4 Operating Organizations

4.1 Personnel and Responsibilities

The personnel involved in accelerator operations include the NLCTA Operations Manager, the NLCTA Operations Engineer, the NLCTA Operator in Charge (OIC), other control room operators, the NLCTA Program Deputy, other accelerator physicists, and other control room staff who are assigned to the NLCTA.

Any accelerator system capable of producing a beam, including high-power rf, may be operated only when there is a valid Beam Authorization Sheet (BAS) and when a qualified OIC is on duty.

The OIC is the qualified operator designated, in the Operations Log, to be in charge of operations at that time.

OIC qualification consists of learning to operate the NLCTA in a safe and efficient manner through a specified set of training classes, some of which apply to all SLAC operations, and some of which are specific to the NLCTA. In addition to the specified training, competency must be certified by the NLCTA Operations Manager.

The Operations Engineer supervises operator training and maintains records that indicate the training and qualifications of the control room operators.

The control room staff may also include accelerator physicists, engineers, experimenters, and others who operate the accelerator controls to commission new hardware or software, diagnose problems, or perform specific experiments.

The responsibilities of the different participants are described in detail in *NLCTA Operations Directives*, Section 2 (02-02-01, draft dated May 22, 1995). The list of contents of *NLCTA Operations Directives* is attached as Attachment 1.

4.2 Training

Table 4.1 shows the required training for personnel engaged in maintenance or operations at the NLCTA. For the most part, the courses listed are standardized courses presented by the ES&H Division; however, qualified operators of NLCTA are required to receive special training in control room procedures and in use of the Radiation Safety Systems (see *NLCTA Operations Directives*, Section 2 and Section 3, draft dated May 22, 1995).

Table 4.1: Safety Training Matrix for Operations and Maintenance Personnel

Training Requirements	Job Descriptions																		
	Ops	Klystr Techs	Fire Dept	P.E. Labor	P.E. Plumb	P.E. Rigger	P.E. Instr	P.E. M Util	P.E. Electr	P.E. M Fab	Contr Techs	Facil Janitor	Facil HVAC	Mech Vac	Mech Techs	OHP Techs	Cryo Techs	Power Techs	Align Techs
Search Procedures	✓																		
Entry Requirements & HV Safety	✓																		
Radiation Training for NLCTA	✓																		
Emergency Responder Trng			✓																
Overhead Crane						✓													
Cryo Storage & Handling																	✓		
Fork Lift				✓		✓		✓	✓	✓									
ES&H Mach Guard (#198)										✓			✓						
ES&H Gen. Safety (#219)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ES&H Haz Comm.(G) (#103)				✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
ES&H Haz Comm (S) (#101)																			
ES&H Intro to Haz W (#177)		✓		✓	✓		✓	✓	✓	✓			✓			✓			
ES&H Rad Cont Tech (#237)																✓			
ES&H Gen Rad Trng (#115)			✓									✓	✓						
ES&H Rad Wkr Trng (#116)	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
ES&H Elec. Safety (B) (#135)		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ES&H Elec Safety (LV) (#243)							✓		✓										
ES&H Nat Elec Code (#260)									✓										
ES&H CPR (#138)		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ES&H Elec Safety HV (#112)									✓										
ES&H Fire Extinguisher (#108)		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ES&H Lock & Tag (#157)		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓
ES&H Lead Safety (#240)																✓			
ES&H Hearing Cons (#222)		✓																	
ES&H Respir. Safety (#241)					✓			S	S	✓		✓	✓			✓	✓		

4.3 SLAC Guidelines for Operations

The NLCTA, like all accelerator facilities at SLAC, is governed by *SLAC Guidelines for Operations*. These documents specify methods and procedures by which accelerator and detector operations are conducted in conformance with DOE 5480.25 Safety of Accelerator Facilities. The *Guidelines* stipulate the responsibility for operations management, responsibilities of various key positions, the requirement for formality and documentation of various activities, and describe mandatory procedures for configuration control of safety systems. Personnel engaged in accelerator operations or maintenance are required to be familiar with these *Guidelines*. A listing of Guideline titles is attached as Attachment 2.

Attachment 1: NLCTA Operations Directives Contents List[1]

[1] Draft dated May 22, 1995.

Attachment 2: List of Titles in *SLAC Guidelines for Operations*

Guideline 1	Operations Organization and Administration
Guideline 2	Management of Work in Accelerator Facilities
Guideline 3	Accelerator Maintenance Management
Guideline 4	Operations Procedures
Guideline 5	Safety Organization
Guideline 6	Shift Routines
Guideline 7	Incident Reports
Guideline 8	Emergency, Incident, and Alarm Response
Guideline 9	Control Room Activities
Guideline 10	Communications
Guideline 11	Operator Training
Guideline 12	Safety in the Accelerator Housings
Guideline 13	Radiation Safety
Guideline 14	Configuration Control of Radiation Safety Systems
Guideline 15	Control Over Activated Material
Guideline 16	Radiological Work Controls
Guideline 17	Electrical Safety
Guideline 18	Control of Work on Electrical Devices in Beam Housings
Guideline 19	Use of Software-based Control Systems
Guideline 20	Configuration Control of Atmospheric Safety Systems
Guideline 21	Equipment Identification
Guideline 22	Standards for Alarms, Warnings, and Advisories
Guideline 23	Safety Deficiency Reviews and Continued Operations
Guideline 24	Safety Review of Major Modifications
Guideline 25	Preparation of Safety Assessment Documents
Guideline 26	Safe Use of Liquefied Nitrogen