



Royal Astronomical Society of Canada (RASC)

Halifax Centre

Dedicated to the Advancement of Astronomy and Allied Sciences

G13: Policies & Recommendations Regarding Use of Laser Pointers (LPs) at Halifax Centre Events

(Adopted May 2, 2023; Revised September 3, 2024)

Background:

Transport Canada (TC) rules and regulations are found within the Canadian Aviation Regulations (CAR) and are enforceable. Aiming a laser at an aircraft is a federal offence and Section 601.20 of the Canadian Aviation Regulations, provides that, subject to section 601.21, *no person shall project or cause to be projected a directed bright light source into navigable airspace in such a manner as to create a hazard to aviation safety or cause damage to an aircraft or injury to persons on board the aircraft.*

<https://www.tc.gc.ca/en/campaigns/not-bright-idea.html> .

The relationship between the RASC and Transport Canada has resulted in a training program for RASC members as LP users and spotters.

Transport Canada provides an authorization letter for trained RASC members to use LPs outside the 10 km radius of certified airports; if hosting an event within the 10 km radius, you must apply to Transport Canada for permission to do so. Military airports do not necessarily show on the Transport Canada map as a certified airport because they may be outside of TC jurisdiction. It is preferred that you stay outside the 10 km allowable distance from the military air base.

Rationale:

The LP remains a useful tool in the amateur astronomer's toolbox; however, LPs are tools **not** toys and their misuse can lead to serious harm.

Halifax Centre endorses the need for safe and responsible use of laser pointers. By following the RASC Halifax Centre policy and recommendations, members will reduce the chance of an unfortunate incident involving LPs and will demonstrate due diligence while leading public RASC Halifax Centre astronomical activities according to Transport Canada regulations.

Policies Regarding the Use of Laser Pointers:

1. Hand-held lasers will only be used for identifying stars, constellations, and celestial objects across the night sky, for the purpose of public education.
2. Only LPs of 5 mW or less can be used (Class IIIa or 3R) in any area outside of the 10 km radius of certified airports. Similarly, avoid military airports.
3. In order to use the RASC authorization permit from Transport Canada, Users and Spotters must be a RASC member in good standing, be older than 18, must have successfully completed the course in the past 3 years, and report any use of LPs to the RASC Halifax Centre Education and Public Outreach (EPO) Chair.
4. For an event to be considered a RASC Halifax Centre event, the trained User must make a written application to the RASC Halifax Centre Education and Public Outreach (EPO) Chair at least 8 hours prior to the event. This can be done by email. The information must include the event, the names of the User(s) and Spotter(s), date, time, and the location.
5. LPs are to be operated at RASC Halifax Centre events only by:
 - a. RASC members designated as LP Users following completion of the RASC LP training, and

- b. one or more LP-trained RASC Halifax Centre members assigned as Spotters to assist LP Users to identify oncoming air traffic. Spotters must be present at all times when LPs are in use during the event.
- 6. The trained LP User and Spotter must have copies of their RASC membership card, a copy of the written authorization from Transport Canada, and a copy of the RASC liability insurance with them at the event.
- 7. It is a RASC and Transport Canada requirement that:
 - a. LP trainers report courses conducted to the RASC Halifax Centre Education and Public Outreach Chair.
 - b. Trained Users report events where LPs are used to the RASC Halifax Centre Education and Public Outreach Chair.
 - c. RASC Halifax Centre sends a compiled report of LP usage to the RASC National Office at least once per year.

Recommendations for Use of Laser Pointers:

- a. The intent to use LPs at a RASC Halifax Centre event should be determined before the event, the on-site astronomy educators made aware of the times of LP usage, and the time of the event posted on websites, registration forms and other documentation related to the event (if appropriate).
- b. To avoid accidental eye exposure, hold it overhead and pointed skyward while it is operating and turn off the LP once an object has been pointed out. The purpose is astronomy, not a distracting laser-light show.
- c. Use good sense in storing LPs. Don't leave lasers accessible to children nor allow them to handle one. Consider removing the batteries when you are done using a LP.