

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.10.d 10 O'Clock (PEER 15) Sweep Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.10		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

V. Castillo

4.120.10.d 10 O'Clock (PEER 15) Sweep Tests

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 To Sweep Zone 9Z1**
- CLOSE** Gates **9GS1-I/O, 9EL1, and 9GI1**
  - VERIFY** Gates **9GS1-I/O, 9EL1, and 9GI1** are **CLOSED**
  - RESET** Gate **9EL1**
  - VERIFY** Gate **9EL1** **RESET**
  - PLACE** **Peer 15 in Mode 16**
  - VERIFY** **Peer 15** is in **Controlled Access** **MODE 16**
  - ACTIVATE** Check station **9CS1**
  - VERIFY** Check station **9CS1** indicator ( **Area Secured** ) **BLINKS ONCE**
  - ACTIVATE** Check station **9CS2**
  - VERIFY** Check station **9CS2** indicator ( **Area Secured** ) **BLINKS ONCE**
  - ACTIVATE** Check station **9CS3**
  - VERIFY** Check station **9CS3** indicator ( **Area Secured** ) **BLINKS ONCE**
  - ACTIVATE** Check station **9CS4**
  - VERIFY** Check station **9CS4** indicator ( **Area Secured** ) **ON**
  
  - EXIT** Gate **9GI1** with **Simultaneous Release**
  - VERIFY** MCR sees Zone **9Z1** **SWEPT**
  
  - Check for test acceptance of Sweep of Zone 9Z1**

- 1.2 To Sweep Zone 10Z1**
- CLOSE** Gates **9GI1-I&O, 10GE1, 10GI1-I&O**
  - VERIFY** Gates **9GI1-I&O, 10GE1, 10GI1-I&O** are **CLOSED**
  - PLACE** **Peer 15 in Mode 16**
  - VERIFY** **Peer 15** is in **Controlled Access** **MODE 16**
  - ACTIVATE** Check station **10XCS1**
  - VERIFY** Check station **10XCS1** indicator ( **Area Secured** ) **BLINKS ONCE**
  - ACTIVATE** Check station **10XCS2**
  - VERIFY** Check station **10XCS2** indicator ( **Area Secured** ) **ON**
  
  - EXIT** Gate **10GE1** with **Simultaneous Release**
  - VERIFY** MCR sees Zone **10Z1** **SWEPT**
  
  - Check for test acceptance of Sweep of Zone 10Z1**

<b>1.3</b>	<b>To Sweep</b>	<b>Zone 10Z2</b>	
	<b>CLOSE</b>	Gates <b>10GI1-I&amp;O, 10EL1, 10ED1, 11GSI-I&amp;O</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>10GI1-I&amp;O, 10EL1, 10ED1, 11GSI-I&amp;O</b> are	<b>CLOSED</b>
	<b>RESET</b>	Gate <b>10EL1, 10ED1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gate <b>10EL1, 10ED1</b> are	<b>RESET</b>
	<b>PLACE</b>	<b>Peer 15 in Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 15</b> is in <b>Controlled Access</b>	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>10Z1</b>	<b>NOT SWEPT</b>
	<b>ACTIVATE</b>	Check station <b>10CS5</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>10CS5</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>10CS4</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>10CS4</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>10CS2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>10CS2</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>10CS3</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>10CS3</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>10CS1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>10CS1</b> indicator ( <b>Area Secured</b> )	<b>ON</b>
	<b>EXIT</b>	Gate <b>10GI1</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>10Z2</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>Check for test acceptance of Sweep of Zone 10Z2</b>		

**1.4 Test of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 16 and Peer 15 in CA Mode 16 and loss of sweep with illegal opening of gate 9GS1-I.**

	<b>PLACE</b>	Peers <b>17 &amp; 15</b> in <b>Controlled Access</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 17</b> is in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 15</b> is in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning lights and <b>LED</b> message: <b>Stop Call MCR for Access X-7400 Stop</b> on both sides of the gate are	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning light on both sides of gate <b>9GS1-O</b> indicate: <b>Call MCR for Crossover Amber</b>	<b>ON</b>
	<b>SWEEP</b>	<b>Zone 8Z2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Zone 8Z2</b>	<b>SWEPT</b>
	<b>SWEEP</b>	<b>Zone 9Z1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Zone 9Z1</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows: Area Secured (S11) <b>Amber</b> Area Secured (S10) <b>Amber</b>	<b>ON</b> <b>ON</b>
	<b>OPEN</b>	Gate <b>9GS1-I</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Zone 9Z1</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Zone 8Z2</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Peer 17</b> is in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Peer 15</b> is in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows: Area Secured (S11) <b>Amber</b> Area Secured (S10) <b>Amber</b>	<b>ON</b> <b>ON</b>

- |  |   |                  |
|--|---|------------------|
| <b>CLOSE</b>                           | Gate <b>9GS1-I</b>  |                  |
| <b>OPEN</b>                            | Gate <b>9GS1-I</b> with <b>without</b> Simultaneous Release |                  |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 9Z1</b>                                    | <b>NOT SWEEP</b> |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 8Z2</b>                                    | <b>NOT SWEEP</b> |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Peer 15</b> is in                               | <b>MODE 16</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Peer 15</b> is in                               | <b>MODE 16</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | <b>9GS1</b> gatebox lights are as follows:                  |                  |
|  | Area Secured (S11) <b>Amber</b>                             | <b>OFF</b>       |
|  | Area Secured (S10) <b>Amber</b>                             | <b>OFF</b>       |
| <b>CLOSE</b>                           | Gate <b>9GS1-I</b>  |                  |
- Check for test acceptance of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 16 and Peer 15 in CA, Mode 16 and loss of sweep with illegal opening of gate 9GS1-I**

