A5400-3 RDIMS

16 November 2022

The Royal Astronomical Society of Canada 203-4920 Dundas Street West Toronto, ON M9A 1B7 Att: Mr. Dennis Lyons

dennis.lyons.3@gmail.com Phone: (204) 218-0956

Subject: AUTHORISATION PURSUANT TO SECTION 601.21 OF THE CANADIAN AVIATION REGULATIONS

Reference: Application to Use Portable Laser Outside Prohibited Areas, July 6, 2022. The Royal Astronomical Society of Canada is requesting authorization for members to project a directed bright light source into navigable airspace.

Dear Mr. Lyons,

Section 601.20 of the *Canadian Aviation Regulations* (CARs), 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.

Section 601.21 of the CARs stipulates that any person planning to project or cause to be projected a directed bright light source into navigable airspace must before the projection:

- (a) Submit a written request to the Minister for an authorization to project the directed bight light source into navigable airspace; and,
- (b) Obtain a written authorization to do so.

On **6 July 2022** you requested an authorization to use portable laser outside of restricted areas. Pursuant to subsection 601.21(2), an authorization will be issued if the projection is not likely to create a hazard to aviation safety or to cause damage to an aircraft or injury to persons on board the aircraft.

Subsection 601.21(3) of the CARs gives the Minister the ability to specify in the authorization any conditions necessary to ensure that the projection is not likely to create a hazard to aviation safety or to cause damage to an aircraft or injury to persons on board the aircraft.



On behalf of the Minister, I hereby, authorize members of the Royal Astronomical Society of Canada, to project **hand-held lasers** into navigable airspace in Canada, excluding within a 10km radius of any certified aerodrome, subject to **the following conditions:**

- Hand-held lasers will only be used outside of 10km radius from all certified aerodromes as described in the <u>interactive map</u>. [Please note that for any activity occurring within a 10km radius of a certified aerodrome a separate authorization is required and must be submitted to Transport Canada for review and consideration. https://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/forms-formulaires/telecharger/26-0754 BO PX
- 2. Hand-held lasers will only be used for identifying stars, constellations, and celestial objects across the night sky, for the purpose of public education.
- 3. Hand-held lasers will not exceed Class 3R, or Class IIIa and will not exceed a **maximum output power of five milliwatts (5 mW)**.
- 4. Hand-held lasers will never be pointed in the direction of aircraft and will only be used in accordance with guidelines similar to those developed by the Royal Astronomical Society of Canada (RASC). The guidelines are published (Last modified Friday May, 3, 2019) on RASC website: https://www.rasc.ca/green-laser-pointer-usage. The organization must submit a copy of their guidelines to Transport Canada as part of the request for authorization.
- 5. A minimum of at least one trained and dedicated spotter must be used at each event where hand-held lasers will be used to watch for aircraft and warn the laser operators.
- 6. The Royal Astronomical Society of Canada shall be responsible for ensuring that all members using hand-held lasers have the training, skills and qualifications necessary to operate the lasers in accordance with the manufacturer's recommendations and the Royal Astronomical Society of Canada own safe-usage guidelines, as noted under condition 4; and that no hazard to aviation safety will be created by the operation.
- 7. All members that are operating a hand-held laser will carry proof of membership of the Royal Astronomical Society of Canada. They will also carry a copy of this authorization letter.
- 8. **The Royal Astronomical Society of Canada** shall provide Transport Canada with a list of every event that occurred under this authorization. The information shall be provided to Transport Canada no later than 30 days after the authorization validity period has ended.
- 9. The organization shall have a valid liability insurance for the validity period of this authorization.



Validity

This authorization is in effect from **1 December 2022** until the earliest of the following:

- a) 23h59 on 30 November 2025 Three-year validity being the maximum; or
- b) The date on which any condition set out in this authorization is breached.

Dated at Ottawa, Ontario, Canada this **16 November 2022** on behalf of the Minister of Transport.

Felix Meunier

Director General, Civil Aviation Directeur général, Aviation civile Transport Canada | Transports Canada 330 Sparks St, 5th floor | 330 rue Sparks, 5e étage (AARTA)

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