



DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL
1 UNIVERSITY CIR
MONTEREY, CA 93943-5000

NPSINST 5100.27B
00K
23 Aug 17

NPS INSTRUCTION 5100.27B

From: Chief of Staff, Naval Postgraduate School

Subj: LASER (NON-IONIZING RADIATION) HAZARDS CONTROL PROGRAM

Ref: (a) OPNAVINST 5100.27B
(b) ANSI Z136.1 (2014)
(c) SECNAVINST 5100.14D
(d) BUMEDINST 6470.23
(e) OPNAVINST 5100.23G
(f) OPNAVINST 5100.19E
(g) OPNAVINST 5102.1D/MCO P5102.1B
(h) MIL-STD-882E
(i) OPNAVINST 3500.39C
(j) MIL-HDBK-828B
(k) DoDD 4160.21-M
(l) DoDD 4160.21-M-1
(m) 29 CFR 1926.54 and 1926.102(b)
(n) ANSI Z136.3
(o) BUMEDINST 6470.19A
(p) ANSI Z136.2
(q) SECNAV M-5210.1
(r) SECNAV M-5210.2
(s) NAVMC DIR 5210.11F
(t) 21 CFR 1040
(u) NPS ORM

Encl: (1) NPS Laser Hazard Control Program
(2) NPS Laser Safety Committee Charter

1. Purpose. To prescribe hazardous laser system management at the Naval Postgraduate School (NPS). This is a complete revision and should be read in its entirety.

2. Cancellation. NAVPGSCOLINST 5100.27A

3. Background. Lasers in both commercial and military applications may damage vision, burn skin, or ignite fires. References (a) through (u) provide either controls over laser system design and operation for protection of personnel and equipment or specify details on laser safety subjects. This instruction provides implementation of these regulations for NPS, but does not re-create or replace these references. This instruction, comprehensive knowledge of references (a)

through (d), and a familiarity with the remaining references are required to administer the Laser Hazard Control Program at NPS.

4. Scope. This instruction applies to NPS faculty, staff, and students. It applies to the design, procurement, use, storage, and disposal of all laser and support systems except commercial medical, commercial industrial, and commercial construction laser systems having no military-specific applications. Guidance for medical, industrial, and construction laser systems is deferred entirely to references (a) and (d). Contractors working for NPS on government furnished laser systems shall be formally informed of laser systems hazards and Navy safety requirements. When requested through a contract, contractors shall provide satisfactory evidence they have met the parent company's equipage, training, and medical requirements.

5. Policy. The Department of the Navy policy is to identify and control laser radiation hazards during all phases of acquisition including design, testing, development, evaluation, acquisition, deployment, operations, demilitarization, and disposal. Personnel shall not be exposed to laser radiation in excess of the Maximum Permissible Exposure (MPE). NPS shall manage laser radiation hazards by Operational Risk Management (ORM) processes of reference (i). NPS shall administratively manage laser safety responsibilities by applying a Laser Permit system that tracks personnel, equipment, training, inspection, and medical requirements. A Laser System Safety Officer (LSSO) that has received the certified Navy training shall be designated to approve laser use for NPS faculty, staff, and students. A Laser Safety Committee shall review LSSO approvals and NPS Laser Hazard Control Program actions quarterly. No laser, even those believed to be below MPE capacities, shall be aimed or shined at another person without LSSO and Laser Safety Committee approval.

6. Responsibilities

a. Department of the Navy: Responsibilities of Department of the Navy supporting organizations are provided in reference (a).

b. NPS: For class 3B lasers, class 4 lasers, lasers used in combat training, or lasers classified in the interest of national security, NPS shall administratively and operationally maintain the applicable requirements prescribed in reference (a) for Operational Commands as follows:

(1) Maintain a Laser Hazard Control Program - enclosure (1).

(2) Maintain this instruction of amplifying details and implementation of references (a) through (c) for personnel, equipment, and facilities. Administrative processes and procedures described here are designed to provide adequate warnings, safety training, documentation, and audits for laser hazard controls. This instruction shall be reviewed at least every four years.

