

Laser Pointer Certification Program

What is the program?

Laser pointers are often used at star parties as an outreach tool. A laser pointer's beam will leave a dim trail of light through the sky at night, working well as a guidance tool and allowing an outreach volunteer to easily direct the audience's attention to a specific object in the night sky.

However, laser pointer usage is federally regulated. Misuse of lasers can lead to blindness, a particular concern when the laser pointer is aimed at an aircraft. For this reason, certain laws exist about laser pointer usage and users must be certified to use a laser pointer for astronomy purposes. The Royal Astronomical Society of Canada (RASC) provides this certification through the form of a one-hour class and an exam.

Centre Responsibilities

Centres are responsible for:

- Providing training sessions to Centre members
- Tracking certified Centre members
- Issuing certification cards to Centre members
- Approving events at which laser pointers will be used

Providing training sessions

Centres are responsible for providing training sessions to any members that may be interested in receiving their laser pointer certification. To provide these sessions, a member of the Centre must be identified by their Centre and then trained as a Centre Trainer for the program. All prospective trainers must already have their laser pointer certification.

How to become a Laser Pointer Trainer for your Centre

Centres must reach out to Dennis Lyons (dennis.lyons3@gmail.com) of the Winnipeg Centre and CC admin@rasc.ca identifying any members of their Centre interested in becoming Centre Trainers. Dennis will reach out with some instructions, lesson slides, exam questions, the exam answer key, and the next scheduled Centre Training Course, provided by National-level laser pointer Instructors. Centre Trainers will be added to an internal list. In the event that new information surrounding the program arises, Centre Trainers will be contacted. Centre Trainers will also be added to a Google Drive folder with all documents to be used in user training and linked throughout the following paragraph.

Tracking certified Centre members

Centres must keep track of any members they certify through their own Centre-run training sessions. After each training session, update [this spreadsheet](#) with each attendee's

information. Detailed instructions on how to use the spreadsheet are included in the first sheet of the document.

Issuing certification cards

Centres must issue certification cards for newly certified or recertified users. Cards can be printed at your Centre or on a member's printer, using [Avery 5371 Business Card paper](#) and [this template](#). Once printed, the cards can be filled out by hand and given to the members at the next Centre meeting. If your printer cannot print double-sided, you can simply print the first page of the template instead.

The image shows two pages of a certification card template. The top page is a form with the following fields: Expiry: _____, RASC ID: _____, Name: _____, Centre: _____, and Trainer: _____. The form is titled "The Royal Astronomical Society of Canada" and "La Société royale d'astronomie du Canada". Below the fields is a paragraph of text: "The above-named member has been trained and qualified to Use or act as a Spotter for Laser Pointers with power rated 5 mW or less. The individual must have consent from their Centre Executive, have a copy of the current RASC insurance policy, and the current authorization letter from the Department of Transportation." The bottom page is titled "DID YOU..." and contains a list of four bullet points: "Inform your Centre about your planned event at least 8 hours in advance?", "Find a spotter (or two) to keep an eye on the sky for you?", "Print off a copy of the RASC Insurance and laser permit?", and "Bring your membership card?".

Approving events with laser pointer activity

Certified laser pointer users are required to inform their Centre executive at least 8 hours before an event at which a laser pointer will be used. This is typically done through email. It is the Centre's responsibility to develop a protocol for approving these events. An example of some protocols could be:

- The first member of the Executive who sees the email from a user regarding an event replies to all recipients showing that they have approved the event
- A single member is responsible for responding to event emails in a timely manner
- An event request is assumed approved if no member of the Executive responds to the email within 8 hours

Spotter/User Responsibilities

Once certified, laser pointer users/spotters are responsible for:

- Safely using the laser pointer at an event, or spotting for aircraft to assist a user
- Carrying required documentation
- Filling out the [usage reporting form here](#) within 30 days of their event

Transport Canada requires us to track all uses of laser pointers for astronomy by our certified users. By filling out this form, the RASC will have a record of all events at which laser pointers have been used.

For more information about what is required of a laser pointer user, please visit <https://rasc.ca/laser-pointer-usage> and view the slides included at the bottom of the page.

Carrying required documentation

Users must have on their person at all times during an event where they are using a laser pointer:

- Membership card ([available here](#) by clicking “print temporary card”)
- Certification card (issued by Centre)
- RASC Certificate of Insurance ([available here](#), updated each year)
- Transport Canada authorisation ([available here](#) at the bottom of the page)

Printing these documents and keeping them with your observing equipment or with your laser will help you remember to bring them to your event.

Next Steps: Becoming a National Instructor

After becoming a trainer for your Centre, where do you go next? Once a Centre Trainer has conducted two User training sessions at their Centre, they are eligible to become a National Laser Pointer Instructor. National Instructors provide training to Centre members interested in becoming Centre Laser Pointer Trainers. If your Centre has a National Instructor, you can:

- Schedule your own User/Spotter Training sessions, allowing more of your Centre members to safely use laser pointers at outreach events, and
- Schedule your own Centre Trainer sessions, allowing certified users to learn how to teach the course themselves.

Eligible Centre Trainers interested in becoming National Instructors must be identified by their Centre executive to Dennis Lyons, CC'ing admin@rasc.ca.

