

Some Pointers about Green Laser Pointers

Over the last decade, the ethereal glow of a Green Laser Pointer (GLP) has become a familiar sight at astronomy education and public outreach events. From star parties for beginners to sky-at-night tours around astronomical installations these instruments have become valuable tools.

With the beam of a Green Laser Pointer an astronomy educator can direct an audience to a specific object - planet, meteor-shower radiant, star, asterism, constellation, or nebula. That makes the Green Laser Pointer one of the best tools in an astronomer's instrument case – but only if used responsibly.

Green Laser Pointers are tools not toys; and their misuse can lead to serious harm. It is estimated that the beam from a 5mW GLP when flashed in the eyes is 26,000 times the surface luminescence of the Sun.

Small wonder then that under the Canadian Aeronautics Act, conviction for laser flashing an aircraft carries maximum penalties of a five-year prison term, and a \$100,000 fine. We suggest that you visit this website for further details –

www.tc.gc.ca/eng/civilaviation/standards/aerodromeairnav-standards-ais-directed-bright-light-menu-1068.htm.

In keeping with the PAA's commitment to safe astronomy education we ask that our members observe the following guidelines when using a GLP:

- 1. Ensure that the GLP is operated **only** by designated, responsible adults, preferably PAA members who are familiar with the potential hazards of laser light. During public events, it is best to assign one or more members to help GLP operators spot oncoming air traffic;*
- 2. Take special care not to shine a GLP in the direction of any person, vehicle, aircraft, or wildlife;*
- 3. Never point a GLP at a glass window or anything with a shiny surface. The reflected beam can be just as dangerous.*
- 4. Avoid using a GLP near an airport or airport runway approach. We suggest a that GLP not be used within 10 km of any airport;*

5. *Use the minimum power to do the job: if a 5mW laser is bright enough, why use a stronger one?*
6. *Be aware that distraction and distress can be experienced by anyone illuminated by green laser light, even if the level is well below that which would cause physiological damage;*
7. *Use good sense in storing your GLP. Don't leave lasers accessible to children. Consider removing the batteries when you are done using a GLP.*

By following these guidelines you will reduce the chance of an unfortunate incident involving a Green Laser Pointer while leading public astronomical activities.

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