(3) Appoint an NPS LSSO. The President has ultimate responsibility and authority for operations of lasers at NPS and the participation of faculty, staff, and students in laser related research and laser activities involving NPS personnel at other locations sponsored by NPS. The

LSSO shall be designated the Presidents representative and act as an extension of the President's direction and authority in the matters of this instruction. The LSSO/Safety Engineer position shall be a permanent, GS billet, funded at a level to fully perform responsibilities.

(4) Provide medical surveillance for class 3B and class 4 laser operators (laser custodians and laser workers) as directed by the LSSO. The LSSO shall document sufficient resources available to NPS to conduct program Baseline and Exit exams. The LSSO shall track laser medical surveillance.

(5) Resource an annually renewable Laser Permit process to track LSSO approved laser applications, inventory, custodian control, Laser Hazard Analysis, ORM, standard operating procedures, inspections, and training. The LSSO or Assistant LSSO (ALSSO) shall execute management of the Permits. Only the LSSO or ALSSO can issue Permits, designate custodians or workers, and authorize class 3B and class 4 operations.

(6) Mandate, review, and approve Laser Eye Protection (LEP) for all personnel required to be within any Nominal Hazard Zone. This includes any considerations for optical aids, alignments, or testing. The LSSO shall manage the mandates through the Laser Permit approval process, and approval of LEP purchases through KFS purchase request reviews.

(7) Provide LSSO expertise to dispose of class 3B, class 4, and military exempt lasers in accordance with references (c), (k) and (l).

(8) Maintain an LSSO managed NPS-wide audit-ready inventory of all class 3B, class 4, and military exempt laser systems. This is in addition to the custodian Laser Permit inventories. The LSSO shall submit compulsory or requested inventory reports to Navy Technical and Administrative Lead Agents as prescribed in reference (a).

(98) Enable ophthalmologist or optometrist for personnel with suspected or observed laser exposure through local emergency (9)-911 response. The LSSO shall notify the Navy Bureau of Medicine and Surgery Laser Administrative Lead Agent (703-681-9276) and contact the Tri-Service Laser Safety Hotline (800-473-3549) as soon as possible.

(10) Submit and archive to Bureau of Medicine & Surgery a laser incident report for all cases where personnel are inadvertently exposed to class 3B or class 4 laser energy. The LSSO shall manage these communications.

(11) Submit safety investigation reports for any incidents meeting the safety investigation thresholds. The LSSO shall manage these communications.

(12) Submit a hazard report for any work-related events having potentially resulted in a laser exposure. The LSSO shall manage these communications.

(13) Organize and conduct Navy Laser Safety Review Board preparations and presentations if required for all NPS outdoor class 3B, outdoor class 4 and military exempt laser use.

(14) Coordinate any space directed (above-horizon) emissions with U.S. Strategic Command Directed Energy Branch Laser Clearing House Section Chief (805-606-1075).

c. NPS Laser Operators:

(1) NPS faculty, staff, contractors, or students possessing or desiring to possess class 3B, class 4, military exempt lasers, lasers systems used in combat, laser systems used in combat training, or laser systems classified in the interest of national security ensure they comply with the provisions of references (a) through (u) and enclosure (1) to this instruction.

(2) NPS faculty, staff, contractors, or students possessing or desiring to possess only class 1, class 2, or class 3R laser systems not used in combat, combat training, or classified in the interest of national security:

(a) Read manufacturer literature and labeling

(b) Avoid direct eye exposure

(c) Never shine the laser system at a person

(d) Do not leave the laser unattended

(e) Ensure appropriate warning labels are on the laser system – “Laser Radiation, AVOID DIRECT EYE EXPOSURE, class 3R/2/1 Laser product.”

(f) Report any instances of contact of the laser beam with an eye to the LSSO.

