

Operational Safety Procedure Form

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

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For Word Doc

Title:	Assembly of the RICH detector		
Location:	Building 90 Room 124	Type:	<input type="checkbox"/> OSP <input checked="" type="checkbox"/> TOSP
Risk Classification (per Task Hazard Analysis attached) (See ESH&Q Manual Chapter 3210 Appendix T3 Risk Code Assignment.)		Highest Risk Code Before Mitigation	3
		Highest Risk Code after Mitigation (N, 1, or 2):	2
Owning Organization:	Physics	Date:	12/20/16
Document Owner(s):	McMullen, Marc		

DEFINE THE SCOPE OF WORK

1. Purpose of the Procedure – Describe in detail the reason for the procedure (what is being done and why).

The procedure provides step by step instructions to assembly the Ring Image Cherenkov Detector shell.

2. Scope – include all operations, people, and/or areas that the procedure will affect.

The scope is limited to the assembly of the detector shell, using machines and tools. The operation will be conducted by the INFN/RICH group in conjunction with the Physics Detector Support Group. The work will be performed in building 90, room 124.

3. Description of the Facility – include building, floor plans and layout of the experiment or operation.

Room 124 is a class 10,000 clean room, with a high ceiling. The room contains the Silicon Vertex Tracker, which is located on the opposite sided of the room.

ANALYZE THE HAZARDS and IMPLEMENT CONTROLS

4. Hazards identified on written Task Hazard Analysis

Hazards include: Heavy lifting, pinch points, and the potential from a fall from > 4'.

5. Authority and Responsibility:

5.1 Who has authority to implement/terminate

R. Ent, P. Rossi, E. Folts, A. Yegneswaran.

5.2 Who is responsible for key tasks

S. Arslan

5.3 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](#))

E. Folts

5.4 What are the Training Requirements (See http://www.jlab.org/div_dept/train/poc.pdf)

Materials Handling, Crane, Man Lift operation.

6. Personal and Environmental Hazard Controls Including:

6.1 Shielding

n/a

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

n/a

6.3 Interlocks

n/a

6.4 Monitoring systems

n/a

6.5 Ventilation

n/a

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

n/a

7. List of Safety Equipment:

7.1 List of Safety Equipment:

Standard PPE, Clean room attire.

7.2 Special Tools:

Double geared winch and pulley.

8. Associated Administrative Controls

n/a

DEVELOP THE PROCEDURE

9. Operating Guidelines

The lead worker and safety warden will perform a briefing with the detector subject matter experts and any workers prior to the beginning of a shift. All man lifts will be inspected prior to the shift by a qualified operator.

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

The building safety warden shall be notified at the start of work by email.

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

See attached detailed assembly procedure document (SMC TA-RICH-001).

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

This is an assembly procedure, if a safety issue is encountered the lift/crane operator will move the detector in either the vertical (65 degrees) or horizontal positions and apply the locking pins to the pivoting block.

13. Special environmental control requirements:

13.1 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

n/a

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

n/a

13.3 Abatement steps (secondary containment or special packaging requirements)

n/a

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

The winch is mechanical. In the case of an outage with personnel in a genie lift, there is an emergency valve to lower the lift basket.

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

n/a

16. Inspection Schedules

17. References/Associated/Relevant Documentation

n/a

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

[Click](#)

To Submit OSP
for Electronic Signatures

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

Expiration: Forward to ESH&Q Document Control

Form Revision Summary

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.
ESH&Q Division	Harry Fanning	06/20/16	06/20/19	1.4

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