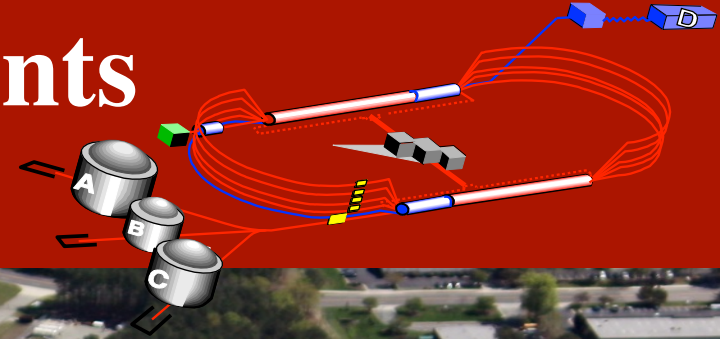


Procedure for Experiments @ 12 GeV



READINESS REVIEW PROCESS

- Jefferson Lab is revisiting the experimental readiness review process in preparation of the 12-GeV startup.
- That means:
 - Partly improving the existing one and correcting accordingly the Experiment Readiness Review web pages
 - Folding in feedback from the management self-assessment for "Installation of New Equipment Involving Multiple Groups"
- The document, almost ready, will give the guidance for running experiments in the 12 GeV era.

READINESS REVIEW PROCESS - FLOWCHART

PROPOSAL PHASE

- Submitting Proposals PAC&TAC
- Director's Decision

PRELIMINARY PLANNING PHASE

- Exp. Description and Requirements
- Exp. Readiness Review Calendar

DESIGN PHASE

- PESAD, specific equipment reviews
- Complete Conceptual Designs & "1st" Readiness Review

CONSTRUCTION PHASE

- Fabrication of the equipment
- Test of the individual elements of the equipment (OSP/TOSP)

**SCHEDULING OF EXPERIMENT
by JLab**

- Construction near-completed, designs frozen
- Exp. Operation Envelop (EOE)
- "2nd" Readiness Review before scheduling request submission

**EQUIPMENT
INSTALLATION**

- "Final" readiness review
- Final ESAD & RSAD
- COO

RUN THE EXPERIMENT

- Safety Checklist
- Experimental Procedures

EXPERIMENT DESCRIPTION AND REQUIREMENTS

THE SUBMITTED INFORMATION IS CONSIDERED FROZEN. MODIFICATIONS TO THE EXPERIMENT SHOULD BE APPROVED BY THE DIVISION MANAGEMENT.

Experimental Hall:

Experiment Number:

Days Approved:

Estimated Installation Time:

Estimated Checkout Time:

Spokespersons:

Short (Technical) Description of the Experiment (max 100 words)

List Beam Energies and Beam Days: (e.g. 30 Days at 11 GeV, 20 Days at 8 GeV)

List Range of Beam Currents: (e.g. 10-60 μ A)

Base Equipment Used
(including description of conditions)

Modifications to Base Equipment
(or use of base equipment with different conditions)

New Equipment

Target Requirements

Beam Line Requirements
(including description of conditions)

Utilities Requirements

Power (MW)

Power Supplies (V, I)

Cryogenics (T, g/s)

LCW (gpm)

Cabling (#, ft)

Other

Additional Requirements

Hazardous Materials

Flammable gases

Lasers

Pressure Vessels

Platforms or Scaffolding

Other

By the Spokespersons

EXPERIMENTAL READINESS REVIEW CALENDAR

THIS CALENDAR INDICATES A BREAK-DOWN OF ANY SPECIFIC EQUIPMENT REQUIRING SAFETY ANALYSIS, AND AN ANTICIPATED EXPERIMENT REVIEW SCHEDULE. MODIFICATIONS OF THIS CALENDAR SHOULD BE APPROVED BY THE DIVISION MANAGEMENT.

Experimental Hall:

Experiment Number:

Liaison Physicist:

Spokespersons:

Which specific equipment design requires a separate review? (*Design Phase III A-C*)

-
-
-

By the DSO

(Note: The specific equipment review committee may request subsequent reviews at completion of equipment fabrication and early commissioning stages, in parallel with this Calendar.)

Is the equipment sufficiently different from base equipment that a "first" readiness review needs to be scheduled at the design phase before the construction phase starts? (*Design Phase III E*)

- Yes, a "first" readiness review is required
- No, no "first" readiness review required

(Note: you cannot request a formal "first" readiness review before completion of the safety analysis of specific equipment and obtaining a pass by the review committee.)

