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Research Organization

5.1 Program Management¹

The personnel involved in defining and scheduling the accelerator program include the Associate Director of the Technical Division, the NLCTA Facility Head, the NLCTA Operations Manager, the NLCTA Operations Engineer, the NLCTA Program Deputy and accelerator physicists, and the NLCTA Facility Engineer and Area Manager.

In general, the aspects of the program concerning experimental accelerator physics are the responsibility of the Program Deputy (assisted by other accelerator physicists); the aspects of the program concerning accelerator maintenance and improvements are the responsibility of the Facility Engineer (assisted by the Area Manager); and coordination of accelerator operations with accelerator physics experiments, maintenance, and improvements is the responsibility of the Operations Manager (assisted by the Operations Engineer).

Carrying out the short-term schedule at all times will be the responsibility of an Operator in Charge (OIC). The OIC title is transient, and is passed among a group of qualified people that includes, but is not limited to, the Program Deputy or another accelerator physicist, or the Operations Engineer. The OIC assumes OIC responsibilities typically for the duration of one shift (six to eight hours). The name of the person holding the OIC title will be indicated in the Operations Log at all times when the NLCTA is operating.

Management involved in program control includes the Associate Director, Technical Division, and the NLCTA Facility Head. Together with the NLCTA Operations Manager, they specify the long-term and short-term schedules for the accelerator program. The NLCTA Facility Head publishes the long-term schedule, in consultation with the Associate Director, Technical Division. The NLCTA Operations Manager translates the long-term schedule into a short-term schedule.

The short-term schedule is reviewed at accelerator management meetings and is updated as needed in response to problems or delays. The accelerator management meeting is usually attended by the NLCTA Facility Head, the Operations Manager, the Program Deputy, the Facility Engineer, and the Operations Engineer.

5.1.1 Operations Manager

The program control responsibilities of the Operations Manager (OM) are as follows:

- Develop and manage the short-term schedule so as to ensure safe and effective utilization of the NLCTA facility. This responsibility may be delegated to the Operations Engineer.
- Monitor the activities of the Operations Engineer and the Operator in Charge and provide assistance where needed.
- Conduct operations meetings as necessary to review progress, announce schedule modifications, and dispatch resources.
- Review all maintenance activities that could affect machine operation.

¹ See also: *NLCTA Operations Directives*, Section 1, Program Control, draft May 22, 1995.

- Review the performance of the Operations Engineer and the qualified operators with regard to operational safety, and make recommendations to the NLCTA Facility Head as to their fitness for accepting operational responsibility.
- Give a summary report of accelerator operations in accelerator management meetings.

The OM may be an accelerator physicist and may participate in accelerator physics experiments.

5.1.2 Operations Engineer

The Operations Engineer (OE) position is filled by an experienced accelerator operator, usually trained by the SLAC Accelerator Department as an EOIC. The OE usually assumes the OE responsibilities for an indefinite period of time. The OE is expected to frequently assume the role of "Operator in Charge" when operations are in progress, and is on call for all operations. The OE may participate in accelerator physics experiments. The OE attends the daily Operations Meeting and is encouraged to attend the shift change meetings.

The program control responsibilities of the OE are as follows:

- Assume the responsibilities of Operator in Charge frequently when operations are in progress, whenever doing so does not conflict with the other responsibilities of the OE.
- Monitor the activities of the Operator in Charge and provide assistance where needed.
- Provide an alternate program when it becomes impossible to carry out the scheduled accelerator program.
- Change the program to make optimal use of the accelerator when neither the primary program nor the alternate programs can be carried out.
- Give a summary report of operations in Operations Meetings.
- Qualify operators in safety, operations, procedures, and in the various accelerator subsystems.
- Develop improvements and upgrades to accelerator tuning procedures and equipment.