Hall Work Governance

Contents

1.	\mathbf{P}	reface	2
2.	P	ersonnel Training	2
3.		Organization and Administration	
3	3.1		
	3.	1.1 Manage the daily operation of the installation	3
	3.	1.2 Coordinate interactions between the Hall staff and users	
3	3.2	Hall Work Coordinator	4
3	3.3	Accelerator Engineering and Admin support personnel	5
3	3.4		
4.	O	perating Procedures	5
3	3.1	Work Routines	6
3	3.2	Beam Line Installation and Modifications	6
3	3.3	Scheduling of Work by Outside Groups	6
3	3.4	Collaboration Request for Laboratory Resources	
Appendix A Hall Organizations for regular installation periods			8
Αp	pen	ndix B Organization for 12 GeV Installation Work(for the 12 month down)	9

1. Preface

As part of its mission, JLab provides the resources necessary for international collaborations of scientists to carry out basic research in nuclear physics and related disciplines. This research, and the work associated with installing the equipment necessary to carry it out, must be conducted in a manner that ensures that environmental, health and safety (EH&S) concerns are addressed at all times. The integration of EH&S activities into work planning and work activities, i.e. integrated safety management, supports the goals of the laboratory: obtaining the highest quality scientific results with efficient, safe, and environmentally responsible operation.

This document outlines how all personnel will conduct work in a safe and effective manner during regular (non-12 GeV) installation periods in *any* of the Experimental Halls. It is directed to physics users, physics staff, contractors, and both user-supported and regular JLab technical staff. It must be read, understood and followed by all persons working unescorted in any Hall. Commissioning and running periods are not covered by this document but rather in specific Conduct of Operations documents for each hall that are enhanced with details for each experiment to be run.

It is important to note that it is a core JLab policy that "No activity is so important or urgent that our standards for safety, health, or environmental protection are compromised."

2. Personnel Training

All personnel involved in any Hall activities during an installation period are required to have successfully completed and be current in the following JLab safety training:

- EH&S Orientation (SAF 100),
- Radiation Worker Training (SAF 801),
- Oxygen Deficiency Hazard Training (SAF 103),
- Relevant Hall Safety Awareness Walk-Through.

Everyone working unescorted in a Hall must read and abide by the rules described in this document.

All personnel are required to wear JLab issued radiation dosimeters during their work in the Hall and to have read and signed the current General Access Radiation Work Permit (RWP). The Safety Awareness Walk-Through for new staff, users, or contractors will emphasize any hazards that are peculiar to the current installation. Any personnel who find the configuration and equipment in the Hall to be substantially different from when they first took the Walk-Through are encouraged to take it again at the earliest opportunity. All personnel are required to inform the Hall Work Coordinator, or his designated alternate, of their planned tasks in the Hall on a daily basis before commencing the work.

In addition, personnel must familiarize themselves with the sections of the JLab EH&S Manual

relevant for their work in any Hall. The JLab EH&S Manual addresses the need for a process of hazard analysis, identification and installation of mitigating safety measures, and evaluation and documentation of their effectiveness for a particular task or set of tasks. Technical work documents (OSPs, TOSPs, etc.) result. Copies of technical work documents are available from the Hall Work Coordinator, and must be signed and followed by anyone carrying out work on relevant apparatus. Also, the JLab EH&S Manual is available at (http://www.jlab.org/ehs/ehsmanual/index.html).

Finally, JLab Lock, Tag and Try training is required for all staff/users who will be performing maintenance on electrical and mechanical equipment. The EH&S Manual provides Lockout/Tagout information in Chapter 6110

3. Organization and Administration

Overall responsibility for installation work in the hall is the responsibility of the Hall Leader. In the subsections that follow we outline the responsibilities of two other key staff, the Project Manager and the Hall Work Coordinator, and then review the responsibilities of support personnel, contractors and users.

3.1 Physics Division Project Manager

The Physics Division Project Manager is a JLab Staff Member who is the on-site manager of the installation work and the engineering, design and fabrication work preceding it. The Physics Division Project Manager is designated by the Hall Leader and is responsible for ensuring that the goals of the installation are met. The Physics Division Project Manager will ensure that the Hall Leader is aware of all pertinent issues. The Physics Division Project Manager shall promote an environment in which the highest safety standards are maintained.