(3) Incidental laser user

7. Communications, Forms, and Reports

a. OPNAV reference (a) contains many of the forms and reports necessary to administer a Navy Laser Hazard Control Program. These may be reproduced directly for NPS administration. The command LSSO may produce electronic substitutes which provide equivalent recordkeeping.

b. The Navy and Marine Corps Laser Safety website is hosted by Navy Systems Warfare Center Dahlgren Division.
<http://www.navsea.navy.mil/Home/WarfareCenters/NSWCDahlgren/WhatWeDo/NavalLaserSafety.aspx>. Updates to the general guidance of Reference (a) are publicized there including

updated electronic inventory reporting forms, points of contact for submission of reports, and the current Navy Laser Safety leadership positions:

- (1) Navy Administrative Lead Agent
- (2) Technical Lead Agent for Laser Safety
- (3) Naval Air Systems Command Vision Laboratory
- (4) Chair, Laser Safety Review Board

c. NPS maintains a Laser Safety Program presence on the NPS intranet under the Safety Directorate. This web page presents a storefront for NPS laser safety policy, guidance, frequently asked questions, and forms for Laser Hazard Analysis, ORM, standard operating procedures, site inspections and Permits. Contact buttons are in place to send an email directly to the LSSO or link to NPS Laser News and Events. The LSSO shall maintain this web page or an equivalent to provide guidance sufficient for NPS project teams to prepare for operations in accordance with this instruction. <https://my.nps.edu/web/safety/laser>

8. Records Management. Records created as a result of this instruction, regardless of media and format, must be managed per SECNAV M-5210.1 of January 2012.

9. Review and Effective Date. Per OPNAVINST 5215.17A, NPS will review this instruction annually on the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, DoD, SECNAV, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will automatically expire 5 years after effective date unless reissued or canceled prior to the 5-year anniversary date, or an extension has been granted.



T. W. LYONS

Releasability and distribution:

<http://intranet.nps.edu/Code00/Instructions/IndexNew.html>

NPS LASER HAZARD CONTROL PROGRAM

1. This enclosure details the Naval Postgraduate School (NPS) Laser Safety Program.

2. Program Requirements

a. Regulations. References (a) through (u) contain the guidance and direction to establish an effective laser hazard control program. NPS shall adhere directly as those references apply except as noted below. Assistance is available from the Command Laser System Safety Officer (LSSO). Deviations from normal requirements in any instruction shall be formally petitioned to the LSSO. The LSSO is authorized to grant provisional waivers from the requirements of references (a) through (u) if reasonable alternatives are able to retain the same level of safety. Any provisional waivers shall be reviewed by the NPS Laser Safety Committee (LSC).

b. LSSO. The President designates an individual by name and code as the LSSO. Most LSSO responsibilities and duties are delineated in reference (a). The LSSO is authorized to confer directly with the President or any agent of the President's authority on matters of NPS Laser Systems. The LSSO shall authorize all Class 3B, Class 4, and Military Exempt Laser Operations at NPS. The LSSO is granted the authority of the President to suspend, restrict, or terminate the operation of any laser system to ensure compliance with regulations, provide for a working environment adequately protecting NPS personnel, members of the public, equipment, or the environment. The LSSO may appoint an Assistant Laser System Safety Officer (ALSSO). The ALSSO must be a certified Navy Administrative Laser Safety Officer (ALSO) or Technical Laser Safety Officer (TLSO) in accordance with Reference (a). This assistant inherits the same Presidential authorities on matters of laser safety when the LSSO is not available. During normal operations, the LSSO and ALSSO report to the Research Safety Department Head.

c. Laser Classification and Labeling. Class 3B, Class 4, or military exempt laser systems used on NPS campus or used by NPS personnel in support of NPS sponsored activities off campus requires Permit approval and a green "AUTHORIZED Permit XXXX-#####" sticker from the LSSO before normal use. Similar laser systems awaiting approval shall be branded with a red "UNAUTHORIZED Permit XXXX_#####" sticker that also lists the inventory custodian's Permit. A supervisory review from the NPS Laser Safety Committee (LSC) which shall convene quarterly is required for continued operations. For some laser systems planned to be employed outdoors, a presentation to and review by the Navy Laser Safety Review Board may be required.

