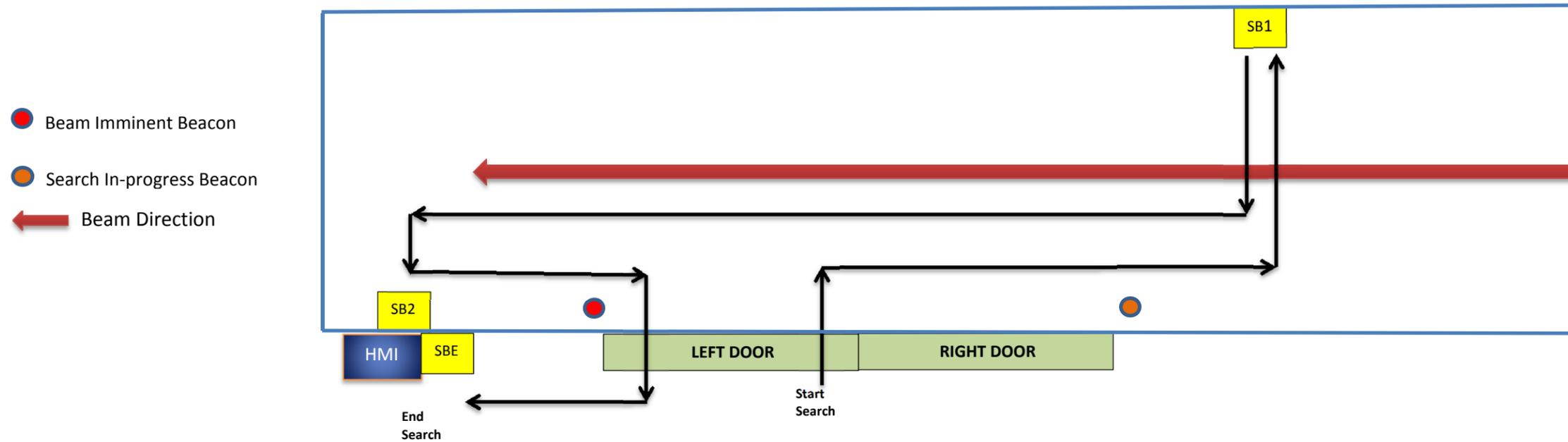


## 4-BM Beamline Enclosure Search Sequence

### FOE (A hutch)



1. Check PPS HMI for PPS Faults and turn Door Maglocks ON (**green**) using HMI
2. Contact FLOCO to clear and reset any faults before starting search  
Initial Search Conditions are:
  - Door Maglocks ON (Green on Keypad)
  - RIGHT door is Closed
  - LEFT door remains Open
  - HMI clear of any faults (No red A chain or B chain faults)
3. Confirm the enclosure is free of people before beginning the search
4. Search Sequence:
  - a. Enter enclosure through the open door and proceed upstream
  - b. Duck under beam pipe, check inboard upstream of beamline equipment for personnel
  - c. Press SB1  
Note: Search must be completed in 120 seconds after pressing SB1
  - d. Press SB2 and exit enclosure
  - e. Close the LEFT door (if using automatic door closer- watch door at all times)
5. Press SBE
6. Beam Imminent warning sounds for 30 seconds
7. Hutch is now interlocked.

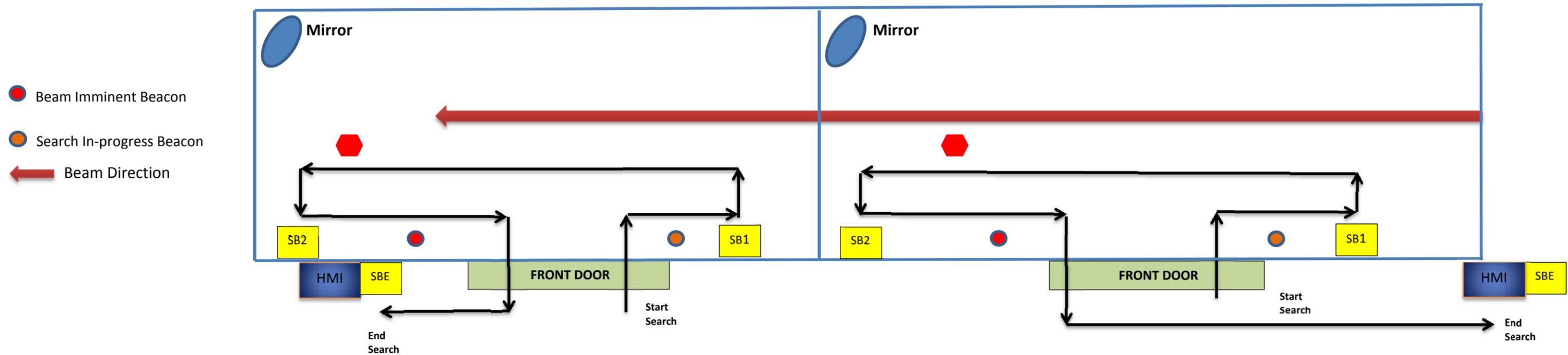
8/17/2017

**X** Ryan Tappero

Ryan Tappero  
XFML Lead Beamline Scientist  
Signed by: Tappero, Ryan

# 4-BM Beamline Enclosure Search Sequence

## B and C Hutch



### Search Sequence for C Hutch

1. Check PPS HMI for PPS Faults and turn Door Maglock ON (green) using HMI
2. Contact FLOCO to clear and reset any faults before starting search  
Initial Search Conditions are:
  - Door Maglock ON (Green on Keypad)
  - HMI clear of any faults (No red A chain or B chain faults)
3. Confirm the enclosure is free of people before beginning the search
4. Search Sequence:
  - a. Enter enclosure through the open door proceed towards SB1
  - b. Check for personnel behind beamline equipment.
  - c. Press SB1  
Note: Search must be completed in 120 seconds after pressing SB1
  - d. Stop. Use mirror to check for personnel
  - e. Press SB2 and exit enclosure
  - f. Close the FRONT door (if using automatic door closer- watch door at all times)
5. Press SBE
6. Beam Imminent warning sounds for 30 seconds
7. Hutch is now interlocked.

### Search Sequence for B Hutch

1. Check PPS HMI for PPS Faults and turn Door Maglock ON (green) using HMI
2. Contact FLOCO to clear and reset any faults before starting search  
Initial Search Conditions are:
  - Door Maglock ON (Green on Keypad)
  - HMI clear of any faults (No red A chain or B chain faults)
3. Confirm the enclosure is free of people before beginning the search
4. Search Sequence:
  - a. Enter enclosure through the open door proceed towards SB1
  - b. Check for personnel behind beamline equipment.
  - c. Press SB1  
Note: Search must be completed in 120 seconds after pressing SB1
  - d. Stop. Use mirror to check for personnel.
  - e. Press SB2 and exit enclosure
  - f. Close the FRONT door (if using automatic door closer- watch door at all times)
5. Press SBE
6. Beam Imminent warning sounds for 30 seconds
7. Hutch is now interlocked.