

ROLE AS A PDL

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I asked ChatGPT to make an image of a cool Hall C polarized target Physics Division Liaison

Missing:

- Jefferson lab jacket
- Name plate
- Safety



RESPONSIBILITIES: A PDL..

- Makes sure that all the shifters have the right training (TO, Walkthrough etc..)
- Makes sure that all the documentation (next page) is up-to-date with the correct subject matter experts (SME) responsible for their subsystem listed
- Makes sure that any reference guides or guidelines specific to the halls are discussed with all run coordinators to make data taking smooth
- Makes sure that the most accurate information about spectrometer settings, beam current limitations, experimental requirements, is conveyed to all the relevant parties (Physics Division, MCC, Collaboration, Shifters) and everyone is on the same page
- Makes suggestions on improving the run plan based on realistic constraints on aforementioned parameters

DOCUMENTATION

- RSAD (Radiation safety assessment documentation)
- COO (Conduct Of Operations)
- ESAD (Experiment Safety Assessment Document)
- ERG (Emergency Response Guidelines)
- Hall C SEM (Standard Equipment Manual)
- Operational manuals (Target related)
- Addendum (Target related)
- Run certificate (DSO and AD issued)

Run Information

- R-SIDIS Shift Sign-up (Read-only Shift Schedule)
- PionCT Shift Sign-up (Read-only Shift Schedule)
- Hall C Electronic Logbook
- Run Safety Documents
 - Conduct of Operations
 - Experiment Safety Assessment Document
 - Radiation Safety Assessment Document
 - SAF112 Training/Emergency Response Guidelines
- Shift Worker Information and Howtos
- Accelerator Status
- Hall C Live Status

*RSAD combined for all experiments

COO

- Onsite Shift Personnel Training
 - SAF112, ODH, ESC, Ladder training etc..
- Organization and Administration
 - Spokespersons
 - Run Coordinator
 - PDL
 - Hall Work coordinator
 - Shift Leader
 - APL (Accelerator Physics Liaison)
 - Engineering Liaison
- Operating procedures
 - Shift routines, rules and guidelines
- Special procedures

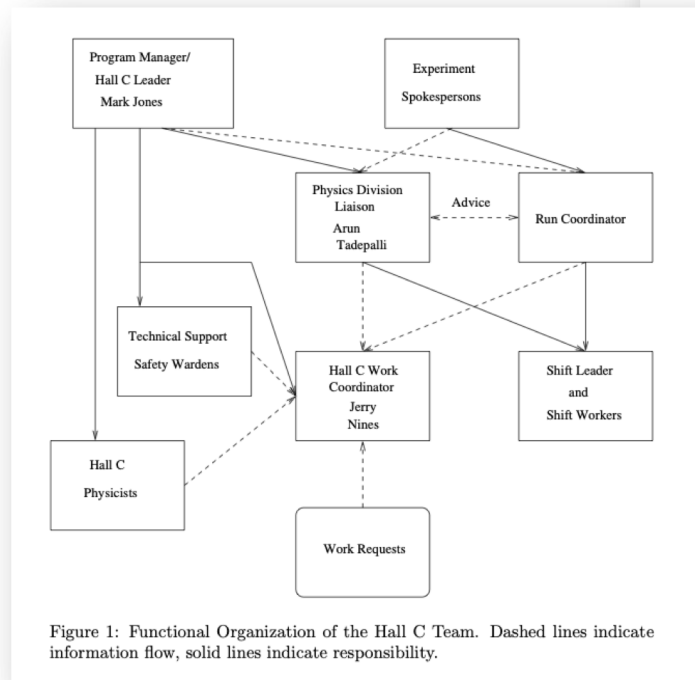


Figure 1: Functional Organization of the Hall C Team. Dashed lines indicate information flow, solid lines indicate responsibility.

Conduct of Operations for Hall C
 E12-22-001, E12-23-001, E12-06-104, E12-24-001,
 E12-06-107
 February 25, 2026

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RSAD

1. Experiment number
2. Targets and associated thickness
3. Number of PAC days on each target
4. Beam energy and current
5. Any other exotic settings/currents at which your experiment chooses to do calibrations
6. Possible scatterers along the beam (windows, targets, air gaps, etc. with their materials, thicknesses and positions relative to pivot given)
7. Beam line critical aperture (max scattering angle at which scattered beam electrons go through the beam line without absorption/cascading in the walls and flanges)

Hall C 2026 Run

Measurement of the Ratio $R=\sigma_L/\sigma_T$ in Semi-Inclusive Deep Inelastic Scattering
(E12-06-104)