The Physics Division Project Manager is the immediate on-site manager of the project and has overall responsibility for execution of the hardware project including cost, schedule, and performance control for both Jefferson Lab and outside collaboration groups and appropriate funding agencies. The Project Manager will refer issues significantly affecting the experiment cost, schedule, and scope to the Hall Leader and the Physics Division Associate Director.

Large-scale installations typically have significant accelerator development and involvement. The Accelerator and Engineering Divisions may designate Project Coordinators as single point(s) of contact between those Divisions and the Physics Division Project Manager. The Project Coordinators will pay special attention to work that interfaces between the responsibilities of the various groups. The Accelerator Division Project Coordinator has overall responsibility for delivering beam line equipment/instrumentation required to provide physics-quality beam for the experimental program.

The functions of the Physics Division Project Manager are to:

3.1.1 Manage the daily operation of the installation

By:

- defining the engineering and design requirements appropriate for the goals of the experiment.
- defining the installation requirements appropriate for the goals of the experiment.
- ensuring, in coordination with the Hall Work Coordinator, that the complete installation schedule is up-to-date.
- determining if the scheduled activities in the Hall can be done safely.
- informing the Hall Leader of any problems encountered during the installation and suggesting solutions to these problems.

3.1.2 Coordinate interactions between the Hall staff and users.

Which entails:

- informing the Hall Leader of the status and plans of the installation.
- assuring that all relevant parties are well informed on design and engineering work for experiments. This includes arranging meetings with users and physics and/or accelerator support groups to discuss the conceptual idea of the design and engineering work, and to arrange the general assembly drawings to be signed off for approval by the relevant personnel, in a timely fashion.
- acting as intermediate point of contact for work requests by the collaboration to the Hall Work Coordinator.
- Coordinating, in conjunction with the Hall Work Coordinator, work done by the various JLab Divisions and Physics Division support groups.
- reporting, in coordination with the Hall Work Coordinator, on the progress of the installation in weekly Hall meetings.

3.2 Hall Work Coordinator

The Hall Work Coordinator is the primary contact for all installation work in the Hall. The responsibilities of the Hall Work Coordinator are to:

- act as the single point of contact for any problems encountered in the installation work, and find solutions in conjunction with the physics staff and the Hall project designer.
- develop the installation plan and track the progress of the installation work.
- enter any cross divisional work into ATLis.
- ensure that the complete installation schedule is up-to-date. This task is done in coordination with the Physics Division Project Manager.
- consult with the Hall Engineer as necessary, and to keep the Project designer and the Hall Engineer informed on any major modifications to the mechanical installations.
- coordinate and schedule any activities in order to optimize productivity. This will be done on a daily basis in a short meeting with representatives of the various groups working in the Hall.
- act as the single point of contact for any EH&S issues that arise during the installation.
- determine if the scheduled activities in the Hall can be done safely. These activities

- shall be coordinated with the Physics Division Project Manager.
- ensure that workers are properly trained, are familiar with all significant hazards, and are aware of all applicable work control documents associated with the project.
- remain in the local area and be available by cell-phone/pager at all times. (If temporarily unavailable the Hall Work Coordinator must appoint a qualified Hall staff member as his designate. The name of such designate should be clearly posted at the Hall entrance.)
- report, in coordination with the Physics Division Project Manager, on the progress of the installation in weekly Hall meeting.
- approve any general assembly drawings related to Hall installation work.

3.3 Accelerator Engineering and Admin support personnel

The responsibilities of non-Physics Division JLab staff members are to:

- Inform the Hall Work Coordinator about any planned work in the Hall.
- Keep all their required training up-to-date.
- Read the entries posted at the safety bulletin board at the gate entrance of the Hall and be aware of changes in work plans and new work planning documentation.
- Request any modifications to the installation and/or the installation schedule through the Hall Work Coordinator.
- Carry out their work in a safe and efficient manner.

