

## Shot Type 4: Shot Director Checklist S-AB-P-057 Rev E

Type 4 Shots are propagating shots that terminate at one of the full aperture calorimeters (or beam dumps) of the Beamline in the Bay. The 40-cm Glass Amplifiers are not fired in a Type 4 shot.

**Prerequisite:** Successful Type 3 Qualification Shot

**Checklist:**

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- 1** Select and review the RID for this shot. Prepare the Master Template.
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- 2** Initiate preparations by pressing the “Advance to: PRESHOT” button.
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- 3** Make headset announcement.
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- Lock the Source Bay\* and direct the LST to sweep and exit the Bay.

\*Note: Sources Bay is required for shots that require the 15-cm Glass Amp or 40-mm Rod Amp.

- 4**
- |               | Closed Access Required |       |       |    |
|---------------|------------------------|-------|-------|----|
|               | Sources                | CB&DB | LB&TB | VG |
| <b>Type 4</b> | Yes*                   | No    | No    | No |

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- 5** Build the Power Conditioning Template.
- Review the Power Conditioning template with the System Scientist.
  - Approve the PCE “Template Report” and click ‘PREPARE’.

**Note: Steps 6 & 7 can be done in either order.**  
 (continues)

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**Beamlines Type 4 Shot checklist**

- ALT has secured the IRDP, IRAT, Injection, SY and TAS areas
- Repeat this checklist for each beam in the shot

**6** Confirm:

- Most recent version of the SRF has been reviewed and implemented
- Type 5 Shot checklist complete
- Review the device position macro reports for accuracy. Note any exceptions.
- The required diagnostics are ready.
- Injection Throttle setting \_\_\_\_\_%
- System Science or PI special setups installed/removed

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**Sources Propagating Shot checklist**

- Repeat this checklist for each beam in the shot

Confirm:

- Most recent version of the SRF has been reviewed and implemented
- Propagating Shot checklist complete and device macro is clean

**For Sources in long-pulse mode**

- 7**
- Pulse width setting
  - SBSS Systems are Enabled.
  - ISP-Cal's are withdrawn?"
  - Sources injected energy setting is \_\_\_\_\_

**If LS1 and/or LS2 are in short-pulse mode**

- Pulse spectra
  - SBSS Systems are Bypassed
  - Preamplifiers are Disabled
  - ISP-Cal's are withdrawn
  - Sources injected energy setting is \_\_\_\_\_
- (continues)

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**Closed Access**

- 8**
- ALT has secured the IRDP, IRAT, Injection, SY and TAS areas
  - LST has secured the Source Bay (if required)

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**Start of Charging**

Make PA announcement: "Now charging for a Type 4 Propagating Shot for Beamline 1,2,3 and/or 4"

- 9
- Click on the "Enable Charge" button.
  - Click on the "Charge" button.
  - Time to "at volt ", in minutes and seconds, every 30 seconds.
  - "System is At\_Volt"

Monitor subsystem shot activities. IF it is necessary to ABORT, press the ABORT button: IF the count is T-5 or less, ALSO **press the red dump button.**

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**Monitor the shot sequence**

Announce:

- 10
- "T-20 seconds" (to the shot).
  - "T-10 seconds" (to the shot) and the shot countdown.

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**Resume Open Access**

- 11
- Make PA announcement: "Shot # \_\_\_\_\_ is complete, resume normal access."
  - Unlock the Bay door

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**POSTSHOT**

- 12
- Proceed to S-AB-P-062 for POSTSHOT or Abort procedures.

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(Done)

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