**1.5 Test of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 17 and Peer 15 in CA Mode 16 and loss of sweep with illegal opening of gate 9GS1-I**

- |  |  |                  |
|--|--|------------------|
| <b>PLACE</b>                           | Peers <b>17 Controlled Access, Mode 17</b>   |                  |
| <input type="checkbox"/> <b>VERIFY</b> | <b>Peer 17</b> is in   | <b>MODE 17</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | <b>Peer 15</b> is in   | <b>MODE 16</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | The warning lights and <b>LED</b> message: <b>Stop Call MCR for Access X-7400 Stop</b> on both sides of the gate are | <b>ON</b>        |
| <input type="checkbox"/> <b>VERIFY</b> | The warning light on both sides of gate <b>9GS1-O</b> indicate: <b>Call MCR for Crossover Amber</b>                  | <b>ON</b>        |
| <b>SWEEP</b>                           | <b>Zone 8Z2</b>  |                  |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 8Z2</b>   | <b>SWEEP</b>     |
| <b>SWEEP</b>                           | <b>Zone 9Z1</b>  |                  |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 9Z1</b>   | <b>SWEEP</b>     |
| <input type="checkbox"/> <b>VERIFY</b> | <b>9GS1</b> gatebox lights are as follows:   |                  |
|  | Area Secured (S11) <b>Amber</b>  | <b>ON</b>        |
|  | Area Secured (S10) <b>Amber</b>  | <b>ON</b>        |
| <b>OPEN</b>                            | Gate <b>9GS1-I</b> with <b>Simultaneous Release</b>  |                  |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 9Z1</b>   | <b>SWEEP</b>     |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 8Z2</b>   | <b>SWEEP</b>     |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Peer 17</b> is in  | <b>MODE 17</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Peer 15</b> is in  | <b>MODE 16</b>   |
| <input type="checkbox"/> <b>VERIFY</b> | <b>9GS1</b> gatebox lights are as follows:   |                  |
|  | Area Secured (S11) <b>Amber</b>  | <b>ON</b>        |
|  | Area Secured (S10) <b>Amber</b>  | <b>ON</b>        |
| <b>CLOSE</b>                           | Gate <b>9GS1-I</b>   |                  |
| <b>OPEN</b>                            | Gate <b>9GS1-I</b> with <b>without</b> Simultaneous Release  |                  |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 9Z1</b>   | <b>NOT SWEEP</b> |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Zone 8Z2</b>   | <b>NOT SWEEP</b> |
| <input type="checkbox"/> <b>VERIFY</b> | MCR sees <b>Peer 17</b> is in  | <b>MODE 17</b>   |

<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 15</b> is in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows:	
		<b>Area Secured (S11)</b> <b>Amber</b>	<b>OFF</b>
		<b>Area Secured (S10)</b> <b>Amber</b>	<b>OFF</b>
	<b>CLOSE</b>	Gate <b>9GS1-I</b>	

- Check for test acceptance of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 17 and Peer 15 in CA, Mode 16 and loss of sweep with illegal opening of gate 9GS1-I.**

**1.6 Test of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 17 and Peer 15 in CA Mode 17 and loss of sweep with illegal opening of gate 9GS1-I.**

	<b>PLACE</b>	Peers <b>15 &amp; 17</b> in <b>Controlled Access, Mode 17</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 15</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 17</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning lights and <b>LED</b> message: <b>Stop Call MCR for Access X-7400 Stop</b> on both sides of the gate are	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning light on both sides of gate <b>9GS1-O</b> indicate: <b>Call MCR for Crossover Amber</b>	<b>ON</b>
	<b>SWEEP</b>	<b>Zone 8Z2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 8Z2</b>	<b>SWEPT</b>
	<b>SWEEP</b>	<b>Zone 9Z1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 9Z1</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows:	
		<b>Area Secured (S11)</b> <b>Amber</b>	<b>ON</b>
		<b>Area Secured (S10)</b> <b>Amber</b>	<b>ON</b>
	<b>OPEN</b>	Gate <b>9GS1-I</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 9Z1</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 8Z2</b>	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 15</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 17</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows:	
		<b>Area Secured (S11)</b> <b>Amber</b>	<b>ON</b>
		<b>Area Secured (S10)</b> <b>Amber</b>	<b>ON</b>
	<b>CLOSE</b>	Gate <b>9GS1-I</b>	
	<b>OPEN</b>	Gate <b>9GS1-I</b> with <b>without</b> Simultaneous Release	
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 9Z1</b>	<b>NOT SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Zone 8Z2</b>	<b>NOT SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 15</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 17</b> is in	<b>MODE 17</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>9GS1</b> gatebox lights are as follows:	
		<b>Area Secured (S11)</b> <b>Amber</b>	<b>OFF</b>
		<b>Area Secured (S10)</b> <b>Amber</b>	<b>OFF</b>
	<b>CLOSE</b>	Gate <b>9GS1-I</b>	

- Check for test acceptance of retention of sweep with legal opening of gate 9GS1-I with Peer 17 in CA, Mode 17 and Peer 15 in CA, Mode 17 and loss of sweep with illegal opening of gate 9GS1-I.**

**END OF TEST PROCEDURE**

**TTL: Sign for completion of initial testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**TTL: Sign for completion of final testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_