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Org: PHALLA

Status: PROCESSED  
Saved: 3/29/2022 8:12:30 AM  
Submitted: 3/29/2022 8:12:30 AM



Operational Safety Procedure Review and Approval Form # 128835  
(See [ES&H Manual Chapter 3310 Appendix T1 Operational Safety Procedure \(OSP\) and Temporary OSP Procedure](#) for Instructions)

Type:	<i>OSP</i> <a href="#">Click for OSP/TOSP Procedure Form</a> <a href="#">Click for LOSP Procedure Form</a> <a href="#">Click for LOTO-COMPLEX Information</a> <a href="#">Click for LOTO-GROUP Information</a>					
Serial Number:	<i>ENP-22-128835-OSP</i>					
Issue Date:	<i>3/29/2022</i>					
Expiration Date:	<i>3/29/2025</i>					
Title:	<i>Use of Hydraulic Presses and Jacks</i>					
Location: (where work is being performed) <a href="#">Building Floor Plans</a>	<i>101 - Experimental Hall A</i> <i>72 - Physics Storage</i> <i>98 - Physics Fabrication - 1</i>	Location Detail: (specifics about where in the selected location(s) the work is being performed)	<i>Various Physics Location</i>			
Risk Classification: (See <a href="#">ES&amp;H Manual Chapter 3210 Appendix T3 Risk Code Assignment</a> )	Without mitigation measures (3 or 4):		<i>3</i>			
	With mitigation measures in place (N, 1, or 2):		<i>1</i>			
Reason:	This document is written to mitigate hazard issues that are : <i>Determined to have an unmitigated Risk code of 3 or 4</i>					
Owning Organization:	<i>PHALLA</i>					
Document Owner(s):	<i>Butler, Jessie (<a href="mailto:jbutler@jlab.org">jbutler@jlab.org</a>) Primary</i>					
Supplemental Technical Validations <input type="checkbox"/>						
<i>Solvents (&lt; 1 Gallon, Non-Flammable) (Imani Burton, Jennifer Williams)</i> <i>Machine Tools (Bert Manzlak, Tim Fitzgerald)</i> <i>ESH&amp;Q Liasion (Tim Fitzgerald)</i>						
Document History <input type="checkbox"/>						
<table border="1"><tr><td>Revision <input type="checkbox"/></td><td>Reason for revision or update <input type="checkbox"/></td><td>Serial number of superseded document <input type="checkbox"/></td></tr></table>				Revision <input type="checkbox"/>	Reason for revision or update <input type="checkbox"/>	Serial number of superseded document <input type="checkbox"/>
Revision <input type="checkbox"/>	Reason for revision or update <input type="checkbox"/>	Serial number of superseded document <input type="checkbox"/>				
Lessons Learned	<a href="#">Lessons Learned</a> relating to the hazard issues noted above have been reviewed.					
Comments for reviewers/approvers: <input type="checkbox"/>	<i>Previous OSP expired.</i>					
Attachments <input type="checkbox"/>						

Procedure: *Hydraulic Press OSP.pdf*

THA: *Hydraulic Press THA.pdf*

Additional Files:

Review Signatures

Subject Matter Expert : Chemicals->Solvents (< 1  
Gallon-> Non-Flammable) **Signed** on 3/29/2022 8:50:07 AM by Imani Burton  
([iburton@jlab.org](mailto:iburton@jlab.org))

Subject Matter Expert : Machine Tools **Signed** on 3/29/2022 8:41:12 AM by Bert Manzlak  
([manzlak@jlab.org](mailto:manzlak@jlab.org))

Approval Signatures

Division Safety Officer : PHALLA **Signed** on 3/29/2022 8:51:02 AM by Ed Folts ([folts@jlab.org](mailto:folts@jlab.org))

ESH&Q Division Liasion : PHALLA **Signed** on 3/29/2022 8:59:14 AM by Bert Manzlak ([manzlak@jlab.org](mailto:manzlak@jlab.org))

Org Manager : PHALLA **Signed** on 3/29/2022 8:54:14 AM by Mark Jones ([jones@jlab.org](mailto:jones@jlab.org))

Safety Warden : Experimental Hall A **Signed** on 3/29/2022 1:15:12 PM by Jessie Butler ([jbutler@jlab.org](mailto:jbutler@jlab.org))

Safety Warden : Physics Fabrication  
- 1 **Signed** on 3/29/2022 11:36:43 AM by Robert Tucker ([retucker@jlab.org](mailto:retucker@jlab.org))

Safety Warden : Physics Storage **Signed** on 3/29/2022 10:44:05 AM by Stanley Madlock  
([smadlock@jlab.org](mailto:smadlock@jlab.org))

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**Operational Safety Procedure Form**  
(See [ES&H Manual Chapter 3310 Appendix T1](#)  
**Operational Safety Procedure (OSP) and Temporary OSP**  
**Procedure** for instructions.)

