

NLCTA PPS Search and Secure Procedure

1. Introduction

This procedure is to be used to secure the NLCTA accelerator enclosure (henceforth referred to as “the enclosure”). Securing the enclosure consists of verifying that no one is inside the enclosure, verifying the integrity of the exclusion barriers, and ensuring that all doors are securely latched. This procedure must be repeated whenever there is a loss of PPS security in the enclosure.

The enclosure contains the injector, the chicane, the linac, and the spectrometer. This procedure starts from the condition in which the enclosure is open.

2. Applicability

A complete search of the enclosure requires a team of at least two qualified operators: one person at the PPS console in the NLCTA control room, and another to conduct the search. A third person (not necessarily a qualified operator) may assist in the search. All people participating in the search and secure process should familiarize themselves with this procedure prior to carrying it out.

3. Precautions and Limitations

If the integrity of the PPS interlocks or other safety systems has been compromised prior to the search, then the “PPS Interlock Checklist,” must be completed.

4. Prerequisite Actions

1. The enclosure is in CONTROLLED access.
2. Two qualified operators are required to search the enclosure.
3. Read this entire search procedure before proceeding.
4. Get the NLCTA Panel Control Key and the NLCTA Search Reset Key from the key safe.

5. Objectives of a search

In searching, we establish that nobody is in the enclosure and, when completed, obtain a “search-set” status in the PPS system. In searching, the following must be observed:

- Searching must be done thoroughly to ensure that every person anywhere in the enclosure will be found.
- Look into the cable trays, under optical tables, beam component stands.
- Do not “turn your back” such that a person can walk by you unnoticed.
- Throughout the search, announce: “Searching. The beam is turning on. Is anybody here?” Any equivalent alternate phrasing is acceptable.

Assume that a worker is disabled due to a head injury, broken leg, heart problems, blood sugar problems, etc. We are not expecting to find a person who is actively and deliberately evading a search, but must find anyone who is disabled or inattentive.

6. Searching the Enclosure

1. The searcher enters into the enclosure via the East Entry Module.
 - The person at the PPS console must not release any keybank keys other than those carried by the search team.
2. The searcher starts the search at the inside of the West Entry Module (outer) PPS door.
 - Make sure the West PPS door is latched.
 - Close the (inner) PPS gate behind you.
3. Obtain the west search preset with the Search Reset Key.
 - Search the west maze by sweeping the area from the west search preset to the gun.
4. Search the length of the enclosure from the gun to the entrance to the East Entry Module maze.
 - Climb to the top of the staircase that leads over the spectrometer extraction beamlines. From the top step, an excellent view of the cable trays and areas behind the spectrometer is available.
5. Obtain the east search preset with the Search Reset Key.
6. Search through the east maze to the East Entry Module (outer) PPS door.
 - Close the (inner) PPS gate behind you.
7. Exit the enclosure.
 - Make sure the East PPS door is latched.
8. Return keybank key to the keybank.
9. Obtain a Search Reset by using the Search Reset Key while the PPS console operator presses the Search Reset button. The “SET” light illuminates on the search reset box as soon as the search is set.
10. Return the search key to the NLCTA control room. This concludes the enclosure search and secure procedure.

7. Background

This document is owned and authorized by the PPA/ARD/Test Facilities Department.

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7.1. Document has been reviewed and approved by:

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