Does the experiment require fabrication of new equipment, or substantial modifications to the base equipment, of such scale that a "second" readiness review needs to be scheduled when fabrication of equipment is completed or near completion, before submitting an experiment scheduling request? (*Preliminary Scheduling Phase V D*)

- Yes, a "second" readiness review is required
- No, no "second" readiness review required

(Note: After this review, the experiment layout and components are considered frozen, and any design modifications will require a change control, approved by the Division Management)

Does the experiment require a "third and final" readiness review of the safety of the installed equipment prior to its commissioning and subsequent use with beam? (*Preparation for Running the Experiment Phase VII A-C*)

- Yes, a "third and final" readiness review is required

(Note: you cannot request a formal "final" readiness review before clearing any issues in earlier review, and submission of near-final drafts of the COO, ESAD, RSAD, Safety Check Lists and Experimental Procedures. Typically, a final readiness review should be scheduled about three-six months before the start of experiment, and include decommissioning plans. Pre-operation checkout of equipment installation and procedures require work control documents.)

Ex. DVCS Exp. (Hall A)

EXPERIMENTAL READINESS REVIEW CALENDAR

THIS CALENDAR INDICATES A BREAK-DOWN OF ANY SPECIFIC EQUIPMENT REQUIRING SAFETY ANALYSIS, AND AN ANTICIPATED EXPERIMENT REVIEW SCHEDULE. MODIFICATIONS OF THIS CALENDAR SHOULD BE APPROVED BY THE DIVISION MANAGEMENT.

Experimental Hall:

Experiment Number:

Liaison Physicist:

Spokespersons:

Which specific equipment design requires a separate review? (*Design Phase III A-C*)

-
-
-

(Note: The specific equipment review committee may request subsequent reviews at completion of equipment fabrication and early commissioning stages, in parallel with this Calendar.)

Is the equipment sufficiently different from base equipment that a "first" readiness review needs to be scheduled at the design phase before the construction phase starts? (*Design Phase III E*)

Yes, a "first" readiness review is required

No, no "first" readiness review required

(Note: you cannot request a formal "first" readiness review before completion of the safety analysis of specific equipment and obtaining a pass by the review committee.)

Does the experiment require fabrication of new equipment, or substantial modifications to the base equipment, of such scale that a "second" readiness review needs to be scheduled when fabrication of equipment is completed or near completion, before submitting an experiment scheduling request? (*Preliminary Scheduling Phase V D*)

Yes, a "second" readiness review is required

No, no "second" readiness review required

(Note: After this review, the experiment layout and components are considered frozen, and any design modifications will require a change control, approved by the Division Management)

Does the experiment require a "third and final" readiness review of the safety of the installed equipment prior to its commissioning and subsequent use with beam? (*Preparation for Running the Experiment Phase VII A-C*)

Yes, a "third and final" readiness review is required

(Note: you cannot request a formal "final" readiness review before clearing any issues in earlier review, and submission of near-final drafts of the COO, ESAD, RSAD, Safety Check Lists and Experimental Procedures. Typically, a final readiness review should be scheduled about three-six months before the start of experiment, and include decommissioning plans. Pre-operation checkout of equipment installation and procedures require work control documents.)

Ex. Tritium Exp. (Hall A)

EXPERIMENTAL READINESS REVIEW CALENDAR

THIS CALENDAR INDICATES A BREAK-DOWN OF ANY SPECIFIC EQUIPMENT REQUIRING SAFETY ANALYSIS, AND AN ANTICIPATED EXPERIMENT REVIEW SCHEDULE. MODIFICATIONS OF THIS CALENDAR SHOULD BE APPROVED BY THE DIVISION MANAGEMENT.

Experimental Hall:

Experiment Number:

Liaison Physicist:

Spokespersons:

Which specific equipment design requires a separate review? (*Design Phase III A-C*)

- Tritium Target

(Note: The specific equipment review committee may request subsequent reviews at completion of equipment fabrication and early commissioning stages, in parallel with this Calendar.)

Is the equipment sufficiently different from base equipment that a "first" readiness review needs to be scheduled at the design phase before the construction phase starts? (*Design Phase III E*)

- Yes, a "first" readiness review is required
 No, no "first" readiness review required

(Note: you cannot request a formal "first" readiness review before completion of the safety analysis of specific equipment and obtaining a pass by the review committee.)

Does the experiment require fabrication of new equipment, or substantial modifications to the base equipment, of such scale that a "second" readiness review needs to be scheduled when fabrication of equipment is completed or near completion, before submitting an experiment scheduling request? (*Preliminary Scheduling Phase V D*)

- Yes, a "second" readiness review is required
 No, no "second" readiness review required

(Note: After this review, the experiment layout and components are considered frozen, and any design modifications will require a change control, approved by the Division Management)

Does the experiment require a "third and final" readiness review of the safety of the installed equipment prior to its commissioning and subsequent use with beam? (*Preparation for Running the Experiment Phase VII A-C*)

- Yes, a "third and final" readiness review is required

(Note: you cannot request a formal "final" readiness review before clearing any issues in earlier review, and submission of near-final drafts of the COO, ESAD, RSAD, Safety Check Lists and Experimental Procedures. Typically, a final readiness review should be scheduled about three-six months before the start of experiment, and include decommissioning plans. Pre-operation checkout of equipment installation and procedures require work control documents.)