



Just the Facts

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Hazard Alert for Tactical Laser Pointers



Purpose

The use of potentially hazardous near-infrared laser diodes is becoming widespread in many applications. Potential hazards and accidents have been identified by the laser safety community. Users of these products need to be alerted to the potential hazards associated with these devices.

Devices of Concern

One device has raised particular concern -- the tactical laser pointer. Relatively inexpensive, readily available, and powered by common batteries, these small lasers can produce a very narrow, powerful beam that can be used in night operations for aiming fire, illuminating targets, and area marking. One accident has occurred to date, from an individual staring into this type of device. These Class 3b laser products range in power from 5 mW to 500 mW, and they can cause serious eye injury if used improperly. Examples of tactical pointers of concern are the *Torch* LPL-30, and the GCP-1. The AN/PAQ-4 series of tactical laser pointers are Class 1 in accordance with ANSI Z136.1 and are not hazardous. An exemption label has been affixed to these devices indicating they have been exempted from Title 21, Code of Federal Regulations (CFR), Part 1040, Performance Standards for Light Emitting Products. This label suggests the use of personal protective equipment and procedures when operating these devices. However, during normal operation, the use of personal protective equipment and procedures is not necessary.



- RPOs and LS0s
- Hazard Alert
- Laser Safety

Hazard Identification

The potential hazard is limited to the unprotected eyes of individuals who look at the laser from within the direct beam. No skin hazard exists. These lasers are infrared, thus the beam normally is not visible to the unaided eye. Even looking directly into the beam at very close range a viewer will only see

Laser/Optical Radiation Program
 U.S. Army Center for Health Promotion and Preventive Medicine
 Aberdeen Proving Ground, MD 21010-5422
 DSN 584-3932 or Commercial 410-671-3932
 email: mchbdsl@aeah1.apgea.army.mil

(at most) a very weak "red" dot. Therefore, individuals could stare directly into hazardous levels of laser radiation at close range and not realize the serious risk to the eye. Individuals should never look at the laser from within the beam. Buyers should be wary of seller claims of device safety, unless the laser is clearly labeled a Class 1 laser product in accordance with Title 21, Code of Federal Regulations (CFR), Part 1040, Performance Standards for Lighting-Emitting Products. This information by must be on the label.

How Devices Are Promoted

These laser pointers are currently marketed to military organizations through mailing brochures and electro-optics trade shows. Although some of these devices contain warning labels, many have been erroneously advertised as "eye-safe."

How to Use the Devices Safely

Users of the laser pointer must never aim the pointer at unprotected personnel. Users could also unscrew the case enough to disable the power source or remove the batteries when storing it in their shirt pocket or rucksack. These devices are not flashlights and should, not be used haphazardly.

Conclusion

Despite their size and the fact that most are powered by small, commonly available batteries, these tactical pointing devices can cause, and have caused, eye damage as a consequence of improper operation. The device should be clearly labeled a Class 1 laser in accordance with 21 CFR 1040; if not, the organization listed below should be contacted before using these systems.

Commander
U.S. Army Center for Health Promotion and Preventive Medicine
ATTN: MCHB-DS-L
Aberdeen Proving Ground, MD 21010-5422
Phone: DSN 584-3932/2331
Commercial (410) 671-3932