



**The Royal Astronomical Society of Canada**

**CALGARY  
CENTRE**

**February 2, 2011**

**To: The Calgary Herald**

We in the Calgary astronomical community wish to express that the recent incident regarding the aiming of a laser pointer at several aircraft in Calgary airspace by an individual walking his dog, is a deplorable act. In the opinion of the Calgary Centre of the Royal Astronomical Society of Canada (R.A.S.C.), the perpetrator deserves to be charged under the *Aeronautics Act* governing disturbance of aircraft in flight.

Lasers are powerful tools, not casual playthings. Lasers are sources of highly concentrated light, and ever since the first red diode laser pointers were widely available, there have been warnings issued regarding pointing such instruments into people's eyes due to the damage that may ensue. The new generation of green laser pointers operate in wavelengths that are more readily absorbed by eye tissues, and hence the potential for visual impairment is greater. Even if no permanent eye injury was sustained by the pilots, temporary flash blindness by this intensity of light beam could severely limit pilots' abilities to fly or land their aircraft.

Green laser pointers are very useful tools outdoors when used properly. Unlike the red laser pointers, the shorter green wavelengths are scattered by the atmosphere, which renders the beam path visible from the ground. With this tool, experienced astronomers can teach the night sky to a group of students by pointing out the constellations and some of the major objects of interest. We are saddened to see a useful and valuable instrument misused in such a callous and dangerous manner and we strongly condemn this type of behaviour.

In the latest incident, one of the reasons the individual proffered up for owning a green laser pointer, was that he was an amateur astronomer. In our opinion, the use of the term of "amateur astronomer" by this individual does not associate him with responsible amateur astronomers, such as those affiliated with the R.A.S.C., who know better than to engage in such reckless behaviour. It is akin to speaking of 'puppy mill' owners and registered dog breeders in the same breath. Nor should his use of the amateur astronomer designation provide an entitlement, benefit or avenue of recourse for a reduced charge.

A respectable amateur astronomer would only have cause to use a laser pointer outdoors when it is clear, only on inanimate astronomical objects and only when there are others that are being taught about the night sky. We do not believe that the man's dog represents such an audience. There is no legitimate solo use of a laser pointer in the sky that we can think of.

The accused individual is not a R.A.S.C. member, nor known to us. Furthermore, the Calgary Centre of the R.A.S.C. would eject any member caught behaving in such a dangerous, inconsiderate and illegal manner. The Royal Astronomical Society of Canada takes laser pointer safety very seriously and has been proactive in education and policy. There is detailed information regarding our laser pointer policy and technical data on laser pointer beam intensities available on our national website: <http://www.rasc.ca/education/other/glpuse.shtml> with a more detailed analysis on the R.A.S.C. Calgary Centre's web site: <http://calgary.rasc.ca/atmosphere.htm>.

Transport Canada also has articles that outline the hazards of interfering with aircraft using laser pointers. The following image from Transport Canada appears on their website as one example of a pilot being hit by a green laser when landing an airliner:



Reference:

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

Transport Canada also includes this notice:

*If convicted of pointing a laser into an aircraft cockpit, the offender could face the \$100,000 maximum fine under the Aeronautics Act, imprisonment of up to five years, or both penalties.*

Yours,

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