The Search for Color Transparency at 12 GeV
(E12-06-107)

Measurement of the N to Δ Transition Form Factors at low four momentum transfers
(E12-22-001)

Measurement of the Generalized Polarizabilities of the Proton in Virtual Compton Scattering (VCS-II)
(E12-23-001)

Measurement of the Nuclear Dependence of $R=\sigma_L/\sigma_T$ in Semi-Inclusive Deep Inelastic Scattering
(E12-24-001)

RCD-RSAD-01.27.2026-HC
rev1

Approval	<u>Signature on File</u> Adam Stavola, Manager Radiation Control Department	<u>05.13.2026</u> Date
Preparer	<u>Signature on File</u> Pavel Degtiarenko, Radiation Physicist Radiation Control Department	<u>05.13.2026</u> Date
Liaison	<u>Signature on File</u> Arun Tadepalli, Staff Scientist Hall A-C Physics	<u>05.13.2026</u> Date

ESAD

- **General Hazards**
 - Electrical Fire, mechanical, strong magnetic fields, lasers etc..
- **Hall specific equipment hazards and mitigation**
- **Responsible personnel and contact information**

Experiment Safety Assessment Document (ESAD)
for
Experimental Hall C Base Equipment

February 19, 2026

ERG

- Safety walkthrough
- Superficial summary and familiarization with hazards in the hall

Emergency Response Guidelines (ERG)

As part of the Experiment Readiness Review Process and Approval, every experiment is required to submit, in addition to the Conduct-of-Operations (COO), Experiment Safety Assessment Document (ESAD) and, Radiation Safety Assessment Document (RSAD), a document that summarizes the location of major hazards in the hall, the location of the various emergency systems as well as emergency procedures and egress routes during that experiment: the Emergency Response Guidelines (ERG) – this document. Shift personnel and anyone else wishing access to the hall during the duration of the experiment, must read and sign to indicate they have understood the COO, ESAD, RSAD and ERG of the experiment. Anyone feeling in doubt with the information contained in the ERG should contact the person responsible for the Hall Worker Awareness Training and schedule guided refresher training.

Purpose

Familiarize users with safety hazards and protection systems in the Counting House and Hall.

Prerequisites to access the halls without escort

ES&H Orientation (SAF100)

Rad Worker I Training or equivalent (must have been issued a dosimeter by JLab)

ODH training (SAF103)

General Access Radiological Work Permit [RWP] (SAF801kd)

Hall C Worker Safety Awareness Training (SAF112)

Reminder

- **No one under 18 years may enter the halls**
- **No sandals or open toe shoes in any hall**
- **No food or drinking inside the halls**
- **Check postings at the entrance to the hall for special requirements** (e.g. hardhats are mandatory in Hall B and often required in the other halls, long pants may be required during extended shutdowns). **If in doubt, please contact the Hall Work Coordinator or his/her designee,**
Hall C - Jerry Nines [cell 757-949-8406, nines@jlab.org]
- Check that all work or test set ups follow the work controls indicated in the ESH&Q manual (<http://www.jlab.org/ehs/ehsmanual/index.html>) and on the supplemental **Physics Division Work Planning Guidance** (http://www.jlab.org/div_dept/physics_division/work_guidance_final.pdf). **If in doubt, consult the Safety Warden of the area in which the work will take place, the Physics Division Safety Officer (E. Folts).**

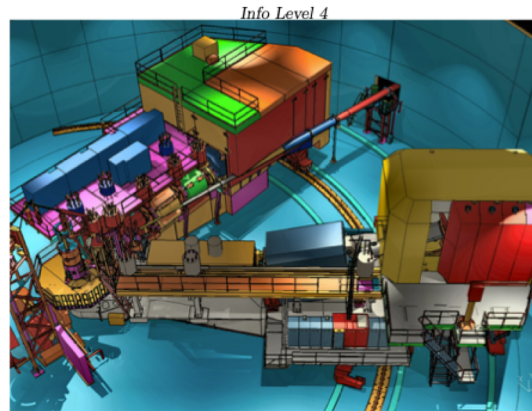
The two-person rule ("Buddy Rule")

Accessing the halls or performing work in the halls may require that personnel work on teams of at least two people. The two-person rule must be followed when entering Hall B or when performing a task in any of the halls that requires two-persons as indicated by the applicable general JLab safety rules or task ePAS. Examples of tasks that require two-persons would be operation of the hall crane, use of a man-lift,

HALL C SEM

- Elaborate descriptions of
- Beamline instrumentation
- Targets
- Detector systems