Click  
For Word Doc

<b>Title:</b>	Use of Hydraulic Presses and Jacks		
<b>Location:</b>	Hall A and Other Physics Division Work Areas	<b>Type:</b>	<input checked="" type="checkbox"/> OSP <input type="checkbox"/> TOSP
<b>Risk Classification</b> (per <a href="#">Task Hazard Analysis</a> attached) (See <a href="#">ES&amp;H Manual Chapter 3210 Appendix T3 Risk Code Assignment.</a> )	<b>Highest Risk Code Before Mitigation</b>		3
	<b>Highest Risk Code after Mitigation (N, 1, or 2):</b>		1
<b>Owning Organization:</b>	PHALLA	<b>Date:</b>	15 March 2022
<b>Document Owner(s):</b>	Jessie Butler (JButler)		

**DEFINE THE SCOPE OF WORK**

- Purpose of the Procedure** – Describe in detail the reason for the procedure (what is being done and why).  
Jefferson Lab has determined that the use of a machine tool is inherently risky and carries an unmitigated Risk Code of 3 or higher. This OSP is used to ensure hazards are communicated and training is appropriate prior to use of hydraulic presses and jacks.
- Scope** – include all operations, people, and/or areas that the procedure will affect.  
This OSP covers hydraulic presses, shears, rollers and jacks.
- Description of the Facility** – include building, floor plans and layout of the experiment or operation.  
Hydraulic presses and jacks are used to apply great pressure to an object to be moved, lifted, bent, sheared, pressed or punched. To be used in Hall A and other Physics Division work areas.

**ANALYZE THE HAZARDS and IMPLEMENT CONTROLS**

- Hazards identified on written Task Hazard Analysis**  
Machine Tools: Rotating parts, high pressure fluid, pinch points, sharp edges, and materials that may shatter.  
Ergonomics including: Lifting and carrying heavy objects and repetitive motions.
- Authority and Responsibility:**
  - Who has authority to implement/terminate**  
Hall A Work Coordinator
  - Who is responsible for key tasks**  
Hall A Tech Staff
  - Who analyzes the special or unusual hazards including elevated work, chemicals, gases, fire or sparks** (See [ES&H Manual Chapter 3210 Appendix T1 Work Planning, Control, and Authorization Procedure](#))  
Industrial Hygiene, Industrial Safety, and RADCON

## 6. Personal and Environmental Hazard Controls Including:

### 6.1 Shielding

As required per equipment manual or deemed necessary for the task being performed.

### 6.2 Barriers (magnetic, hearing, elevated or crane work, etc.)

Equipment guards are installed and in correct position.

### 6.3 Interlocks

As required per equipment manual or deemed necessary for the task being performed.

### 6.4 Monitoring systems

As required per equipment manual or deemed necessary for the task being performed.

### 6.5 Ventilation

As required per equipment manual or deemed necessary for the task being performed.

### 6.6 Other (Electrical, ODH, Trip, Ladder) (Attach related Temporary Work Permits or Safety Reviews as appropriate.)

As required per equipment manual or deemed necessary for the task being performed.

## 7. List of Safety Equipment:

### 7.1 List of Safety Equipment:

Since this OSP covers several different pieces of equipment, operator must wear proper safety equipment as outlined in the operation manual of the equipment used in performing the task.

### 7.2 Special Tools:

As required per equipment manual or deemed necessary for the task being performed.

## 8. Associated Administrative Controls

This OSP, THA and the machine's operations manual.  
 On the job training and demonstrated proficiency.