(1) Each laser system requires ANSI or Mil Exempt classification and labeling to become Permit Authorized. Laser classification is detailed in reference (b). Some Class 1 or Class 2 lasers, when opened allow Class 3B or Class 4 radiation levels to be accessible and shall be treated as Class 3B or Class 4 under those conditions. These systems shall require a NPS Laser Safety Program trained Custodian and Permit. If normal operations are Class 1, 2, or 3R, then operations may be delegated to those deemed proficient and able by the Custodian. Operators of Class 1, 2, and 3R systems need not be enrolled in the Laser Safety Program. Operators of Class

1, 2, and 3R enclosed Class 3B or 4 systems need not be enrolled in the Laser Safety Program if delegated and trained to operate the system in the Class 1, 2 or 3R modes by a Laser Custodian.

(2) Laser site warning signs shall be posted at all laser system site entrances to inform unaware personnel of laser radiation. Laser site design, signal words, and required labeling are specified in reference (b). Laser protective housings, optical cable disconnects, and unenclosed beam paths shall be posted with warning signs and labels as specified in reference (b).

(3) Laser awareness devices and additional precautions for Class 3b and 4 laser system operations are contained in reference (b) tables 10 and 11 and shall be reviewed for initial Permit Authorization and again at annual reviews.

d. Protective Equipment. All NPS personnel using lasers shall wear laser protective equipment if there is any chance of entering a Nominal Hazard Zone – an area where irradiance may exceed Maximum Permissible Exposure (MPE) limits. This typically is Laser Eye Protection (LEP) and sometimes clothing that covers all skin. LEP for NPS systems shall be inspected by the LSSO for serviceability during initial Permit inspections and annual Permit reviews. LEP shall be reviewed and approved by the LSSO following a formal hazard analysis but before purchase. Workers shall inspect their own protective equipment before each use.

e. Safety Evaluations, Inspections, and Surveys. As part of the initial Permit inspections or annual Permit reviews, laser inventories, equipment, and operational sites shall be inspected by the LSSO or ALSSO. For laser sites, the minimum requirements detailed in Appendix C of enclosure (6) of reference (a) shall be the requirements, however an equivalent form approved by the LSSO and LSC may be used during these inspections. Inspection records shall be maintained by the LSSO for three years. NPS currently has no outdoor ranges for Class 3R or stronger laser systems. Outdoor range authorization is detailed in references (a) and (j). Self-Assessments shall be conducted as directed by the Research Safety Department Head to meet higher organizational self-assessment requirements. The format of self-assessments should conform to the needs of the higher organizational needs. Self-assessments shall be maintained on SharePoint for 5 years.

f. Medical Surveillance Program. All Class 3B and Class 4 Custodian and Laser Workers at NPS shall be enrolled in Laser Medical Surveillance. Students attending Class 3B and Class 4 graduate education demonstrations conducted by an NPS Permitted and Authorized Custodian or Laser Worker are not required to enter Laser Medical Surveillance or be enrolled in the NPS Laser Safety Program if no other laser work is anticipated. Coordination with Presidio Health Clinic Monterey is required to conduct Laser Safety Program Medical Surveillance in accordance with the August 2015 Medical Surveillance Procedures Manual and Medical Matrix 12th edition. Management of this exchange of service shall be coordinated by the NPS Safety Directorate Department Head and specific directions to NPS personnel shall be posted on the NPS Laser Safety intranet web pages. NPS personnel shall complete a SECNAV 5100/1 form, which requires supervisor signature, and email it to Presidio staff to schedule appointments. Once conducted, a receipt of initial, exit, and incident medical exams shall be collected from

either the individuals upon completion, or directly from Presidio Health Clinic staff. A receipt of the completion of the initial and termination ocular exams shall be maintained by the LSSO indefinitely.

g. Laser Inventory. The LSSO shall maintain a record specifically of all Class 3B, Class 4 and military exempt lasers and their locations at NPS. The LSSO shall submit NPS records required to the Navy Laser Administrative Lead Agent (ALA) and Technical Lead Agent (TLA). A compulsory NPS Military Exempt laser inventory shall be reported to the Navy ALA annually by 30 October.

