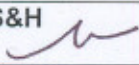
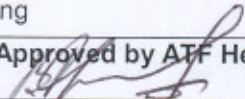
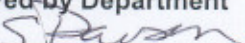


BROOKHAVEN NATIONAL LABORATORY PHYSICS DEPARTMENT		Number: 4.0.2	Revision: 1
		Effective: 08/01/2006	Page 1 of 3
Subject: ATF Linac Operator Training		Prepared by:	
Reviewed by ES&H Coordinator: 	Approved by ATF Head: 	Approved by Department Chair: 	

**Accelerator Test Facility
ATF LINAC Operator Training**

ATF Linac Operator Training Checklist #1 (PO-ATF-LINAC1).

ATF Linac Operator Training Checklist #2 (PO-ATF-LINAC2).

ATF Linac Operator Training Checklist #1 (PO-ATF-LINAC1)

BNL Accelerator Test Facility

Completion of this training qualifies the trainee as a "DUTY" (Experimental) Operator of the ATF linear accelerator system. A Duty Operator may only conduct those operations listed below.

Trainee name _____	Life/Guest number _____	Date _____
--------------------	-------------------------	------------

Policies and Procedures:

- | | |
|---|---|
| <input type="checkbox"/> Emergency phone numbers: Police/Fire/Medical x2222 or x911, ATF Control Room x2306, Building Manager (B. Liegel) x2281 | |
| <input type="checkbox"/> Role as Local Emergency Coordinator (LEC) and understanding of local emergency plan (LEP); trainee must complete GE-LEC course | |
| <input type="checkbox"/> Minimum of 2 people to be present at ATF whenever linac is in operation | |
| <input type="checkbox"/> Demonstrate proper use of linac high energy operation checklist, logbooks, keybox, and general procedural compliance | |
| <input type="checkbox"/> Emergency STOP button identification & purpose (Red vs. Blue) | <input type="checkbox"/> ATF radiation fault response procedure |
| <input type="checkbox"/> Modulator malfunction response procedure | <input type="checkbox"/> Power failure response and main circuit breaker location |
| <input type="checkbox"/> Understanding of radiation hazards (prompt vs. activation), postings, shielding, chipmunks, etc. | |
| <input type="checkbox"/> Identification of controlled areas at ATF and requirements for training and TLD badges | |
| <input type="checkbox"/> Understanding of proper procedure to hand-over operations to next operator (keys, logbooks, etc) | |

Experimental Area Security:

- | |
|--|
| <input type="checkbox"/> Demonstrate use of the Area Enable keys (27/28) and Operations keys (25/26) for the control room console |
| <input type="checkbox"/> Demonstrate use of the Reset key (29) when the Radiation Security system has been tripped |
| <input type="checkbox"/> Demonstrate interlock search & secure procedures for both Laser and Radiation security of the Experimental Hall |
| <input type="checkbox"/> Demonstrate operation of the High Energy Beam Stop and Laser UV shutter |

Machine Reset and Turn-Off Procedures:

- | |
|--|
| <input type="checkbox"/> Demonstrate the ability to reset the RF Modulators after a routine trip |
| <input type="checkbox"/> Demonstrate the ability to reset the Magnet Power Supplies after a routine trip |
| <input type="checkbox"/> Demonstrate routine turn-off of machine systems and use of checklist to document it |
| <input type="checkbox"/> Demonstrate emergency turn-off |

Computer Operations:

- | |
|--|
| <input type="checkbox"/> Demonstrate the ability to login to the Operations Program |
| <input type="checkbox"/> Demonstrate the ability to select appropriate equipment/elements for beam control |
| <input type="checkbox"/> Demonstrate the ability to change beam energy and use appropriate diagnostics to establish correct beam operation |
| <input type="checkbox"/> Demonstrate the use of the file Snap/Restore features to archive machine set points |

Trainee signature indicates completion of the training and understanding of linac policies/procedures:

Name (print)	Life/Guest #	Institution	Signature	Date

Trainer's name/life#/signature/date:

- | |
|---|
| <input type="checkbox"/> TRAINER: Add trainee's name & phone number to "Qualified DUTY Operator" list and notify ESH personnel |
|---|

ATF Linac Operator Training Checklist #2 (PO-ATF-LINAC2)
BNL Accelerator Test Facility

Completion of this training qualifies the trainee as a LINAC ("FULL") Operator of the ATF linear accelerator system, who may conduct all operations of a Duty Operator plus those listed below.

Trainee name _____	Life/Guest number _____	Date _____
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Policies and Procedures:

☐ Completion of PO-ATF-LINAC1 training checklist for Duty Operator - **REQUIRED** prior to start of PO-ATF-LINAC2

☐

☐

☐

Machine Turn-On Procedures

☐ Observe machine turn-on procedures and use of operations checklist

☐ **DAY 1** - Perform machine turn-on procedures, using operations checklist

☐ **DAY 2** - Perform machine turn-on procedures, using operations checklist

☐ **DAY 3** - Perform machine turn-on procedures, using operations checklist

Beam Alignment:

☐ Demonstrate

☐ Demonstrate

☐ Demonstrate

☐ Demonstrate

Machine Reset and Turn-Off Procedures:

☐ Demonstrate the ability to reset the RF Modulators after a routine trip

☐ Demonstrate the ability to reset the Magnet Power Supplies after a routine trip

☐ Demonstrate routine turn-off of machine systems and use of checklist to document it

☐ Demonstrate emergency turn-off

Trainee signature indicates completion of the training and understanding of linac policies/procedures:

Name (print)	Life/Guest #	Institution	Signature	Date

Trainer's name/life#/signature/date:

☐ **TRAINER:** Add trainee's name & phone number to "Qualified LINAC Operator" list and notify ESH personnel