

Date: January 29, 2019
To: Eugene Chudakov, Hall D Leader
From: Patrizia Rossi, Deputy Associate Director for Physics
Subject: Readiness Certificate for Hall D Spring 2019 run

Enclosed please find the Experiment Readiness Certificate for Hall D Spring 2019 run. The run will be split into 2 parts: a) GlueX-II E12-12-002 DIRC commissioning (14 days); b) PRIMEX-eta E12-10-011 running (54 days). Hall D is authorized to proceed with the run. As Hall Leader you are responsible for ensuring that all members of the collaboration are aware of the hazards the experiment presents and that they understand and follow the operations procedures outlined in your approved Conduct of Operations (COO), Experiment Safety Assessment Document (ESAD), Radiation Safety Assessment Document (RSAD), Emergency Response Guidelines (ERG) and on the General Access Radiation Work Permit (RWP, SAF801kd). The Physics Division EH&S group and the CEBAF Radiation Control Group are prepared to assist you in any way they can.

As an important part of your responsibility for managing the execution of this run, you must set in place a procedure that will ensure that all users working in Hall D during the run have read and understood the COO, ESAD (and associated OSPs/TOSPs, if any), RSAD, ERG and RWP, and that they have received the standard Hall D safety awareness training (SAF113), which includes a hazard awareness walkthrough of the hall.

The objectives of the DIRC part of the run is to test and calibrate a 1/2 - the bottom part - of the DIRC detector. The DIRC upper optical box will not be installed. The run will be using regular GlueX-I conditions and the regular 30cm LH2 target. The maximum beam current will be 1300nA with a thin diamond radiator. Aluminum radiators <0.05% RL may be used for a part of the run. In this case, the beam current will be scaled in order to provide a photon flux similar to the photon flux produced by the diamond radiators.

In the PRIMEX-eta part of the run several items will be different from GlueX: a) The solenoid in Hall D will be turned off; b) the vacuum pipe downstream of the FCAL will be removed; c) only Aluminum radiators will be used; d) the targets will be: Liquid Helium 30cm (3.9% RL), and Be 17.8mm (5% RL) thick. The CompCal will be used. Maximum beam current will be 600nA (<10h), regular beam current 320nA.

The Spring 2019 run is not expected to produce significant levels of radiation at the site boundary. However, it will be continuously monitored by the Radiation Control Department (RCD) to ensure that the site boundary goal is not exceeded. Activation of targets, collimators and beam line hardware must also be considered. The manipulation and/or handling of targets and beam line hardware (potential radioactive material), the transfer of radioactive material, or modifications to the beam line after the target assembly must be reviewed and approved by the RCD.

If there are any changes to your planned run that may have impact on radiation safety, it is your responsibility to discuss them with the RadCon Group before the modified plan is executed.

Four final items. First, the designated run coordinator is to be accessible to the accelerator division operations staff at all times via the Hall D cellular phone 383-5542. Second, the run coordinator or his or her designated representative is charged with representing the experiment both at the daily meetings with the accelerator program deputy that take place at 7:45 each morning in the MCC conference room and at the daily operations summary meetings that take place at 8:00 each morning in the MCC conference room. Third, the run coordinator should represent the experiment at the weekly accelerator scheduling meetings (Wednesdays at 1:30 in the MCC). Fourth, the shift coordinator is charged with

reconciling the experiment's records on accelerator performance with those of your crew chief at the end of each shift and with keeping the records for the experimental equipment performance and for the simultaneous availability of the beam and the experimental equipment (i.e. "useful" data-taking).

The measures outlined above are intended to promote smooth coordination between Accelerator operations and the experimenters, and to provide the laboratory with meaningful metrics on the operational reliability of the accelerator and experimental equipment.

cc: A. Freyberger
L. Pentchev (for placement in Hall D counting house)
P. Vasilauskis (for placement in the MCC)
W. Oren (for distribution as appropriate)
V. Vylet
A. Manzlak
Hall D Spring 2019 physics run: GlueX-II E12-12-002 DIRC commissioning and PRIMEX-eta
E12-10-011, ER²C Files

Experiment Readiness Certificate for Hall D GlueX-II E12-12-002 DIRC commissioning and PRIMEX-eta E12-10-011 Spring 2019 run

Document	Review(s)*	Certification	Signature	Date
Proposal w/ EH&S Hazard Identification Checklist	TAC & PAC	JLAB Director	See PAC report	
Preliminary Experiment Safety Assessment Document (PESAD) (optional)	ER ² C	--	N/A	
Radiation Safety Assessment Document (RSAD) (includes planned Experiment Operations Envelope)	RadCon	RadCon	<i>P. P. P.</i>	1/29/2019
	JLRRP or ad hoc panel review IF recommended by RadCon Officer	Review Chair	N/A	
Experiment Assessment Completion Readiness Review	ER ² C	Deputy Associate Director for Physics	<i>P. P. P.</i>	1/29/2019
Conduct of Operations (COO)	ER ² C	Associate Director for Physics	<i>J. J.</i>	1/29/19
Experiment Installation Checklist	Hall Work Coordinator	Hall Leader	<i>E. Chudakov</i>	1/29/2019
Issue/Concern Checklist	ER ² C	Physics Div. Safety Officer	<i>E. Chudakov</i>	1/29/19
Hall Leader Signoff on Experiment Readiness	E. Chudakov	n/a	See attached memo	

Experiment Readiness is Certified

R. Ent

Associate Director for Physics

1/29/19

Date

*Note: JLRRP = Jefferson Lab Radiation Review Panel
 ER²C = Experimental Readiness Review Committee
 RadCon = Radiation Control Group
 PAC = Program Advisory Committee
 TAC = Technical Advisory Committee