h. Laser Custodians are designated personnel who are authorized by NPS to possess and use lasers and supervise authorized Laser Workers. NPS issues Permits to use or possess Class 3B, Class 4, and Military Exempt lasers to Laser Custodians. A Laser Custodian shall

- (1) Be in the Laser Medical Surveillance Program
- (2) Complete the NPS Initial Laser Safety Training and pass the Quiz with 70 percent or better
- (3) Complete Annual Refresher Training annually thereafter
- (4) Be identified on the Permit
- (5) Maintain an accurate laser inventory for lasers they are documented to possess
- (6) Maintain a Laser Log for each operational laser system
- (7) Ensure only NPS laser safety trained laser workers operate Permitted and Authorized lasers
- (8) Conduct safety planning for the installation of laser systems within their authorized spaces. This includes working with the LSSO to complete Laser Hazard Analysis (LHA) and deliberate Operational Risk Management (ORM), generating a SOP that is informed by the ORM, scheduling and completing site inspections, and managing laser logs.
- (9) Enforce SOPs for those Permitted and Authorized Systems.
- (10) Ensure workers under their supervision receive system specific training. For controlled systems, this usually is NPS Initial Laser training, NPS Annual Refresher training, and system-specific hazard, ORM, and Standard Operating Procedure (SOP) training.
- (11) Provide appropriate laser protective equipment to personnel who must be present in any nominal hazards zone of lasers under their custody.

(12) Assist in investigating incidents.

(13) Ensure daily use of Class 3B and Class 4 lasers are logged.

(14) Ensure laser authorized spaces under their custodial responsibility are in compliance with the requirements of references (a) and (b) for operations and available for inspection by the LSSO with reasonable notice.

i. Operator Training and Certification. Laser custodians and laser workers shall receive training on the safe use of lasers that is in accordance with reference (a) enclosure (7) paragraph 4 prior to first of use of a Class 3B, Class 4 or military exempt laser. This shall normally be accomplished by completing LSSO developed NPS Initial Laser Safety Training or completing the Navy ALSO or TLSO courses. Annual Refresher Training is required annually to maintain status as a Custodian or Worker on an Authorized Permit. Training records shall be maintained by the LSSO until individuals transfer. Prior to being allowed to service, maintain, or fire Class 3B, Class 4, or Military Exempt lasers on the NPS campus, Contractors shall be provided the LHAs to communicate the hazards associated with a laser systems. Contractors shall then be asked to provide evidence of their training and medical surveillance to the LSSO.

j. Emergency Provisions. Laser custodians shall ensure emergency procedures, including emergency shutdown procedures are included in SOP. The SOP shall be posted at each laser installation in a location safely accessible to personnel rendering emergency aid. The LSSO shall coordinate with emergency medical technicians and firefighters annually to provide basic instruction on laser hazards.

k. Laser Safety Committee. NPS currently maintains inventory of 100 Class 3B, Class 4, or Military Exempt lasers of mostly unique configuration. NPS also has great collective laser safety experience and wisdom in the Professors, Custodians, and staff embedded within the NPS community. The quantity and magnitude of hazards warrants a local laser safety committee to improve visibility, risk analysis, supervision, and reinforce Custodian ownership of safe operations. This community expertise shall be engaged through the NPS Laser Safety Committee (LSC). Details of the LSC are in enclosure (2).

l. Laser Mishap Investigation. Each laser Custodian and the LSSO are charged with ensuring prompt medical attention is given to laser injuries. The LSSO shall investigate and report laser mishaps per references (a) through (c), and (e) through (g). Copies of reports shall be sent to the Naval Safety Center, Bureau of Medicine and Surgery (M3B4), Headquarters Marine Corps Safety Division (if Marine Corps personnel or systems are involved), the Lead Naval Technical Laboratory for Laser Safety (LNTL) and the ALA. The LSSO shall ensure corrective actions are effective in preventing a recurrence of similar mishaps.

