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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.124.j.d ATF Laser Facility Sweep Tests

ATF OPM Procedures in which this Attachment is used.		
4.120.124		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
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Approved: \_\_\_\_\_ *Signature on File* \_\_\_\_\_  
 Physics Department Chair Date

V. Castillo

**4.120.124.j.d ATF Laser Facility Sweep Tests**

**ATF 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 to Sweep ATF Experimental Hall (EH) for Laser Operations**

- |                          |                 |   |               |
|--------------------------|-----------------|---|---------------|
|                          | <b>CLOSE</b>    | <b>EHG1 (Door A)</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | EHG1 is   | <b>CLOSED</b> |
|                          | <b>ENTER</b>    | <b>EH at FHG1 (Door B)</b>  |               |
|                          | <b>CLOSE</b>    | Door <b>FHG1</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | Door <b>FHG1</b> is   | <b>CLOSED</b> |
|                          | <b>ACTIVATE</b> | Start of Search (SS) P/B at LL to Exp Hall gate, <b>FHG1</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS</b> P/B is pressed EHBI/O <b>In 0</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>SS Led</b> at SS station is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS Led</b> is on ACR sees EHBI/O <b>Out 2</b> is   | <b>ON</b>     |
|                          | <b>ACTIVATE</b> | Check station <b>CS-1</b>   |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>CS-1</b> P/B is pressed ACR sees EHBI/O <b>In 2</b> is   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CS-1 Led</b> at CS-1 station is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>CS-1 Led</b> is on ACR sees EHBI/O <b>Out 3</b> is   | <b>ON</b>     |
|                          | <b>ACTIVATE</b> | Check station <b>CS-2</b>   |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>CS-2</b> P/B is pressed ACR sees EHBI/O <b>In 3</b> is   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CS-2 Led</b> at CS-2 station is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>CS-2 Led</b> is on ACR sees EHBI/O <b>Out 4</b> is   | <b>ON</b>     |
|                          | <b>EXIT</b>     | <b>With Pass thru P/B</b> Exp Hall So exit, EHG1, and close in < 20secs   |               |
|                          | <b>ACTIVATE</b> | End of Search ( <b>EOS</b> ) P/B  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS</b> P/B is pressed ACR sees EHBI/O <b>In 1</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>EOS Led</b> at EOS station is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS Led</b> is on ACR sees EHBI/O <b>Out 5</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ _____ <b>secs</b> , (~15 secs is acceptable) <b>EH Sonalert</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EH Sonalert</b> is on ACR sees EHBI/O-3 <b>Out 0</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ _____ <b>secs</b> , (~15 secs is acceptable) <b>EH Strobe</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EH Strobe</b> is on ACR sees EHBI/O-3 <b>Out 1</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | At end of Alarm and Strobe <b>EH Secured/Interlocked signs</b> at gates:<br><b>EHG1</b> <input type="checkbox"/> and <b>FHG1</b> <input type="checkbox"/> are | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees <b>EH Secured Led</b> in Control Room  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees on EHBI/O-3 <b>Out 10</b> is   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees on Operations page <b>EH</b>   | <b>SWEEP</b>  |

- Check for acceptance of Test to Sweep ATF Experimental Hall for laser Operations**

**1.2 Test Pass thru buttons, Outside and Inside, at EH gate EHG1preserves Sweep**

- |                          |               |   |               |
|--------------------------|---------------|---|---------------|
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>  | <b>SWEEP</b>  |
|                          | <b>ENTER</b>  | <b>EHG1</b> using <b>Outside</b> Pass thru button and < 20 secs |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>EHG1</b> Pass Thru button               | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b> retains                                      | <b>SWEEP</b>  |
|                          | <b>EXIT</b>   | <b>EHG1</b> using <b>Inside</b> Pass thru button and < 20 secs  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>EHG1</b> <b>Inside</b> Pass Thru button | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b> retains                                      | <b>SWEEP</b>  |

- Check for acceptance of Test Pass thru buttons, Outside and Inside, at EH gate EHG1 preserves Sweep**

**1.3 Test illegal opening of EHG1 drops EH Sweep**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>   | <b>SWEEP</b>    |
|                          | <b>ENTER</b>  | <b>EHG1</b> using <b>Outside</b> Pass thru button and < <b>20 secs</b>         |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>EHG1 Outside</b> Pass Thru button                      | <b>ACTIVE</b>   |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>   | <b>SWEEP</b>    |
|                          | <b>EXIT</b>   | <b>EHG1 without</b> using <b>Inside</b> Pass thru button                       |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warning at <b>EH</b> is  | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warning at <b>ACR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>   | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of EHG1 drops EH Sweep

