Person: Alexander Somov (somov@jlab.org) ORG: PHALLD	Status: Saved Date: 09/08/2020 10:42:52 AM
JSA	
THOMAS JEFFERSON NATIONAL ACCELERATOR	FACILITY
12000 Jefferson Avenue	
Newport News, VA 23606	
Phone: (757) 269-7100	
Beam Schedule 105324	
Experiment Title: Studying Short-Range Correlations with Real Photon B ID: E12-19-003	leams at GlueX
Experiment Hall	
D An in the last in the contract of the contr	
How many days out of the PAC-approved runtime for your experiment is	included in this request?
15 days out of 15.0	·
Explain your request. This explanation should be able to guide the schedonly a fraction of the PAC-approved runtime is requested. Identify any conjunction your experiments (e.g. periods when members of the collaboration have exclude their participation, or times when critical apparatus will not be at the space provided below or attach a document in the attachments section.	onstraints on the scheduling of prior commitments that would vailable): Type your answer in
We are requesting all PAC approved days	
Associated Experiments	
Note: Use this section to link other experiments	
Directions: To add an associated experiment click the Add Experiment button.	An auto complete text field will
appear where you can type the experiment. Select the auto complete item that	t matches the experiment typed
Linked Experiments	manara a a Amaramana a sa
Collapse All	
Appendix A	

Proposed Commissioning and Run Schedule

Enter data in preferred time sequence for energies, current, targets, beam conditions, etc, for the entire Run Plan including commissioning. Under "Special Requirements" below, note all critical scheduling needs, e.g., a certain set of energies must be run before another set, etc.

NOTE: INDICATE ALL MAJOR EQUIPMENT CHANGES, BREAKS, OR MAINTENANCE DAYS, ETC. ON SEPARATE LINES.

Days	Setup Number from Radiation Budget Form	Tag No. Special Requirements (including any variance from standard beam conditions)				
0.7	1 1	Beam and detector commissioning, radiator 4x10-4 X0 diamond, beam current 140 nA				
7	2 Zatasa Andrea Sandaria Sanda	Production run on Carbon target, radiator 4x10-4 X0, 140 nA beam current				
1.0	B 3 COLOR OF TARREL FOR THE PROPERTY OF THE PR	Install liquid D target, no beam, solenoid field switched off				
0.5	Jacobson Jacobson State Company of the Company of t	Run with empty target, radiator 4x10-4 X0 diamond, beam current 140 nA				
4.5	5	Production run on liquid D target, radiator 4x10-4 X0 diamond, beam current 140 nA				
0.3	de the control of the	Switch to liquid He4 target				
1	7	Production run on liquid He target, radiator 4x10-4 X0 diamond, beam current 140 nA				

*Assume 100% efficiency for accelerator and experimental operations. ** Provide setup numbers as indicated on the Radiation Budget Form. The sum of the run days must be = the PAC-approved days. Consult Accelerator Liaison Physicist H. Areti for current beam capabilities.

Appendix B

Proposed Apparatus or Beam Development Run Schedule

Fill in one of these forms for each proposed development activity. Enter data in preferred time sequence for energies, current, targets, beam conditions, etc, for the entire Development Run. Under "Special Requirements" below, note all critical scheduling needs, e.g., a certain set of energies must be run before another set, etc.

Identify the goals of the development run and indicate the experiment(s) for which the proposed run is relevant:

No special development time with beam is requested for this experiment. The experiment will be operated using three targets: Carbon target, LD target, and LHe4 target. The standard GlueX LH2 target cell will be used for liquid targets, with a special heat shield installed around the target cell. LHe target was used in the PrimEx experiment in Hall D. The solid C target will be designed and constructed by the Target group. The target will be installed (before we start the experiment) on already existing holder used in the PrimEx experiment.

NOTE: INDICATE ALL MAJOR EQUIPMENT CHANGES, BREAKS, INSTALLATION OR SETUP, OR MAINTENANCE DAYS, ETC. ON SEPARATE LINES.

Days

Setup Number**
from Radiation
Budget Form

Special Requirements Include any variance from standard
beam conditions, special developmental setups, special
beamline or experimental equipment, and associated
setup and installation times in the hall, etc

Install liquid Deuterium target after physics run on Carbon
target, no beam, solenoid magnet filed switched off

Switch from liquid D to liquid He target, no beam

*Assume 100% efficiency for accelerator and experimental operations. ** Provide setup numbers as indicated on the Radiation Budget Form

Appendix C

Pre-Installation Requirements

For all changes, additions, and enhancements to the standard* equipment (including detector systems) and for new equipment, identify for each area listed below the following specific items: who will be doing the work (User/J Lab staff/contractor); the manweeks required for the work; when the work will be done; and the work location.

