

Job Hazard Analysis and Mitigation

Task or Employee: DIRC Prototype R&D Routine Non-routine

Retention: Completed Routine JHAMs are retained by the employee and supervisor. Non-routine JHAMs are retained until the task is fully closed out. In the case of an accident, the form is to be retained for use by the review team.
 Other relevant safety documents are:

- Endstation A Area Hazard Analysis (https://www-internal.slac.stanford.edu/esh/SLACsafety/jham/aha_docs/AHA-B060-61.doc)
- Research Yard Area Hazard Analysis (https://www-internal.slac.stanford.edu/esh/SLACsafety/jham/aha_docs/AHA-ResearchYard.doc)

Sequence of Basic Job Steps	Potential Hazards	Controls & Recommended Actions
Accessing the Research Yard. Entering and working in and around Endstation A	<ul style="list-style-type: none"> • Exposure to radiation • Electrical hazards • Trips/slips/falls • Uneven floor surfaces • Protruding equipment • Pipes and other navigation obstacles • Noise (difficult to communicate or hear hazard warnings) • Limited lighting in Endstation A in evenings and on weekends 	<ul style="list-style-type: none"> • Have up to date GERT certification and properly wear dosimeter • Review the ESA and Research Yard Area Hazard Analysis (AHA) • Observe and follow safety rules and regulations established for the area • Adhere to safety signage • Wear close-toes shoes • Touch equipment only under the guidance of a system expert. • Be aware of your surroundings; look before you reach or go • Know dangers of the materials you are working with by reading MSDS • Maintain a clean environment • Training: <ul style="list-style-type: none"> ○ General Employee Radiological Training (GERT) (course #115) ○ Employee Orientation to ES&H (course #219)
Use of hand tools (non-powered) such as wrenches, hammers, saws, screw drivers.	<ul style="list-style-type: none"> • Cut hands/knuckles • Stab wound • Eye injury 	<ul style="list-style-type: none"> • Wear gloves when practical • Use liquid wrench or similar material to pre-loosen tight bolts. • Apply force away from your body when prying with hand-tools (like a screwdriver) • Wear safety glasses if something may fly into your eye. • Keep tools sharp • Use the right tool for the job
Working in the ESA data monitoring trailer (build. 420)	<ul style="list-style-type: none"> • Electrical hazards • Trips/slips/falls 	<ul style="list-style-type: none"> • Review the Area Hazard Analysis (AHA) • Observe and follow safety rules and regulations established for the

Sequence of Basic Job Steps	Potential Hazards	Controls & Recommended Actions
	<ul style="list-style-type: none"> • Protruding equipment 	<p style="text-align: center;">area</p> <ul style="list-style-type: none"> • Adhere to safety signage • Wear close-toes shoes • Touch equipment only under the guidance of a system expert. • Be aware of your surroundings; look before you reach or go
Work around Focusing DIRC Prototype	<ul style="list-style-type: none"> • Movable equipment (bar support frame, electronic crates) and overhead equipment (bar support frame, beam line and support) <ul style="list-style-type: none"> ▪ Risk of bumping into equipment or hitting head • Uneven floor surfaces, cables on floor • Possible exposure to HeNe laser beam • Stepladder access to beamline detectors and standoff box: slip, trip, fall hazard 	<ul style="list-style-type: none"> • Be aware of your surroundings; look before you reach or go • Follow operating procedures • Alignment laser is a class IIIa HeNe laser, no special training is required. It poses an eye hazard only when looking into the beam for an extended time or when viewed through optics (telescope, magnifier). Do not look into the beam with or without optics. • When accessing the beamline detectors or the standoff box, use the ladder, do not step on bar support frame.

Acknowledgements	Print Name	Signature or Initialed	Date
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Participant:			