**1.4 Test illegal opening of EHG1 using Interlock OFF button drops EH Sweep but silences Alarm**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>                           | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>Interlock Off P/B</b> at gate <b>EHG1</b> |                 |
|                          | <b>ENTER</b>  | <b>EH</b> thru <b>EHG1</b>                   |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>EH</b> is              | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is             | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b>                           | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of EHG1 using Outside/Inside Interlock OFF button drops EH Sweep but silences Alarm

**1.5 Test to Sweep ATF Fel Room (FR) for Laser Operations**

- |                          |                 |  |               |
|--------------------------|-----------------|--|---------------|
|                          | <b>CLOSE</b>    | FR to Vestibule 2 gate <b>FV2G1</b>                                      |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>FV2G1</b> is  | <b>CLOSED</b> |
|                          | <b>CLOSE</b>    | FR to Exp Hall gate <b>FHG1 (Door B)</b>                                 |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | Door <b>FHG1</b> is  | <b>CLOSED</b> |
|                          | <b>ACTIVATE</b> | Start of Search (SS) P/B at <b>FR</b> side of gate <b>FV2G1</b>          |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS</b> P/B is pressed <b>FRBI/O In 1</b> is                     | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>SS Led</b> at <b>SS</b> station is                                    | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS Led</b> is on <b>ACR</b> sees <b>FRBI/O-2 Out 2</b> is       | <b>ON</b>     |
|                          | <b>ACTIVATE</b> | End of Search (EOS) P/B at <b>FR</b> side of gate <b>FHG1</b>            |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS</b> P/B is pressed <b>ACR</b> sees <b>FRBI/O In 1</b> is    | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>EOS Led</b> at <b>EOS</b> station is                                  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS Led</b> is on <b>ACR</b> sees <b>FRBI/O-2 Out 3</b> is      | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ ____ <b>secs</b> , ( ~15 secs is acceptable) <b>FR Sonalert</b> is | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>FR Sonalert</b> is on <b>ACR</b> sees <b>FRBI/O-2 Out 0</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ ____ <b>secs</b> , ( ~15 secs is acceptable) <b>FR Strobe</b> is   | <b>ON</b>     |

- VERIFY** While FR Strobe is on ACR sees FRBI/O-2 Out 1 is **ON**
- VERIFY** At end of Alarm and Strobe **FR Secured/Interlocked signs** at gates:  
**FHG1**  and **FV2G1**  are **ON**
- VERIFY** ACR sees FR Secured Led in Control Room **ON**
- VERIFY** ACR sees on FRBI/O-2 **Out 9** is **ON**
- VERIFY** ACR sees on Operations page **FR** **SWEEP**

- Check for acceptance of Test to Sweep ATF Fel Room for laser Operations**

**1.6 Test Pass thru buttons at FR to EH gate FHG1preserves Sweep**

- SWEEP** **EH and FR**
- VERIFY** ACR sees **EH**  and **FR**  **SWEEP**
- ENTER** **FHG1 using EH side Pass thru button and < 20 secs**
- VERIFY** ACR sees for 20 secs FHG1 Pass Thru button **ACTIVE**
- VERIFY** ACR sees **EH**  and **FR**  retain **SWEEP**
  
- ENTER** **FHG1 using FR side Pass thru button and < 20 secs**
- VERIFY** ACR sees for 20 secs FHG1 Pass Thru button **ACTIVE**
- VERIFY** ACR sees **EH**  and **FR**  retain **SWEEP**

- Check for acceptance of Test Pass thru buttons at FR to EH gate FHG1preserves Sweep**

**1.7 Test illegal opening of FHG1 drops EH and FR Sweep**

- SWEEP** **EH and FR**
- VERIFY** ACR sees **EH**  and **FR**  **SWEEP**
  
- OPEN** **FHG1 without using Pass thru button**
- VERIFY** ACR sees **EH**  and **FR**  **NO SWEEP**
- VERIFY** ~ \_\_\_\_ **Secs** (~ 5 secs are acceptable) audible warnings at **EH**  and **FR**  are **ON**
- VERIFY** ~ \_\_\_\_ **Secs** (~ 5 secs are acceptable) audible warning at **ACR** is **ON**
- VERIFY** ACR sees **EH**  and **FR**  **NO SWEEP**

