



ITA Interfacing with MCR and Operations Procedures

Evan Niner & Todd Sullivan Accelerator Readiness Review for the 400 MeV Test Area 9 September 2020

Overview

Defining the roles and responsibilities of ITA staff and experiments in communicating with the MCR.

Operations Search and Secure procedures and On Job Training (OJT)



Roles

ITA Coordinator – 2 week rotation coordinating on-site active experiments and acting as the primary contact between ITA experiments and the MCR and other laboratory resources. Oversees experiment installation, ORC approval, operation, and decommissioning activities. ITA coordinator will instruct users on facility procedures and communication protocols with the MCR.

Experiment – A group of users with an approved Technical Scope of Work operating at the ITA. Each group has an experiment spokesperson identified on the TSW.

Experiment representative – The point of contact between the MCR and the experiment during beam operation. The experiment spokesperson or a representative. They will self-identify to the MCR when making the beam request.

Radiation Safety Officer (RSO) – Reviews TSWs and ORCs, approved Controlled Access requests, determines cool-off time, coordinates sample installation, retrieval, storage & Shipping.

Radiation Control Technician (RCT) – Oversee material installation and removal of material in the "front porch", shielding cave, and counting house storage freezer.

Experimenter Locations During Beam Operation

The experiment will identify in the ORC where they will be located during beam operations.

ITA Counting House – For experiments with active samples requiring monitoring of cooling, power, active data collection from the samples users will be stations in the ITA counting house (x3101)

Remote – For experiments with passive samples with little monitoring required beyond the total fluence delivered by the accelerator to the samples, users may be remotely located.



Experiment Communication with MCR

The ITA coordinator will provide the MCR with a list of experiments approved to request beam and their operational plan.

After an approved ORC, the experimental representative will contact the MCR to request a Search and Secure followed by beam. The representative will provide:

- Identify the experiment they represent (TXXXX).
- Identify their name, location and contact number for further communication
- Specify they are requesting beam to the MTA
- Identify a target fluence and any additional requests (i.e., specification on beam spot size, pulse) pattern and intensity, etc.)

The representative will communicate any requests for changes in beam conditions in similar fashion.

If the experiment chooses to operate in data collection shifts, the new experimental representative will contact the MCR to note a change in contact at the start of shift. **₹ Fermilab**

Experiment Communication with MCR

Any request for a controlled access will be communicated by the experiment representative to the ITA coordinator. The ITA coordinator will make the controlled access request to the MCR, requiring RSO approval.

The experiment representative will communicate to the MCR when the beam request is complete.

The ITA coordinator, in consultation with the RSO, will request a return to supervised access after a determined cool-off period following beam operations.



Operations Procedures



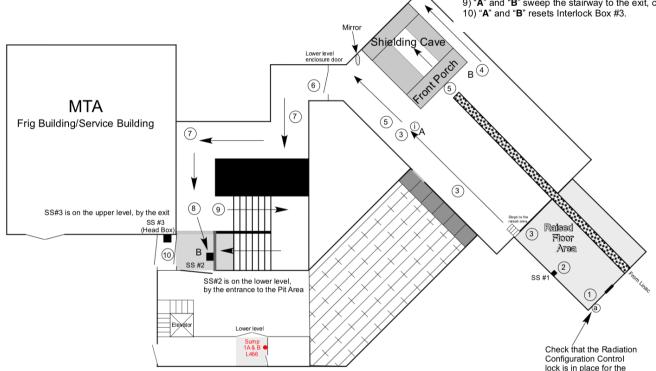
Search and Secure

Search and Secure Procedure:

- "A" and "B" enter the Hall and proceed upstream to the raised floor area, the "Stub". There is a
 cover over the cable penetration on the far upstream wall. Verify the cover is in place and locked.
- 2) "A" and "B" sweep the area to reset Interlock Box #1.
- 3) "A" and "B" sweep the hall to ①, where "A" holds. "A" uses the other Mirror to check on top of the Shielding Cave.
- 4) "B" checks the area between the Shielding Cave and the wall.
- 5) "B" using a flashlight checks inside the Shielding Cave, then joins up with "A".
- 6) "A" and "B" exits the Hall, closing the door behind them.

cable penetration.

- 7) "A" and "B" sweep the hallway to Interlock Box #2.
- 8) "A" holds while "B" resets Interlock Box #2.
- 9) "A" and "B" sweep the stairway to the exit, checking under the grating, and exit the enclosure.





On Job Training

OJT training for operators has been updated for MTA.

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Operators are training on Search and Secure procedures.

Additional training to be added after commissioning activities coordinated by beamline physicist are complete.



Questions and Comments