2019 Version: Jefferson Lab Hall C Standard Equipment Manual



Hall C Staff and Users

Editor: S. A. Wood¹

May 14, 2025

Branch: FY26, Commit: 736bbc1

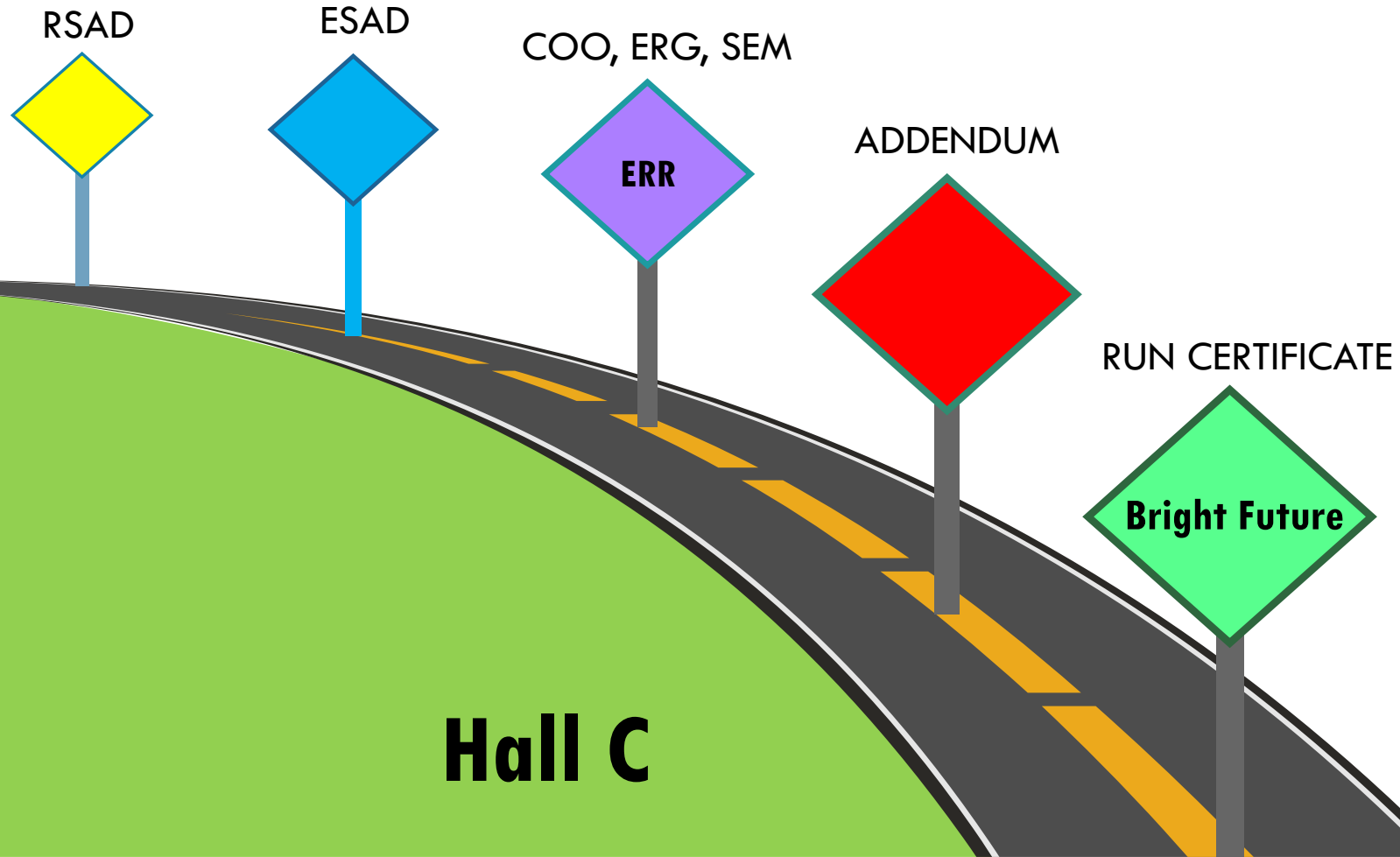
¹Thomas Jefferson National Accelerator Facility