- Check for acceptance of Test illegal opening of FHG1 drops EH and FR Sweep**

**1.8 Test illegal opening of FHG1 using EH/FR Interlock OFF button drops EH and FR Sweeps but silences Alarm**

- SWEEP** **EH and FR**
- VERIFY** ACR sees **EH**  and **FR**  **SWEEP**
- PRESS** **EH Interlock Off P/B at gate FHG1**
- ENTER** **FR thru FHG1**
- VERIFY** audible warning at **EH**  and **FR**  **OFF**
- VERIFY** audible warning at **ACR** is **OFF**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b> <input type="checkbox"/> and <b>FR</b> <input type="checkbox"/>           | <b>NO SWEEP</b> |
|                          | <b>SWEEP</b>  | <b>EH</b> and <b>FR</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b> <input type="checkbox"/> and <b>FR</b> <input type="checkbox"/>           | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>FR Interlock Off P/B</b> at gate <b>FHG1</b>  |                 |
|                          | <b>ENTER</b>  | <b>EH</b> thru <b>FHG1</b>   |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>EH</b> <input type="checkbox"/> and <b>FR</b> <input type="checkbox"/> | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is   | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>EH</b> <input type="checkbox"/> and <b>FR</b> <input type="checkbox"/>           | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of FHG1 using EH/FR Interlock OFF button drops EH and FR Sweeps but silences Alarm**

**1.9 Test Pass thru buttons at FR to Vestibule 2 (V2) gate FV2G1preserves Sweep**

- |                          |               |   |               |
|--------------------------|---------------|---|---------------|
|                          | <b>SWEEP</b>  | <b>FR</b>   |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>  | <b>SWEEP</b>  |
|                          | <b>EXIT</b>   | <b>FV2G1</b> using <b>FR side</b> Pass thru button and < <b>20 secs</b> |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>FV2G1</b> Pass Thru button                      | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b> retains  | <b>SWEEP</b>  |
|                          | <b>ENTER</b>  | <b>FV2G1</b> using <b>V2 side</b> Pass thru button and < <b>20 secs</b> |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>FV2G1</b> Pass Thru button                      | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b> retains  | <b>SWEEP</b>  |
- Check for acceptance of Test Pass thru buttons at FR to Vestibule 2 (V2) gate FV2G1preserves Sweep**

**1.10 Test illegal opening of FV2G1 drops FR Sweep**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
|                          | <b>SWEEP</b>  | <b>FR</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>   | <b>SWEEP</b>    |
|                          | <b>OPEN</b>   | <b>FV2G1</b> without using Pass thru button                                    |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>   | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warnings at <b>FR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warning at <b>ACR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>   | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of FV2G1 drops FR Sweep**

**1.11 Test illegal opening of FV2G1 using FR/V2 Interlock OFF button drops FR Sweep but silences Alarm**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
|                          | <b>SWEEP</b>  | <b>FR</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>FR Interlock Off P/B</b> at gate <b>FV2G1</b> |                 |
|                          | <b>ENTER</b>  | <b>FR</b> thru <b>FV2G1</b>                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>FR</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>FR</b>                               | <b>NO SWEEP</b> |

- |                          |               |   |                 |
|--------------------------|---------------|---|-----------------|
|                          | <b>SWEEP</b>  | <b>FR</b>                                 |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees FR</b>                        | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>V2 Interlock Off P/B at gate FV2G1</b> |                 |
|                          | <b>ENTER</b>  | <b>FR thru FV2G1</b>                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>audible warning at FR</b>              | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>audible warning at ACR is</b>          | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees FR</b>                        | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of FV2G1 using FR/V2 Interlock OFF button drops FR Sweep but silences Alarm**