## 9. Training

### 9.1 What are the Training Requirements (See [List of Training Skills](#))

Please refer to operating manual for specific equipment being used.  
 Since workers could be handling hydraulic fluids and oils, they will need spill prevention training (SAF123)

## DEVELOP THE PROCEDURE

## 10. Operating Guidelines

Ensure that all operator selector switches and buttons are clearly identified and that you know the function of every key, button, knob, or handle.

- Ensure operation of emergency stop button
- Ensure that all hoses, cords, cylinders, pumps and hardware are in good condition with no leaks.
- Ensure that you are clear of pinch points created by moving slides before starting the machine.
- Ensure that work is done in a well-lit area.
- Ensure that all start and stop buttons are operational.
- Do not reach around guards.

- If a part should become stuck in a press, care will be taken to protect extremities from laceration pinch etc.
- Use extra care when working with materials that have the potential to shatter
- Ensure that tool contact areas are inaccessible to the operator.

Ensure that all guards:

- Prevent body parts from entering the area being guarded.
- Do not create pinch points between the guards and other stationary or moving parts of the machine or tooling.
- Allow inspection, offer maximum visibility.
- Ensure that fixed guards are securely attached to the machine forms, components, or fixtures and, where possible, utilize fasteners removable by tools not normally at the disposal of the operator.
- Ensure that rotating cranks and hand wheels are well lubricated and maintained.
- Hand wheels are located on retractable crank to ensure that crank is not protruding while the machine is operation.
- Ensure that work is secured prior to operation if applicable.
- Always stay at the machine while it is running.

**11. Notification of Affected Personnel (who, how, and when include building manager, safety warden, and area coordinator)**

Notify equipment owner by phone or email in case of incident or equipment malfunction.

**12. List the Steps Required to Execute the Procedure: from start to finish.**

- Provide clearance between machines so that movement of one operator or helper will not interfere with the work of others.
- Provide ample room for handling of material, work pieces, and chips.
- Provide safe storage and handling of tooling or parts that could dislodge and fall or roll.
- Keep floor area around machine free of obstructions and maintained in safe condition.
- Ensure spill control materials are available if applicable.

**13. Back Out Procedure(s) i.e. steps necessary to restore the equipment/area to a safe level.**

Stop and contact area Work Coordinator or Supervisor

**14. Special environmental control requirements:**

**14.1 List materials, chemicals, gasses that could impact the environment** (ensure these are considered when choosing Subject Mater Experts) and explore [EMP-04 Project/Activity/Experiment Environmental Review](#) below

Hydraulic fluid

**14.2 Environmental impacts** (See [EMP-04 Project/Activity/Experiment Environmental Review](#))

None – Containment is in place to mitigate hydraulic spills.

**14.3 Abatement steps** (secondary containment or special packaging requirements)

- Ensure spill control materials are available if applicable.
- Ensure secondary containment is in place if applicable
- Contact Environmental group (x7308 or x6254)

**15. Unusual/Emergency Procedures (e.g., loss of power, spills, injury, fire, etc.)**

In the event of injury, or an immediate emergency exists, call **911** and also notify:

- Guards (x5822)
- Occupational Medicine (x7539)
- Crew Chief (x7045) (if inside the fence)

In case of an injury follow standard JLAB procedures. Initial response cards are located with each phone for appropriate emergency phone numbers. Additional information can be found at [https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-24400/\\*.pdf](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-24400/*.pdf).

Spill: see above

Power loss: Turn off machine, inspect for safe operation, reset and restart after return of power.

**16. Instrument Calibration Requirements** (e.g., safety system/device recertification, RF probe calibration)

As required by equipment operation manual and operation being performed.

**17. Inspection Schedules**

As required by equipment operation manual and before operation.

**18. References/Associated/Relevant Documentation**

OSHA Standard 29 CFR 1910.212 Machinery and Machine Guarding.

