Jefferson Lab
Thomas Jefferson National Accelerator Facility

Material Handling Lift Plan

(See ES&H Manual Chapter 6141 Appendix T4 Hoisting and Rigging Operations) for Instructions

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Instructions:

This form ***must*** be completed for each lift using a mobile crane, forklifts with suspended loads or a critical lift, with an overhead crane or forklift. This form should be used for a non-routine lift with overhead cranes or incorporated into a Temporary Operational Safety Procedure.

STEP 1 – Planning the Lift

Lift Title:	Cryomodule Lift at North or South access building
Location:	Building 38 & 67
Lift Date (s):	Various times throughout the year
Lift Plan Prepared by:	Print Frank Humphry Phone # 269-5291 Date 2-18-2020
JLab Approved by:	Mark Loewus Print Mark Loewus Phone # 269-7847 Date August 13, 2020

JLab Work Coordinator: Frank Humphry

DOE Lift Classification:		CRITICAL		PRE-ENGINEERED PRODUCTION	X	ORDINARY	

Load Weight # 12,000 pounds

Load Weight Determined By:

- ☐ Equipment Manufacturers Data Plate
- ☐ Rigger Estimate
- ☐ Labeled Shipping Weight
- xDyno Measured

Describe the Load:

CEBAF C20 / C50 / C75 & C100 Cryomodules

Rigging Hardware Required:

List all items (size & load rating) to be used under the hook to accomplish the planned lift.

2 polyester slings.
EE2-840-T4” x 12’. Each sling is rated for 23,000 pounds in a basket configuration.

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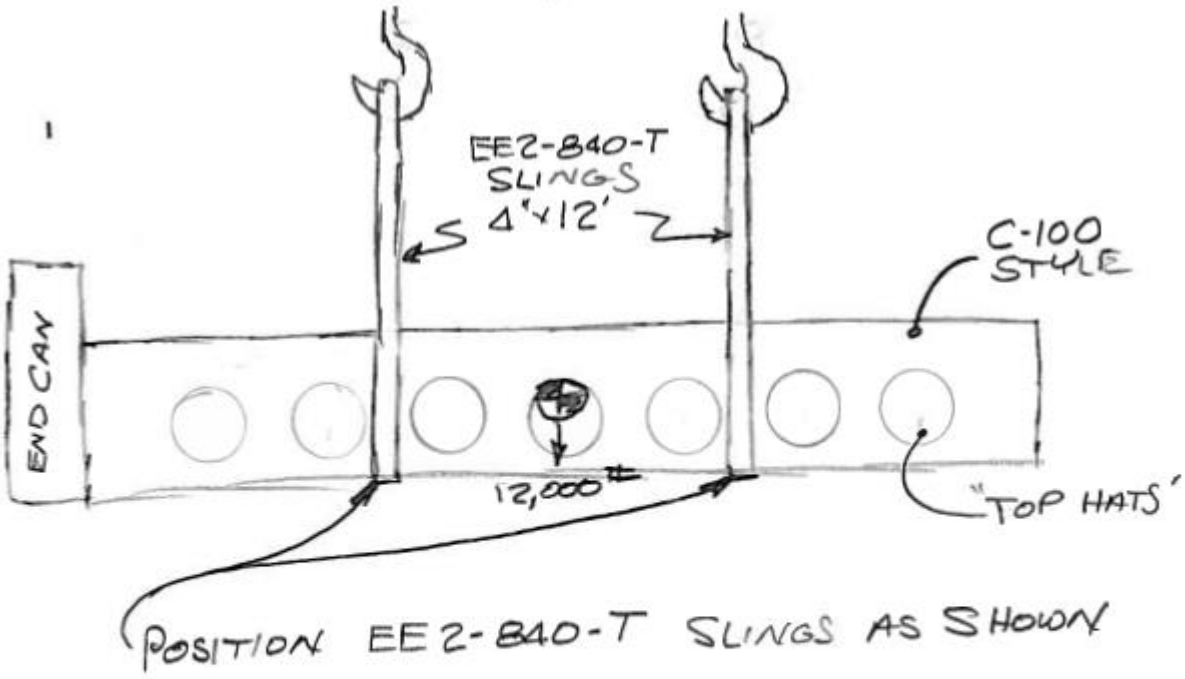
Plan View:

Show the Following:

- Load with CG labeled
- Mobile Crane, Pivot and Outriggers
- Outrigger ground loading
- Distance from load CG to Crane Pivot
- Underground Utilities, manholes and valve boxes
- Overhead Obstructions
- Lift Perimeter Demarcation
- Ground Bearing Reactions