Engineering and Design:**

- 1) The composite Carbon target consisting of eight foils (7 % R.L. in total) will be designed, fabricated, and installed by the Target group (according to Chris K., it will take about 8 weeks to design and fabricate the target). The target will be installed on the existing mounting and alignment base similar to that used for Be target in the Hall D PrimEx experiment.
- 2) The LHe4 target: Liquid Helium target has already been used in the PrimEx experiment in Hall D. The standard Hall D LH2 target and infrastructure will be used. The target will be surrounded by a 500 micron Al heat shield developed for the PrimEx D experiment.

The target group is responsible for installation of the targets. After installation, C target and LHe (LD) target cell will be aligned/surveyed by the JLab survey and alignment group.

Equipment to be Fabricated:***

The composite Carbon target will be designed and fabricated by the target group by the beginning of the experiment.

Pre-Installation Tests: (Identify any developmental activities with or without beam, associated with the equipment changes. Indicate locations.)

No pre-installation tests are required.

* See the Hall leader for a list and description of standard equipment. ** Complete requirements must be provided for equipment requiring JLab engineering and design. *** Complete drawings must be provided for equipment to be fabricated by JLab

INSTALLATION REQUIREMENTS

For each item below, identify days to complete installation, type of manpower (i.e. welder, electrician, programmer, etc.), manweeks of effort for each subsystem, and the man effort (User/J Lab staff/contractor).

	Equipment to be installed	Time (days) (Assuming 100% efficient operation)	Type of Manpower	Man-Weeks of Effort	User/JLab Staff/Contractor
Alignment	Carbon and liquid Deuterium (He4) target cell	0.7	Alignment group	0.3	JLab, alignment group
Electrical	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	A SECTION OF THE PROPERTY OF T	Cartesianas A. Tric survey is informed a contribution on a lateral for the contribution of the contributio	Countries and appropriate programming countries and appropriate progra	
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Detector				September 1980 y September 1981 y September 1981 y September 1980 y Septem	des et a la la la la company de provide de la company
Target	Solid C target, liquid D and He4 targets	2.0	engineering/technician	1	JLab Target group, Hall D group
Beamline (including Radcon)	where the appropriate set is the shadow the set set so that cold	, min contratuente son	Exposition and an experimental society and a second society of the	Appropriately a trust soverest entry-cook use a cook.	and or to send an application of the send and the send an
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item indicate ty	pe of manpowe	nissioning and/or d er (lift operator, weld t (User/J Lab staff/d	der, electrician,		ks of effort for each
Equipment to be removed	Equipment Location	Time (days) (Assuming 100% efficient operation)	Type of Manpower	Man-Weeks of Effort	User/JLab Staff/Contractor
LHe4 target	Targer		technician	0.4	JLab, target group, Hall D technician
Obtain hall le for schedule		nce that the inform	ation in this App	oendix is under.	stood and adequate
	*******************************				C-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
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Target System For polarized commissioning This experiment Describe any Carbon target beginning of temporary	targets, descring and run school ent will not use pent will not us	edule all appropri	standard cryo	activities.) ogenic targets nter of the Hall existing fixture	D target before the (originally used for
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Data	Acq	uis	itioı	Π

Indicate the anticipated data acquisition rates (peak and averages) as well as the anticipated total data going to media.

Data Acquisition Rate Peak (megabytes/second):

1300

Rate Average (megabytes/second):

1200

Total Data Going to Media (gigabytes):

1400000

Indicate the proposed modifications to the data acquisition system. Include a schedule of developmental activities identifying who is doing the work.

No change in DAQ

Indicate the proposed modifications to the controls system. Include a schedule of developmental activities identifying who is doing the work.

No change in control system

Appendix F

User Staffing Profile

For each phase of the experiment (design, construction, testing, commissioning, running, deinstallation, and data reduction and analysis), indicate the number of onsite FTE users you anticipate, the incremental office and laboratory space required (i.e., space not already provided to collaboration members), and your desired location.

	Collaboration FTEs at JLab	Storage Space	Laboratory Space	How long is space needed?	Comments
	Contract to the contract of th	The second secon	a transcription and a second and a second	and the state of t	Anna and a state of the same o
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