

## Chapter 20

### Laser Hazard Control Program

1. Purpose. To prescribe installation policy and guidance concerning the control of Laser Radiation Hazards. When questions arise outside the scope of this chapter, reference (m) shall be used.

2. Scope. This chapter is applicable to all activities and tenant commands that operate or maintain laser systems aboard MCAS Cherry Point, its auxiliary landing fields, and range areas. 2d MAW units shall comply with the requirements of WgO 5104.1(Series). References (r) and (s) outline the requirements for Laser Range Safety.

3. Background. As laser systems become more numerous, solid laser radiation hazards prevention programs are key to assuring a mishap-free workplace. Reference (m) prescribes policy and guidance in the identification and control of laser radiation hazards. It applies to the design, use, and disposal of all equipment and systems capable of producing laser radiation including laser fiber optics. It also issues guidance on establishing a command Laser Hazard Control Program including requirements for a Laser System Safety Officer (LSSO), personnel training, laser engineering protective eye-wear, laser warning signs, and administrative and engineering protective measures.

4. Action. Local Laser Safety Organization's (LLSO) will be established within each activity/tenant command that possesses, operates, maintains or trains with laser devices. The LLSO will be incorporated within existing safety elements to the maximum extent possible. Technical expertise and the LSSO may be drawn from an available source within each unit; however, each will function through the organization's existing safety establishment.

a. The MCAS Cherry Point LSSO shall be appointed in writing by the CO and shall have direct access to the CO on all laser safety matters. The LSSO shall be a graduate of an approved LSSO Course. Duties shall include:

(1) Review this chapter annually and provide updates as necessary.

(2) Maintain an inventory of all lasers utilized aboard MCAS Cherry Point, its auxiliary landing fields, and range areas, for dissemination upon request to the Administrative Lead Agent (ALA), currently the BUMED within the DON or to higher headquarters.

(3) Coordinate LSSO training as needed.

(4) Maintain copies of laser radiation hazard surveys provided by the Range Laser Safety Specialist (RLSS) team, which document certification of military target ranges designated for use of laser weapons systems.

b. An LSSO shall be appointed in writing for any unit/activity using Class IIIB, Class IV, or military exempt lasers. The unit/activity LSSO shall be a graduate of an approved LSSO Course and shall have direct access to the unit/activity CO on all laser safety matters. Duties shall include:

(1) Publish a unit/activity local laser safety program command policy, safety regulations and SOPs, in accordance with this Order and references (a) through (e).

(2) Maintain an inventory of all unit/activity held laser devices along a Laser Data Worksheet for each device and provide a copy of the inventory to the installation LSSO upon request.

(3) Maintain copies of flight approvals and Laser Safety Review Board findings on each applicable laser system.

(4) Maintain a log of all operational, maintenance, or training laser firings to include: date, time, location, operator, purpose, and personnel present. A log of all airborne firings should include type of aircraft and Bureau Number (BUNO), location, heading, altitude, air-speed, and designation target.

(5) Maintain a current listing of all personnel who are authorized to engage in laser operations and ensure that each individual is enrolled in the proper medical surveillance program.

(6) Maintain training records of all personnel who engage in laser operations, maintenance, or training. These records will be maintained for two years and include times and dates of training received, as well as copies of designations and assignments for laser operations.

#### 5. Laser Safety Training Program

a. All personnel working with laser devices or in areas using or storing Class IIIB, Class IV, or equivalent military-exempt lasers shall receive appropriate classroom training.

b. Local lesson plans will be submitted to the MCAS Cherry Point LSSO and safety and standardization. Such lesson plans should, at a minimum, encompass all applicable topics contained in the reference. Completed training rosters will be submitted to TSD.

c. Formal safety school requirements of LSSOs and other necessary laser safety training needed for operations and maintenance will be locally budgeted and coordinated through TSD.

d. Normal laser-related technical training (operations and maintenance) is not applicable under this Order.

#### 6. Laser Eye Protection (LEP)

a. All personnel exposed to lasers, either directly or indirectly, are required to wear laser eye protection.

b. All goggles or spectacles must be properly labeled and inspected prior to use. All LEP devices shall have the proper optical density at the appropriate wave lengths for each type of laser being used.

#### 7. Medical Surveillance Program

a. This program is a Naval Medical Department function although the program implementation and reporting of overexposure incidents are the responsibilities of the LSSO.

b. Personnel using or working around Class IIIB or Class IV lasers shall be enrolled in the medical surveillance program either as "Laser Personnel" or "Incidental Personnel" as defined below:

(1) Maintenance personnel whose work with lasers requires them to bypass the safety interlocks and personnel involved in procedures that expose them to an open laser beam, shall be enrolled in the Medical Surveillance Program as "Laser Personnel."

(2) Operators of fielded military Class IIIB or IV systems and aircrew aboard aircraft using Class IIIB or IV military laser systems shall be enrolled in the Medical Surveillance Program as "Incidental Personnel."

(3) All other personnel will be categorized per specific job requirements.

c. Medical surveillance protocols for individuals designated as "Laser Personnel" or "Incidental Personnel" shall include a pre-placement exam that consists of a visual acuity exam and a review of their ocular history, and a termination exam, which consists of a visual acuity only.

8. Mishap Investigation Report Procedures. In the event of an overexposure incident or suspected overexposure incident, the following action shall be taken:

a. An initial notification message reporting any overexposure or suspected overexposure shall be sent to BUMED (MEDCOM 02). A follow-on phone call will be made to inform the chain of command, to include the MCAS Cherry Point LSSO. A mishap will be entered into ESAMS.

b. An investigation shall be conducted by the LSSO with assistance from MCAS Cherry Point LSSO. If an aircraft mishap investigation is initiated IAW reference (t), the Aviation Mishap Board (AMB) shall include a LSSO (Technical Laser Safety Officer (TLSO) designation minimum) on the investigation board as an adjunct member.

c. Mishap Reports shall be sent via the chain of command using ESAMS/Web-Enabled Safety System (WESS) in accordance with applicable mishap reporting directives with copies to Safety (DSS/LSSO), MCIEAST (DSS) or IIMEF (DSS) as appropriate, MARFORCOM (DSS), BUMED (Code 02) and CMC (SD).