions

None

5. Procedure

This test will verify the following for both A and B divisions:
in Peer 3, 23, and 25.
Physical condition of Crash actuators
MCR interface - AB Panelview
Mode change to SAFE STATE (2)

5.1 From PASS Engineering Change Log Book, record software installed Peer 3, 23, and 25, both Divisions A & B.

Division A Compiler version _____

Division B Compiler version _____

Peer 3, 23, and 25 Div. A Program version _____
Save date _____
Peer 3, 23, and 25 Div. B Program version _____
Save date _____

5.1.1 Actuator operation, done in Restricted Access (8)

Perform a physical inspection of each actuator and cabling. Adjust pull cord for correct tension if necessary.(1) Operate each actuator and observe Crash indication on Panelview and change to SAFE STATE (2) Crash resets only after actuator is reset. (3) Confirm second crash also holds reset off.

5.1.1.1 V1 buttons physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

5.1.1.2 Muon buttons physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

5.1.1.3 U Up physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

5.1.1.4 VT physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

5.1.1.5 U Dn physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

5.1.1.6 V P physical check OK _____

1) Panelview indicates Crash _____
   A goes to SAFE STATE _____
   B goes to SAFE STATE _____
2) "Crash" will not reset _____
   Crash resets after actuator is reset _____
3) Two crashes indicate "Crash" and will only reset after both actuators are reset _____

6. Documentation

6.1 Completed checkoffs on this procedure

6.2 Completed PASS Logbook

7. References

7.1 AGS-OPM 9.1.16, "Lockout/Tagout for Radiation Safety (RS LOTO)"

8. Attachments

None