## Jobs Safety Analysis (JSA)

<table>
<thead>
<tr>
<th>JOB/ACTIVITY NAME:</th>
<th>Component alignment and layouts in FEH - XRT – NEH - FEE</th>
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<tr>
<td>DEPARTMENT/GROUP NAME</td>
<td>MET / AEG</td>
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<td>BLDG/AREA LOCATION(s):</td>
<td>LCLS / FEH - XRT – NEH - FEE</td>
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<td>OTHER INFORMATION:</td>
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### REQUIRED PERSONAL PROTECTIVE EQUIPMENT FOR ENTIRE JOB

- [x] safety glasses
- [x] safety shoes
- [ ] chemical resistant gloves
- [ ] other reflective vest
- [x] other flashlight
- [x] hard hat
- [ ] welding gloves
- [ ] gloves when handling tools
- [ ] other
- [ ] long pants / sleeves
- [ ] other
- [ ] welding goggles
- [ ] hearing protection
- [ ] chemical goggles
- [ ] harness lanyard
- [ ] face shield
- [ ] harness lanyard
- [ ] glove when handling tools

### Basic Steps

#### Set Up Equipment and Targeting

- Set up survey instruments (includes Class 2 or 3R laser instruments)
- Place targets on and around components including magnets
- Plug in instruments
- Use illumination if necessary

#### Potential Hazards

- Radiation (since the FEE is under construction radiation currently does not exist in the area)
- Falling off ladders
- Exposure to electrical energy

#### Controls

- Full PPE is required (see checklist above)
- Inspect ladders before use and never climb to the top rungs
- Inspect hand or power tools and cords before use
- Inspect power cords for any defects and use GFCIs (never daisy chain cords)

#### Perform Survey

- Make measurements

#### Potential Hazards

- Falling off ladders when moving targeting
- Exposure to electrical energy
- Injuries from using hand-tools improperly including cuts, eye injuries or electrical shock

#### Controls

- Full PPE is required
- Do not stare continuously at a laser instrument (Class 2 lasers are safe due to natural blink reflex and Class 3R are safe with restricted beam viewing)
- Inspect ladders before use and never climb to the top rungs
I understand & will adhere to the steps, hazards & controls as described in this JSA. I understand that performing steps out of sequence may pose hazards that have not been evaluated, nor authorized. I will contact my supervisor prior to continuing work, if the scope of work changes or new hazards are introduced. 

I understand I have the authority and responsibility to stop work I believe to be unsafe.

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<tr>
<th>Worker Name (please print)</th>
<th>Signature</th>
<th>Date</th>
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I have reviewed the steps, hazards & controls described in this JSA with all workers listed above and authorize them to perform the work. Workers are qualified (i.e. licensed or certified, as required & in full compliance with SLAC training requirements) to perform this activity.

Supervisor | Signature | Date |
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I have communicated area hazards with the supervisor or listed worker(s) for this activity and have coordinated the described activity with affected occupants. The above listed workers are released to perform described scope of work in the following area(s):

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<th>Area or Building Manager</th>
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