

4.120.72.f LINAC Chipmunk 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 Test of Chipmunk NMO 62, area monitor, located U/S of Linac Plug Door

- VERIFY** Chipmunk calibration date [____/____/____] is **VALID**
- VERIFY** Chipmunk is in good physical condition and is **CHIRPING**
- VERIFY** MCR sees Chipmunk **keep-alive** counts **O.K.**
- VERIFY** NMO 62 was source-tested to MCR on ____/____/____ **OK**

- Check for test acceptance of Chipmunk NMO 62**

1.2 Test of Chipmunk NMO 63 located at Linac Tank 4/5

- VERIFY** Chipmunk calibration date [____/____/____] is **VALID**
- VERIFY** Chipmunk is in good physical condition and is **CHIRPING**
- VERIFY** MCR sees **Opto monitor** 21-7 Chipmunk NMO 63 **O.K.**
- VERIFY** At encl 4880 relay **BK14** is **ON**

- DISCON** NMO 63 from **Security interface box** for **failsafe test**
- VERIFY** At encl 4880 relay **BK14** **OFF**
- VERIFY** MCR sees at **Opto monitor** NMO 63 **IN'LOCK**
- RESET** NMO 63 from **MCR Opto monitor**
- VERIFY** MCR sees NMO 63 **OK**
- VERIFY** At encl 4880 relay **BK14** is **ON**

- PRESS** **Trip button** on chipmunk NMO 63
- VERIFY** At encl **4880 relay BK14** **OFF**
- VERIFY** MCR sees at **Opto monitor** NMO 63 **IN'LOCK**
- RESET** NMO 63 from **MCR Opto monitor**
- VERIFY** MCR sees NMO 63 **OK**
- VERIFY** At encl 4880 relay **BK14** is **ON**

- Check for acceptance of Test Chipmunk NMO 63 located at Linac Tank 4/5**

1.3 Test of Chipmunk NMO 68 located at Linac Tank 1

- VERIFY** Chipmunk **calibration** date [____/____/____] is **VALID**
- VERIFY** Chipmunk is in good physical condition and is **CHIRPING**
- VERIFY** MCR sees **at Opto monitor** 20-7 Chipmunk NMO 68 **O.K.**
- VERIFY** At encl 4880 relay **CK8** is **ON**

- DISCON** NMO 68 FROM interface box for **failsafe**
- VERIFY** At encl 4880 relay **CK8** **OFF**
- VERIFY** MCR sees at **Opto monitor** NMO 68 **IN'LOCK**
- RESET** NMO 68 from **MCR Opto monitor**
- VERIFY** MCR sees NMO 68 **OK**
- VERIFY** At encl 4880 relay **CK8** is **ON**

- PRESS** **Trip button** on chipmunk NMO 68
- VERIFY** At encl **4880 relay CK8** **OFF**
- VERIFY** MCR sees at **Opto monitor** NMO 68 **IN'LOCK**
- RESET** NMO 68 from **MCR Opto monitor**
- VERIFY** MCR sees NMO 68 **OK**
- VERIFY** At encl 4880 relay **CK8** is **ON**

- Check for acceptance of Test Chipmunk NMO 68 located at Linac Tank 1**

1.4 Test of Chipmunk (# 1) NMO 61 located at BLIP Pump House

- | | | | |
|--------------------------|---|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor 21-11 Chipmunk NMO 61 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| | DISCON | NMO 61 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 61 | IN'LOCK |
| | RESET | NMO 61 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 61 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 61 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 61 | IN'LOCK |
| | RESET | NMO 61 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 61 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk (# 1) NMO 61 located BLIP Pump House | | |

1.5 Test of Chipmunk (# 2) NMO 65 located at BLIP Pump House

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|--------------------------|--|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor 22-6 Chipmunk NMO 65 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| | DISCON | NMO 65 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 65 | IN'LOCK |
| | RESET | NMO 65 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 65 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 65 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 65 | IN'LOCK |
| | RESET | NMO 65 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 65 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk (# 2) NMO 65 located at BLIP Pump House | | |

1.6 Test of EBIS Chipmunk NMO 112 located at Shield Beam Height

- | | | | |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor 46-16 Chipmunk NMO 112 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4521 relay DK11 is | ON |
|
 | | | |
| <input type="checkbox"/> | DISCON | NMO 112 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4521 relay DK11 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 112 | IN'LOCK |
| <input type="checkbox"/> | RESET | NMO 61 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 112 is | OK |
| <input type="checkbox"/> | VERIFY | At encl 4521 relay DK11 is | ON |
|
 | | | |
| <input type="checkbox"/> | PRESS | Trip button on chipmunk NMO 112 | |
| <input type="checkbox"/> | VERIFY | At encl 4521 relay DK11 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 112 | IN'LOCK |
| <input type="checkbox"/> | RESET | NMO 112 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 112 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4521 relay DK11 is | ON |

- Check for acceptance of Test of EBIS Chipmunk NMO 112 located at Shield Beam Height**

1.7 Test of EBIS Area Monitor Chipmunk NMO 113 located at EBIS headwall, Linac side

- | | | | |
|--------------------------|---------------|--|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees on Pet page Chipmunk NMO 113 keep-alive counts | O.K. |
| <input type="checkbox"/> | VERIFY | NMO 112 was source-tested to MCR on[
_____/_____/_____]] | ON |

- Check for acceptance of Test of EBIS Area monitor Chipmunk NMO 113 located at EBIS headwall, Linac side**

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____