System	Operational Responsibility/Ownership Responsible contact for operations, and/or responsibilities	Group	Fiscal responsibility Account for maintenance, equipment	System integrator Single point of contact for issues within operational
General beamline and detector magnets (including Hall C central and horizontal elements)	Magnet Hardware - Jim Meyer Power Supplies - Derek Kumar Control Software - Scott Higgins	Mag/PS ET Power Controls	Accelerator	Hall C - Ryan Bodenmann Hall C - Ryan Searge
Halls	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Accelerator	Hall A - Epsilon Gal Hall C - Ryan Searge
RFHs and cavity monitors	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Accelerator/Halls	Control Gal
EPHs and cavity monitors	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Accelerator/Halls	Control Gal
Complex Power Supplies and Magnets Hall C MBE Diodes (CHS, T, HV)	Magnet Hardware - Jim Meyer Power Supplies - Derek Kumar Beam Diodes, A - Francis Searge Beam Diodes, C - Ryan Bodenmann Vacuum Systems - Greg Walker Control Software - Scott Higgins	Mag/PS DC Power HV/EPH AC/EPH Vacuum Controls	Halls	Chris Seibel
Complex Laser and Diagnostics	Chris Seibel		Halls	Chris Seibel
Magnet Power Supplies and Magnets	In Hall Magnet Hardware - Steve Becker Power Supplies - Derek Kumar Control Software - Scott Higgins	Mag/PS DC Power Controls	Halls	Dan Jones
Magnet Target and Detectors	Hall A - Dan Jones Hall C - Chris Seibel	Mag/PS DC Power	Halls	Hall A - Dan Jones Hall C - Chris Seibel
Empty Beam Modulation Systems	Magnet Hardware - Derek Kumar RF Hardware - Greg Walker Cabling Diagnostics - Keith Cole RF Diagnostics - Control Gal	DC Power Vapor BC Mag/PS	Halls	Control Gal
Art Diodes and Power Supplies (EPHs include)	Magnet Hardware - Jim Meyer Power Supplies - Seth Philip Control Software - Ryan Searge	Mag/PS DC Power Controls	Accelerator	Control Gal
Art Beam Energy Measurements (EMs, current)	EMF Hardware - Steve Becker Control Software - Scott Higgins Analysis Software - Tracy Larson	Mag/PS Controls H/A	Accelerator	Control Gal
Hall A CRT	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Accelerator	Bernd Searge
Hall C WU crystal	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Accelerator	Ryan Bodenmann
Native Systems	Hardware and Electronics - Chris Curran Control Software - Scott Higgins	Fast Electronics Controls	Halls	Bill Henry
Stems	Hardware - Epsilon Gal Electronics - Chris Curran Cabling - Keith Cole Software - Scott Higgins	Fast Electronics BC Controls	Halls	Control Gal
Walls Monitor (Hall A)	Hardware - Keith Cole Software - Scott Higgins	BC Controls	Hall A	Epsilon Gal
Beam Dump	Hardware - David Lawrence Hudson / Neffinger - Hall Wilson Software - Keith Cole	AC/DCS HV/PS BC	Accelerator	Keith Walsh
Vacuum Systems	Physics for Hall C - Hall / Henry Physics for Hall A - Hall / Henry	Hall/PS H/A	Halls	Lawrence Hall / Jerry Henry
Target system (FD) interface	Tracy Larson / FD - Jerry Searge Control Gal, Hardware - Keith Cole Software (operational specific) - Higgins / Hall	DC BC Mag/PS	Accelerator	Chris Seibel
Target system (EM)	Control Gal, Hardware - Keith Cole Software (operational specific) - Higgins / Hall	BC Mag/PS	Accelerator	Halls
EMs	Hardware - Jerry Searge Software - Scott Higgins	EM Controls	Accelerator	David / EPH
Hot Chambers	Hardware - Jerry Searge Software - Scott Higgins	EM Controls	Accelerator	Mark Jones
Beamline Documentation (PS Specs, Hall mag, Hg levels, etc.)	David / EPH - Chad, Physics EM/PS - Chris Curran Searge/Hall - Chad Seibel	Mag/PS BC H/A	Accelerator	EPH/BC
Utility Infrastructure (HV, cooling, gas, etc.)	HV - James Gungl - Hall / Henry	Hall/PS H/A	Halls	Lawrence Hall / Jerry Henry
Chop Systems	Diode Driver Control - Hall / Henry CHS to Distribution Cart - Jonathan Chad	Hall/PS HV	Halls	Jonathan Chad
Quartz Monitors	Hardware - Jan Williams Software	EM Controls	EM/PS	Jan Williams

Updated: 12/2024

Figure 2.5: Beamline elements with operational and fiscal responsibilities. The most up to date version is maintained on the accelerator website [2].

DOCUMENTS TIMELINE



SUMMARY

- Need time and coordinated effort from MCC, Hall C Staff, Safety, EH&S and Collaboration to materialize all the documents for a new experiment
- Best to have one liaison for the target and physics division
- Exact details about who submits what document can be worked out but best to have synergy between MCC, target group, Hall C staff and safety through one focal point