3.4 Users and Contractors

Users and Contractors are persons whose supervisor is not a Hall staff member. Users often have a member of the Hall physics staff as local sponsor, contractors often have a member of the Hall technical staff as the subcontracting officer's technical representative (SOTR). During an installation, all users and contractors are under the direct daily supervision of the Hall Work Coordinator for any of their activities within the Hall. The responsibilities of each user or contractor are to:

- Keep all their training up-to-date.
- Read the entries posted at the safety bulletin board at the gate entrance of the Hall and be aware of changes in goals, operating parameters, and new documentation.
- Carry out their work in a safe and efficient manner under the direction of the Hall Work Coordinator and inform the Hall Work Coordinator in advance of any desired activities in the Hall.

In addition, the responsibility of each user is to:

 Request any modifications to the installation and/or the installation schedule through the Hall Work Coordinator.

4. Operating Procedures

3.1 Work Routines

Due to the large scale of typical installation work, many different groups will be involved. These include:

- 1. Hall technical staff, under the direct supervision of the Hall Work Coordinator
- 2. Hall physics staff
- 3. University user groups
- 4. University-supported technical personnel responsible for major pieces of equipment
- 5. Contractors
- 6. Accelerator, Engineering, Administration and Physics Division support groups.

The standard procedure for work during installation has been identified above, with the Hall Work Coordinator the central point of contact for all work. If special target systems such as cryogenic or polarized targets are used, it is anticipated that especially the Physics Division Polarized and Cryogenic Target Group, will interact on a daily basis with the Hall Work Coordinator if they are responsible for the installation of cryogenic targets.

The mode of operations for requests for work and plans to do work by outside groups are further detailed in the following Sections.

3.2 Beam Line Installation and Modifications

Installation work in the Halls may require changes to the beam line, (or a completely different beam line) configuration. All beam line work must be well documented as it may affect the site boundary radiation dose and the production of airborne radioactivity, and may affect beam operations. Beam line work and beam line modifications must adhere to the following rules:

- 1. Notify the Hall Work Coordinator or his designate before initiating work on the beam line.
- 2. Any change to the Hall beam dump line configuration must be approved by the head of the Radiation Control Group.
- 3. Enter work activity description into ATLis.

3.3 Scheduling of Work by Outside Groups

Work in the Hall that is to be performed by external groups such as survey and alignment, plant services etc., must be scheduled so that it does not endanger personnel or equipment or interfere with the installation work. The Hall Work Coordinator is the single point of contact for any work by outside groups. To effectively schedule this work, the Hall Leader and the Hall Work Coordinator will concur on task scheduling. The Hall Work Coordinator's job is to coordinate activities in the Hall so that work can take place smoothly and safely and to insure that multiple activities do not interfere with each other.

The Work Coordinator and the appropriate Hall staff will meet as needed to plan the scheduled

work and develop appropriate work control documents, educational or other safety measures (such as escorts), that may be needed.

3.4 Collaboration Request for Laboratory Resources

A collaboration may request, in writing, additional services from other laboratory divisions through the Hall Leader. The collaboration may also request additional services from Hall personnel through the Work Coordinator. Some requests may require that an OSP or TOSP be developed.

Appendix A Hall Organizations for regular installation periods

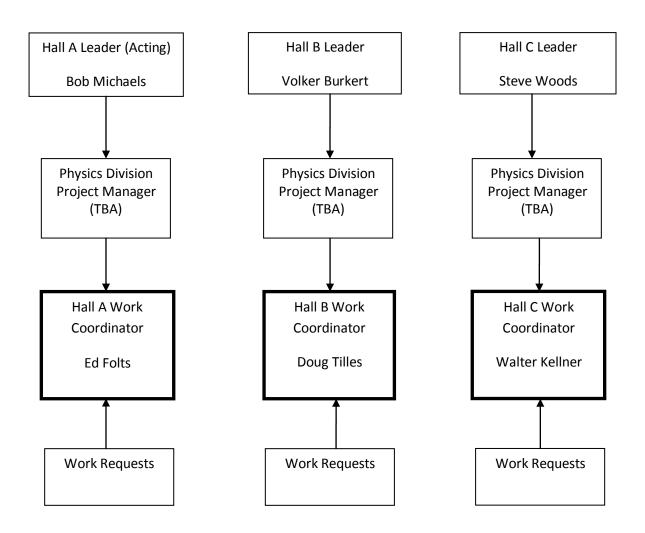


Figure 1: Functional Organization of the Hall Teams. After construction is complete Hall D will follow the same procedure.



Appendix B Organization for 12 GeV Installation Work(for the 12 month down)