RIGGING FOR C-100 STYLE

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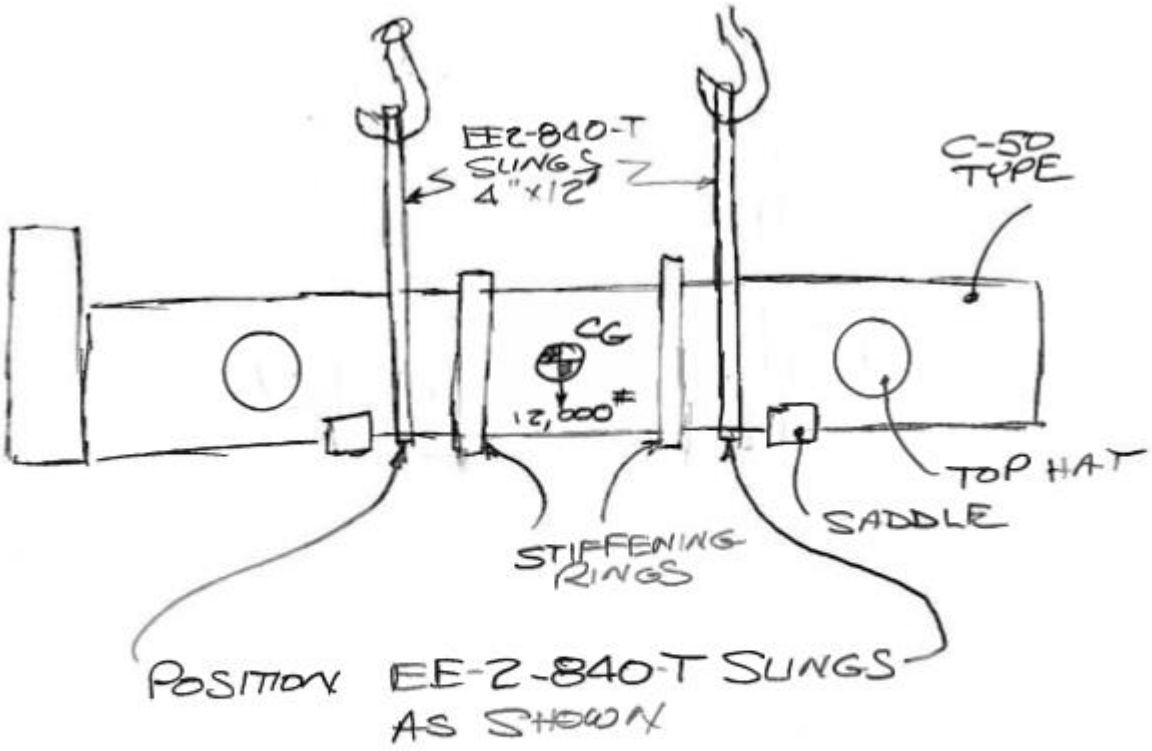
Material Handling Lift Plan

ELEVATION

Show the Following:

- Load with CG labeled
- BTHLD's
- Sling Horizontal Angles
- Sling Tensions
- Label Rigging Gear, size & WLL
- Label D/d ratios



RIGGING FOR C-50 STYLE

STEP 2 – Setup for Lift

Equipment Make:_____ Type:_____

Model#:_____ Serial#:_____

Owner:_____

Annually Inspected By:_____ Date:_____

Monthly Wire Rope Inspection Documented: Y / N
Daily Inspection Documented: Y / N

Equipment Operator[i]_____

Certification/Qualification: _____
CCO No._____ Expiration Date:_____
Employer:_____

Lead Rigger: _____
Certification/Qualification: _____

Lift Director (ASME) or PIC (DOE)[ii]:_____

Site Supervisor[iii]:_____

- Establishes a perimeter that clearly identifies the area of the lift.
- Ensures ALL personnel within the perimeter wears proper PPE required for the area.
- Conducts a Pre-Lift Meeting where the sequences of actions that will occur to accomplish the lift are presented.
- Attend the Pre-Lift Meeting.

Signal Person:_____

STEP 2 – Setup for Lift

PPE Requirements:

- Hard Hat
- Safety Shoes
- Safety Glasses
- List any additional PPE needed to perform the lift

Watch Personnel (Maintains Lift Perimeters) :_____

Identify a Muster Point:_____

Emergency Procedures (in case of injury)

1. Stop Lift
2. Lower Load to a safe position
3. _____
   _____
   _____

Limits of Safe Operation **(i.e. wind, rain, lighting or traffic)**

STEP 3 - Lift

- **Accomplish the lift according to the Lift Plan.**
- **Document minor adjustments required to accomplish the lift.**
- **Re-approval is required if Operators, equipment or rigging changes after initial approval.**

Post Lift De-Brief

What went well? _____
_____

Areas of Improvement: _____
_____
_____

Documentation – Send a copy of this COMPLETED LIFT PLAN to:

Name:	**Mark Loewus**	**Mark Loewus**	**28G**
	Print	e-mail address	Mail Stop

- **Rigging Hardware must be inspected and marked in accordance with the criteria contained in the following documents:**

    - *ASME B30.9 Slings*
    - *ASME B30.20 Below the Hook Lifting Devices*
    - *ASME B30.26 Rigging Hardware*
    - *29 CFR 1926.251 Rigging Equipment for Material Handling*

- **5-3.1.3 Responsibilities**

  While the organizational structure of various projects may differ, the following roles are described here for purposes of delineating responsibilities. All responsibilities listed below shall be assigned in the work site organization. A single individual may perform one or more of these roles.

  [i] **Equipment Operator:** directly controls the equipment's functions.

  [ii] **Lift Director:** directly oversees the work being performed by a crane and the associated rigging crew. This position equates to the **Person-In-Charge (PIC)** identified in the DOE Hoisting & Rigging Standard.

  [iii] **Site Supervisor:** exercises supervisory control over the work site on which a crane is being used and over the work that is being performed on that site.

Form Revision Summary

Revision 2.2 – 01/24/18 – Updated TPOC from B.Sperlazza to M.Loewus
Revision 2.1 – 01/25/17 – Updated TPOC from D.Kausch to B.Sperlazza
Revision 2.0 – 12/04/14 – Form revised to create uniformity between ALL material handling equipment
Revision 1.1 – 03/22/12 – Update to format only
Revision 1.0 – 04/12/10 – Update to reflect current laboratory operations

ISSUING AUTHORITY	FORM TECHNICAL POINT-OF-CONTACT	APPROVAL DATE	REVIEW DATE	REV.
ESH&Q Division	Mark Loewus	01/24/18	01/24/21	2.2

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