### 1.12 Test to Sweep ATF CO2 Main Room (C2MR) and CO2 Amp Room (C2AR) for Laser Operations

- |                          |                 |  |               |
|--------------------------|-----------------|--|---------------|
|                          | <b>CLOSE</b>    | <b>CO2 Amp Room to High Bay Area Exit gate ECG1</b>                |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ECG1 is</b>   | <b>CLOSED</b> |
|                          | <b>CLOSE</b>    | <b>CO2 Main Room to Vestibule 2 gate CV2G1</b>                     |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CV2G1 is</b>  | <b>CLOSED</b> |
|                          | <b>OPEN</b>     | <b>MAINT door and hold</b>   | <b>OPEN</b>   |
|                          | <b>ACTIVATE</b> | <b>C2AR check station P/B CCS1</b>                                 |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS1 is pressed C2BI/O In 0 is</b>                        | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CCS1 Led at CCS1 station is</b>                                 | <b>OFF</b>    |
|                          | <b>CLOSE</b>    | <b>MAINT door</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>MAINT door is</b>   | <b>CLOSED</b> |
|                          | <b>ACTIVATE</b> | <b>C2AR check station P/B CCS1</b>                                 |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS1 is pressed C2BI/O In 0 is</b>                        | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CCS1 Led at CCS1 station is</b>                                 | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS1 Led is on ACR sees C2BI/O-3 Out 1 is</b>             | <b>ON</b>     |
|                          | <b>ACTIVATE</b> | <b>C2MR check station P/B CCS2</b>                                 |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS2 P/B is pressed ACR sees C2BI/O In 1 is</b>           | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CCS2 Led at CCS2 station is</b>                                 | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS2 Led is on ACR sees C2BI/O-3 Out 3 is</b>             | <b>ON</b>     |
|                          | <b>ACTIVATE</b> | <b>C2MR check station P/B CCS3</b>                                 |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS2 P/B is pressed ACR sees C2BI/O In 2 is</b>           | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CCS3 Led at CCS3 station is</b>                                 | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS3 Led is on ACR sees C2BI/O-4 Out 14 is</b>            | <b>ON</b>     |
|                          | <b>EXIT</b>     | <b>CO2 Main Room to Vestibule 2 gate CV2G1</b>                     |               |
|                          | <b>CLOSE</b>    | <b>CV2G1</b>   |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CV2G1</b>   | <b>CLOSED</b> |
|                          | <b>ACTIVATE</b> | <b>Vestibule 2 check station P/B CCS4</b>                          |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS4 P/B is pressed ACR sees C2BI/O In 3 is</b>           | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>CCS4 Led at CCS4 station is</b>                                 | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While CCS4 Led is on ACR sees C2BI/O-4 Out 15 is</b>            | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>For ~ _____ secs, (~15 secs is acceptable) C2MR Sonalert is</b> | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While C2MR Sonalert is on ACR sees C2BI/O-3 Out 1 is</b>        | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>For ~ _____ secs, (~15 secs is acceptable) C2MR Strobe is</b>   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>While C2MR Strobe is on ACR sees C2BI/O-3 Out 3 is</b>          | <b>ON</b>     |

- |                          |               |  |              |
|--------------------------|---------------|--|--------------|
| <input type="checkbox"/> | <b>VERIFY</b> | For ~ _____ secs, (~15 secs is acceptable) <b>C2AR Sonalert</b> is   | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | While <b>C2AR Sonalert</b> is on ACR sees C2BI/O-3 Out 0 is  | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | For ~ _____ secs, (~15 secs is acceptable) <b>C2AR Strobe</b> is   | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | While <b>C2AR Strobe</b> is on ACR sees C2BI/O-3 Out 2 is  | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | At end of Alarm and Strobe <b>FR Secured/Interlocked signs</b> at gates:<br>EV2G1 <input type="checkbox"/> , outside Vestibule 1 and FV2G1 <input type="checkbox"/> , inside FR, are | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2MR <input type="checkbox"/> and C2AR <input type="checkbox"/> Secured Leds in Control Room  | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees on C2BI/O-4 <b>Out 9</b> <input type="checkbox"/> and C2BI/O-3 <b>Out 5</b> <input type="checkbox"/> are  | <b>ON</b>    |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees on Operations page <b>C2MR</b> <input type="checkbox"/> and <b>C2AR</b> <input type="checkbox"/>  | <b>SWEEP</b> |
|                          | <b>OPEN</b>   | <b>MAINT</b> door and hold   | <b>OPEN</b>  |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>MAINT</b> door is   | <b>OPEN</b>  |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees on Operations page <b>C2MR</b> <input type="checkbox"/> and <b>C2AR</b> <input type="checkbox"/>  | <b>SWEEP</b> |

- Check for acceptance of Test to Sweep ATF CO2 Main Room (C2MR) and CO2 Amp Room (C2AR) for Laser Operations**