m. Disposal of Military Exempt Lasers. The laser Custodian and LSSO shall coordinate with the ALA to disposal of military exempt lasers. Disposal shall be in accordance with references (k) and (t), and with demilitarization in accordance with reference (l).

n. Laser Pointers. The use of laser pointers has proliferated significantly. Readily available commercial diode laser pointers are Class 2, (some old classification system Class IIIa – which is a new Class 3R), Class 3R, or sometime Class 3B. It is likely individuals who are not familiar with appropriate safety precautions can acquire and possess hazardous Class 3B laser pointers, possibly through GSA. Class 3B laser pointers shall be treated as normal Class 3B laser systems and placed under a Custodian, inventory control, and formal Class 3B management (LHA, ORM, SOP, site approval, etc.). No formal Laser Safety Program controls beyond those specified in the front matter section 6.13.c.2 of this instruction are required for Class 2 or Class 3R laser pointers and use of these systems does not require enrollment into the Laser Safety Program. Momentary exposure to Class 2 and 3R laser pointers will not cause permanent retinal damage, but can cause mild visual impairment such as flash blindness, afterimage, and glare that may affect any visual-critical activity such as driving or flying.

o. A checklist for use of lasers in approved laboratories generated from this instruction shall be made available on the NPS intranet Safety web page. A checklist for use of controlled lasers outdoors shall be available for NPS users by request from the LSSO, however outdoor operations require continuous close coordination with the LSSO.

NPS LASER SAFETY COMMITTEE

1. This enclosure defines the Laser Safety Committee (LSC) at the Naval Postgraduate School (NPS). It covers the responsibilities, authorities, membership, and rules.

2. Scope & Mission

a. Charter. The mission of the LSC is to enhance protection of NPS faculty, staff, students, contractors, the public, and the environment through supervision and review of the actions of the NPS Laser Safety Program and consideration of the NPS Mission.

b. The LSC seeks to leverage the depth of resident expertise in an advisory body that considers laser safety of NPS research, training, and demonstrations of laser systems sponsored by NPS. The committee shall pay particular notice to compliance with existing Federal, Department of the Navy, and state of California requirements, laws, and regulations.

(1) Review actions of the LSSO.

(2) Review training content and requirements, qualifications, and where appropriate equipment.

(3) Advise on communications with the LSRB.

3. Authority. The LSSO has the certified training and authorization to approve laser use for NPS faculty, staff, contractors, and students. The LSC supervises and implicitly finalizes through review the actions of the LSSO. It also reviews any other NPS laser activities, NPS policies, rules, and procedures for the safe use of laser sources. The committee is granted the authority to adjudicate, deny, require changes, or withdraw permission for the use of any laser devices in order to comply with regulations or meet reasonable standards for health and safety. Custodians do not have to wait for a final LSC approval to begin active laser operations once LSSO approval is obtained but should the LSC vote to deny use at a subsequent regularly scheduled meeting, laser activity shall be suspended until LSSO approval can again be obtained.

4. Responsibilities. The committee reports to the NPS Dean of Research. The committee is responsible for the following:

a. Reviewing and adjudicating all Permits for Class 3B, Class 4, or military exempt laser use following approval by the LSSO. If the LSSO rescinds authorization on any previously approved system, the LSSO shall brief this event to LSC

b. Reviewing and approving laser training procedures and criteria

c. Advising the President, on all laser safety related matters on the NPS campus or involving NPS faculty, staff, or students

- d. Reviewing all laser incidents
- e. Reviewing the annual audit/review of the laser hazard control program. This audit may be reviewed and discussed at a LSC meeting and is recorded in the minutes
- f. Making recommendations to the NPS Dean of Research on risk management issues related to laser safety.