**19. List of Records Generated** (Include Location / Review and Approved procedure)

**Submit Procedure for Review and Approval** (See [ES&H Manual Chapter 3310 Appendix T1 OSP & TOSP Instructions – Section 4.2 Submit Draft Procedure for Initial Review](#)):

- Convert this document to .pdf
- Open electronic cover sheet:  
<https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-24048/3310T1Form.doc>
- Complete the form
- Upload the pdf document and associated Task Hazard Analysis (also in .pdf format)

**Distribution:** Copies to Affected Area, Authors, Division Safety Officer

**Expiration:** Forward to ES&H Document Control

**Form Revision Summary**

- Revision 1.7 – 02/25/2021** – Corrected link to Word doc; updated ‘ESH&Q’ to ‘ES&H’; other minor edits. No approval required.
- Revision 1.6 – 06/23/2020** – Update section 15 to reflect guard number, what to do in an emergency, crew chief numbers, etc. approved by H. Fanning
- Revision 1.5 – 04/11/18** – Training section moved from section 5 Authority and Responsibility to section 9 Training
- Revision 1.4 – 06/20/16** – Repositioned “Scope of Work” to clarify processes
- Qualifying Periodic Review – 02/19/14** – No substantive changes required
- Revision 1.3 – 11/27/13** – Added “Owning Organization” to more accurately reflect laboratory operations.
- Revision 1.2 – 09/15/12** – Update form to conform to electronic review.
- Revision 1.1 – 04/03/12** – Risk Code 0 switched to N to be consistent with [3210 T3 Risk Code Assignment](#).
- Revision 1.0 – 12/01/11** – Added reasoning for OSP to aid in appropriate review determination.
- Revision 0.0 – 10/05/09** – Updated to reflect current laboratory operations

ISSUING AUTHORITY	FORM TECHNICAL POINT-OF-CONTACT	APPROVAL DATE	REVIEW DATE	REV.
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ES&H Division

[Harry Fanning](#)

04/11/18

02/25/24

1.6

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## Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1](#)  
[Work Planning, Control, and Authorization Procedure](#))

Click  
For Word

<b>Author:</b>	Jessie Butler (JButler)	<b>Date:</b>	15 March 2022	<b>Task #:</b> If applicable	
<b>Complete all information. Use as many sheets as necessary</b>					
<b>Task Title:</b>	Use of Hydraulic Presses and Jacks	<b>Task Location:</b>	Hall A and Other Physics Division Work Areas		
<b>Division:</b>	Physics	<b>Department:</b>	Hall A	<b>Frequency of use:</b>	As Needed
<b>Lead Worker:</b>	Hall A Work Coordinator				
<b>Mitigation already in place:</b> <a href="#">Standard Protecting Measures</a> <a href="#">Work Control Documents</a>	Training, Guards, and Fluid Containment				

Sequence of Task Steps	Task Steps/Potential Hazards	Consequence Level	Probability Level	Risk Code (before mitigation)	Proposed Mitigation (Required for Risk Code >2)	Safety Procedures/ Practices/Controls/Training	Risk Code (after mitigation)
1	Machine Tools – (e.g., rotating parts, high pressure fluid, pinch points, sharp edges, material that may shatter)	High	Low	3	1. Wear safety glasses 2. Wear gloves	1. Use machine guards 2. Wear proper work attire 3. Read & sign equipment OSP 4. Read and understand equipment Operation Manual	1
2	Environmental (i.e., spills)	Medium	Low	2	1. Have applicable spill control and containment in place 2. Contact IH (x7308/6254) immediately if spill occur.	1. Oil Worker training – SAF123	1

<b>Highest Risk Code before Mitigation:</b>	3	<b>Highest Risk Code after Mitigation:</b>	1
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# Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1](#)  
[Work Planning, Control, and Authorization Procedure](#))

When completed, if the analysis indicates that the [Risk Code](#) before mitigation for any steps is “medium” or higher (RC≥3), then a formal [Work Control Document](#) (WCD) is developed for the task. Attach this completed Task Hazard Analysis Worksheet. Have the package reviewed and approved prior to beginning work. (See [ES&H Manual Chapter 3310 Operational Safety Procedure Program](#).)

### Form Revision Summary

**Revision 0.2 – 07/26/21 – Periodic Review;** updated header and footer

**Periodic Review – 08/29/18 –** No changes per TPOC

**Periodic Review – 08/13/15 –** No changes per TPOC

**Revision 0.1 – 06/19/12 -** Triennial Review. Update to format.

**Revision 0.0 – 10/05/09 –** Written to document current laboratory operational procedure.

ISSUING AUTHORITY	TECHNICAL POINT-OF-CONTACT	APPROVAL DATE	REVIEW DATE	REV.
ES&H Division	<a href="#">Harry Fanning</a>	08/29/18	07/26/24	0.2

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For questions or comments regarding this form contact the Technical Point-of-Contact [Harry Fanning](#)