**1.13 Test Pass thru buttons at C2MR to Vestibule 2 (V2) gate CV2G1preserves Sweep**

- |                          |               |   |               |
|--------------------------|---------------|---|---------------|
|                          | <b>SWEEP</b>  | <b>C2R</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>SWEEP</b>  |
|                          | <b>EXIT</b>   | <b>CV2G1</b> using <b>C2R side</b> Pass thru button and < 20 secs |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs CV2G1 Pass Thru button                       | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R retains  | <b>SWEEP</b>  |
|                          | <b>ENTER</b>  | <b>CV2G1</b> using <b>V2 side</b> Pass thru button and < 20 secs  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs CV2G1 Pass Thru button                       | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R retains  | <b>SWEEP</b>  |
- Check for acceptance of Test Pass thru buttons at C2R to Vestibule 2 (V2) gate CV2G1preserves Sweep**

**1.14 Test illegal opening of CV2G1 drops C2R Sweep**

- |                          |               |   |                 |
|--------------------------|---------------|---|-----------------|
|                          | <b>SWEEP</b>  | <b>C2R</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>SWEEP</b>    |
|                          | <b>OPEN</b>   | <b>CV2G1</b> without using Pass thru button                             |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ Secs (~ 5 secs are acceptable) audible warnings at <b>C2R</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ Secs (~ 5 secs are acceptable) audible warning at <b>ACR</b> is  | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of CV2G1 drops C2R Sweep**

**1.15 Test illegal opening of CV2G1 using C2R/V2 Interlock OFF button drops C2R Sweep but silences Alarm**

- |                          |               |                                     |                 |
|--------------------------|---------------|-------------------------------------|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>C2R</b>                          |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R                        | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | C2R Interlock Off P/B at gate CV2G1 |                 |
|                          | <b>ENTER</b>  | C2R thru CV2G1                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at C2R              | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at ACR is           | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R                        | <b>NO SWEEP</b> |
|                          |               |                                     |                 |
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>C2R</b>                          |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R                        | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | V2 Interlock Off P/B at gate CV2G1  |                 |
|                          | <b>ENTER</b>  | C2R thru CV2G1                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at C2R              | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at ACR is           | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R                        | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of CV2G1 using C2R/V2 Interlock OFF button drops C2R Sweep but silences Alarm

**1.16 Test Pass thru buttons at C2AR to High Bay (HB) exit gate CV2G1preserves Sweep**

- |                          |               |   |               |
|--------------------------|---------------|---|---------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>C2R</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>SWEEP</b>  |
|                          | <b>EXIT</b>   | CV2G1 using C2R side Pass thru button and < 20 secs |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs CV2G1 Pass Thru button         | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R retains                                | <b>SWEEP</b>  |
|                          |               |   |               |
|                          | <b>ENTER</b>  | CV2G1 using HB side Pass thru button and < 20 secs  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs CV2G1 Pass Thru button         | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R retains                                | <b>SWEEP</b>  |
- Check for acceptance of Test Pass thru buttons at C2R to High Bay (HB) gate ECG1preserves Sweep

**1.17 Test illegal opening of ECG1 drops C2R Sweep**

- |                          |               |   |                 |
|--------------------------|---------------|---|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>C2R</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>SWEEP</b>    |
|                          |               |   |                 |
|                          | <b>OPEN</b>   | ECG1 without using Pass thru button                               |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ Secs ( ~ 5 secs are acceptable) audible warnings at C2R is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ Secs ( ~ 5 secs are acceptable) audible warning at ACR is  | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees C2R  | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of ECG1 drops C2R Sweep

**1.18 Test to Sweep ATF Laser Lab (LL) for Laser Operations**

- CLOSE** LL to Vestibule 1 gate **LV1G1**
- VERIFY** **LV1G1** is **CLOSED**
- CLOSE** Exit LL gate **ELG1**
- VERIFY** **ELG1** is **CLOSED**
- CLOSE** Exit LL gate **ELG2**
- VERIFY** **ELG2** is **CLOSED**
  