5. Membership. Membership of the committee shall be by recommendation of the Dean of Research and appointment by the Dean of the school of the individual. Members shall include the LSSO by default. It should include NPS faculty and staff who are knowledgeable, cognizant, and experienced in the use of non-ionizing lasers. The Dean of Research is a non-Quorum member of the committee, however when he attends, he is a voting member. Membership may include Environmental and Safety Compliance Officers from the various NPS schools and/or departments where lasers are used. The LSSO serves as the acting Chair of the committee by default unless a Chair is designated by the Dean of Research.

- a. The committee size and composition should be large enough to represent the spectrum of laser users across NPS. The extent of representation shall be recommended by the LSSO and implicitly enacted by the recommendations of the Dean of Research.
- b. The Chair has the responsibility for conducting regular committee meetings and communicating the control functions of the committee.
- c. The committee may choose to elect a Chair to relieve the LSSO as the acting Chair for a two-year term, responsible for directing conduct and presentation of the LSC. The designation letter from the Dean of Research of this individual shall specify "Chair of the Laser Safety Committee".

6. Attendance, Alternates, and Replacements

- a. Regular attendance is desired at committee meetings. The Chair shall attempt to coordinate a time and place suitable for a Quorum quarterly. If a member does not attend three consecutive meetings, the Committee may request the Dean of Research to recommend a replacement.
- b. For planned absences, committee members may, with the consent of the Chair, appoint an Alternate for a specific meeting. The Alternate may represent the absent committee member in all aspects of committee participation, and shall have the responsibility and authority to review and adjudicate on behalf of the absent member.
- c. A committee member may nominate a qualified replacement during their appointed term for the remainder of the term. A formal letter from the Dean of the school of the individual shall be required to document replacement. In the event a member leaves NPS, membership is automatically terminated.

d. The minutes shall document membership and attendance.

7. Meetings, Agenda, and Quorum. The committee shall meet at least once during each calendar quarter, or more frequently at the discretion of the Chair. The Chair shall develop the meeting agenda and make it and any supporting documentation available to members not less than three working days prior to the scheduled meeting date. A quorum consists of at least fifty percent of current membership, and must include the LSSO, or the Chair and the LSSO if a Chair has been designated. Committee approvals are secured if a review is conducted without objection. If a member objects to a permit, process, or action, a majority rules vote shall be taken on an appropriate remedy and action, or the objection is overridden.

8. Reports, Records, and Minutes

a. The minutes, together with all materials reviewed by the committee, serve as the official documentation of the LSC. The minutes shall include the date, the members present and absent, summary of discussions, and action items. Following each meeting, minutes shall be prepared by the LSSO in draft form and made available to all members for a reasonable period of time for review and comment. A suspense date for comments shall close adjudications and make the minutes official.

b. A copy of the minutes shall be retained by the LSSO for permanent storage and authorized access on SharePoint by all LSC members.

9. Subcommittees. The committee may establish subcommittees for specific functions. Each subcommittee shall submit a written report of its activities and actions to the committee for each quarter in which it was active. Subcommittee reports shall be included in LSC minutes.

10. This LSC Guidance direction shall be reviewed and updated when this NPS instruction is revised for any other reason.

APPENDIX A
NPS LSC Member Appointment Letter

From: Dean of [SCHOOL], Naval Postgraduate School
To:

Subj: APPOINTMENT TO THE NAVAL POSTGRADUATE SCHOOL LASER SAFETY
COMMITTEE

Ref: (a) NPSINST 5100.27 (series)

1. You are hereby appointed to the Naval Postgraduate School (NPS) Laser Safety Committee (LSC) for a period of two years effective _____.
2. Your appointment carries with it the responsibility to engage, contribute, and provide oversight to the NPS Laser Safety Program. You are asked to familiarize with reference (a), with particular attention the LSC discussed in enclosure (2).
3. If necessary to terminate your membership early please inform the Dean of [School] and then the Laser Systems Safety Officer as soon as practicable so a replacement can be found.
4. Your willingness to serve NPS in this capacity is greatly appreciated. The Laser Safety Program will benefit from your experience, wisdom, and participation.
5. Welcome Aboard!

//signature//
Dean of [School]

Copy to:
Dean of Research
NPS LSSO