- ACTIVATE** Start of Search (SS) P/B in LL
- VERIFY** While **SS** P/B is pressed LLBI/O **In 1** is **ON**
- VERIFY** **SS Led** at SS station is **ON**
- VERIFY** While **SS** Led is on ACR sees LLBI/O-3 **Out 2** is **ON**
- PRESS** Pass thru P/B in LL and exit LV1G1
- CLOSE** LV1G1 in < 20 secs
- ACTIVATE** LL **EOS** P/B
- VERIFY** While **EOS** P/B is pressed ACR sees LLBI/O **In 1** is **ON**
- VERIFY** **EOS Led** at EOS station is **ON**
- VERIFY** While **EOS** Led is on ACR sees LLBI/O-3 **Out 3** is **ON**
- VERIFY** For ~ \_\_\_\_\_ secs, (~15 secs is acceptable) **LL Sonalert** is **ON**
- VERIFY** While **LL Sonalert** is on ACR sees LLBI/O-2 **Out 0** is **ON**
- VERIFY** For ~ \_\_\_\_\_ secs, (~15 secs is acceptable) **LL Strobe** is **ON**
- VERIFY** While **LL Strobe** is on ACR sees LLBI/O-2 **Out 1** is **ON**
- VERIFY** After Alarm and Strobe **LL Secured/Interlocked sign** at **LV1G1** is **ON**
- VERIFY** ACR sees **LL Secured Led** in Control Room **ON**
- VERIFY** ACR sees on LLBI/O-3 **Out 10** is **ON**
- VERIFY** ACR sees on Operations page **LL SWEEP**

- Check for acceptance of Test to Sweep ATF LL for laser Operations**

**1.19 Test Pass thru buttons at LL to Vestibule 1 (V1) gate LV1G1preserves Sweep**

- SWEEP** **LL**
- VERIFY** ACR sees **LL SWEEP**
- EXIT** **LV1G1** using **LL side** Pass thru button and < 20 secs
- VERIFY** ACR sees for 20 secs **LV1G1** Pass Thru button **ACTIVE**
- VERIFY** ACR sees **LL** retains **SWEEP**
  
- ENTER** **LV1G1** using **V1 side** Pass thru button and < 20 secs
- VERIFY** ACR sees for 20 secs **LV1G1** Pass Thru button **ACTIVE**
- VERIFY** ACR sees **LL** retains **SWEEP**

- Check for acceptance of Test Pass thru buttons at LL to Vestibule 1 (V1) gate LV1G1preserves Sweep**

**1.20 Test illegal opening of LV1G1 drops LL Sweep**

- |                          |   |  |                 |
|--------------------------|---|--|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>LL</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>   | <b>SWEEP</b>    |
| <input type="checkbox"/> | <b>OPEN</b>   | <b>LV1G1</b> without using Pass thru button                                    |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>   | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>VERIFY</b>   | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warnings at <b>LL</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b>   | ~ ____ <b>Secs</b> ( ~ 5 secs are acceptable) audible warning at <b>ACR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>   | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>Check for acceptance of Test illegal opening of LV1G1 drops LL Sweep</b> |  |                 |

**1.21 Test illegal opening of LV1G1 using LL/V1 Interlock OFF button drops LL Sweep but silences Alarm**

- |                          |   |  |                 |
|--------------------------|---|--|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>LL</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>LL Interlock Off P/B</b> at gate <b>LV1G1</b> |                 |
|                          | <b>ENTER</b>  | <b>LL thru LV1G1</b>                             |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | audible warning at <b>LL</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>                               | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>LL</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>V1 Interlock Off P/B</b> at gate <b>LV1G1</b> |                 |
|                          | <b>ENTER</b>  | <b>LL thru LV1G1</b>                             |                 |
| <input type="checkbox"/> | <b>VERIFY</b>   | audible warning at <b>LL</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>ACR sees LL</b>                               | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>Check for acceptance of Test illegal opening of LV1G1 using LL/V1 Interlock OFF button drops LL Sweep but silences Alarm</b> |  |                 |

**1.22 Test to Sweep ATF Gun Hutch (GH) for Laser Operations**

- |                          |                 |   |               |
|--------------------------|-----------------|---|---------------|
| <input type="checkbox"/> | <b>CLOSE</b>    | <b>GH</b> to Vestibule 1 gate <b>GV1G1</b>                                |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>GV1G1</b> is   | <b>CLOSED</b> |
| <input type="checkbox"/> | <b>ACTIVATE</b> | <b>Start of Search (SS) P/B</b> in <b>GH</b>                              |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS P/B</b> is pressed <b>GHBI/O In 0</b> is                      | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>SS Led</b> at <b>SS</b> station is                                     | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS Led</b> is on <b>ACR</b> sees <b>GHBI/O-2 Out 2</b> is        | <b>ON</b>     |
|                          | <b>PRESS</b>    | <b>Pass thru P/B</b> in <b>GH</b> and exit <b>GV1G1</b>                   |               |
|                          | <b>CLOSE</b>    | <b>GV1G1</b> in < 20 secs   |               |
|                          | <b>ACTIVATE</b> | <b>GH EOS P/B</b>   |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS P/B</b> is pressed <b>ACR</b> sees <b>GHBI/O In 1</b> is     | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>EOS Led</b> at <b>EOS</b> station is                                   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS Led</b> is on <b>ACR</b> sees <b>GHBI/O-2 Out 3</b> is       | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ _____ <b>secs</b> , ( ~15 secs is acceptable) <b>GH Sonalert</b> is | <b>ON</b>     |

- VERIFY** While GH Sonalert is on ACR sees GHBI/O-2 Out 0 is **ON**
- VERIFY** For ~ \_\_\_\_\_ **secs**, (~15 secs is acceptable) **GH Strobe** is **ON**
- VERIFY** While GH Strobe is on ACR sees GHBI/O-2 Out 1 is **ON**
- VERIFY** After Alarm and Strobe **GH Secured/Interlocked sign** at **GV1G1** is **ON**
- VERIFY** ACR sees GH Secured Led in Control Room **ON**
- VERIFY** ACR sees on GHBI/O-2 **Out 10** is **ON**
- VERIFY** ACR sees on Operations page **GH** **SWEEP**

- Check for acceptance of Test to Sweep ATF GH for laser Operations**

### 1.23 Test Pass thru buttons at GH to Vestibule 1 (V1) gate GV1G1 preserves Sweep

- SWEEP GH**
- VERIFY** ACR sees **GH** **SWEEP**
- EXIT GV1G1 using GH side Pass thru button and < 20 secs**
- VERIFY** ACR sees for 20 secs **GV1G1 Pass Thru button** **ACTIVE**
- VERIFY** ACR sees **GH** retains **SWEEP**
  
- ENTER GV1G1 using V1 side Pass thru button and < 20 secs**
- VERIFY** ACR sees for 20 secs **GV1G1 Pass Thru button** **ACTIVE**
- VERIFY** ACR sees **GH** retains **SWEEP**

- Check for acceptance of Test Pass thru buttons at GH to Vestibule 1 (V1) gate GV1G1preserves Sweep**

### 1.24 Test illegal opening of GV1G1 drops GH Sweep

- SWEEP GH**
- VERIFY** ACR sees **GH** **SWEEP**
  
- OPEN GV1G1 without using Pass thru button**
- VERIFY** ACR sees **GH** **NO SWEEP**
- VERIFY** ~ \_\_\_\_ **Secs** (~ 5 secs are acceptable) audible warnings at **GH** is **ON**
- VERIFY** ~ \_\_\_\_ **Secs** (~ 5 secs are acceptable) audible warning at **ACR** is **ON**
- VERIFY** ACR sees **GH** **NO SWEEP**

- Check for acceptance of Test illegal opening of GV1G1 drops GH Sweep**

### 1.25 Test illegal opening of GV1G1 using GH/V1 Interlock OFF button drops GH Sweep but silences Alarm

- SWEEP GH**
- VERIFY** ACR sees **GH** **SWEEP**
- PRESS GH Interlock Off P/B at gate GV1G1**
- ENTER GH thru GV1G1**
- VERIFY** audible warning at **GH** **OFF**
- VERIFY** audible warning at **ACR** is **OFF**
- VERIFY** ACR sees **GH** **NO SWEEP**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
|                          | <b>SWEEP</b>  | <b>GH</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>GH</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | V1 <b>Interlock Off P/B</b> at gate <b>GV1G1</b> |                 |
|                          | <b>ENTER</b>  | <b>GH</b> thru <b>GV1G1</b>                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>GH</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>GH</b>                               | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of GV1G1 using GH/V1 Interlock OFF button drops GH Sweep but silences Alarm**

**1.26 Test to Sweep ATF Yag Room (YR) for Laser Operations**

- |                          |                 |  |               |
|--------------------------|-----------------|--|---------------|
|                          | <b>CLOSE</b>    | YR to Vestibule 1 gate <b>YV1G1</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>YV1G1</b> is  | <b>CLOSED</b> |
|                          | <b>ACTIVATE</b> | Start of Search (SS) P/B in YR   |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS</b> P/B is pressed <b>YRBI/O In 0</b> is                         | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>SS Led</b> at SS station is   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>SS Led</b> is on ACR sees <b>YRBI/O-3 Out 2</b> is                  | <b>ON</b>     |
|                          | <b>PRESS</b>    | Pass thru P/B in YR and exit <b>YV1G1</b>                                    |               |
|                          | <b>CLOSE</b>    | <b>YV1G1</b> in < 20 secs  |               |
|                          | <b>ACTIVATE</b> | <b>YR EOS P/B</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS P/B</b> is pressed ACR sees <b>YRBI/O In 1</b> is               | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | <b>EOS Led</b> at EOS station is   | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>EOS Led</b> is on ACR sees <b>YRBI/O-3 Out 3</b> is                 | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ _____ secs, (~15 secs is acceptable) <b>YR Sonalert</b> is             | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>YR Sonalert</b> is on ACR sees <b>YRBI/O-3 Out 0</b> is             | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | For ~ _____ secs, (~15 secs is acceptable) <b>YR Strobe</b> is               | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | While <b>YR Strobe</b> is on ACR sees <b>YRBI/O-3 Out 1</b> is               | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | After Alarm and Strobe <b>YR Secured/Interlocked sign</b> at <b>YV1G1</b> is | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees <b>YR Secured Led</b> in Control Room                               | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees on <b>YRBI/O-3 Out 15</b> is  | <b>ON</b>     |
| <input type="checkbox"/> | <b>VERIFY</b>   | ACR sees on Operations page <b>YR</b>  | <b>SWEEP</b>  |
- Check for acceptance of Test to Sweep ATF YR for laser Operations**

**1.27 Test Pass thru buttons at YR to Vestibule 1 (V1) gate YV1G1 preserves Sweep**

- |                          |               |  |               |
|--------------------------|---------------|--|---------------|
|                          | <b>SWEEP</b>  | <b>YR</b>  |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>YR</b>   | <b>SWEEP</b>  |
|                          | <b>EXIT</b>   | <b>YV1G1</b> using <b>YR side</b> Pass thru button and < 20 secs |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>YV1G1</b> Pass Thru button               | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>YR</b> retains                                       | <b>SWEEP</b>  |
|                          | <b>ENTER</b>  | <b>YV1G1</b> using <b>V1 side</b> Pass thru button and < 20 secs |               |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees for 20 secs <b>YV1G1</b> Pass Thru button               | <b>ACTIVE</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ACR sees <b>YR</b> retains                                       | <b>SWEEP</b>  |
- Check for acceptance of Test Pass thru buttons at YR to Vestibule 1 (V1) gate YV1G1preserves Sweep**

**1.28 Test illegal opening of YV1G1 drops YR Sweep**

- |                          |               |   |                 |
|--------------------------|---------------|---|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>YR</b>   |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>  | <b>SWEEP</b>    |
| <input type="checkbox"/> | <b>OPEN</b>   | <b>YV1G1</b> without using Pass thru button                                   |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>  | <b>NO SWEEP</b> |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> (~ 5 secs are acceptable) audible warnings at <b>YR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | ~ ____ <b>Secs</b> (~ 5 secs are acceptable) audible warning at <b>ACR</b> is | <b>ON</b>       |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>  | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of YV1G1 drops YR Sweep

**1.29 Test illegal opening of YV1G1 using YR/V1 Interlock OFF button drops YR Sweep but silences Alarm**

- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>YR</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>YR Interlock Off P/B</b> at gate <b>YV1G1</b> |                 |
|                          | <b>ENTER</b>  | <b>YR</b> thru <b>YV1G1</b>                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>YR</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>                               | <b>NO SWEEP</b> |
- 
- |                          |               |  |                 |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | <b>SWEEP</b>  | <b>YR</b>  |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>                               | <b>SWEEP</b>    |
|                          | <b>PRESS</b>  | <b>V1 Interlock Off P/B</b> at gate <b>YV1G1</b> |                 |
|                          | <b>ENTER</b>  | <b>YR</b> thru <b>YV1G1</b>                      |                 |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>YR</b>                     | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | audible warning at <b>ACR</b> is                 | <b>OFF</b>      |
| <input type="checkbox"/> | <b>VERIFY</b> | <b>ACR sees YR</b>                               | <b>NO SWEEP</b> |
- Check for acceptance of Test illegal opening of YV1G1 using YR/V1 Interlock OFF button drops YR Sweep but silences Alarm

**END OF TEST PROCEDURE**

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

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

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

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