

AIP CANADA (ICAO) SUPPLEMENT 23/20

ONTARIO REGION LASER PROJECTION IN THE VICINITY OF EGBERT, ONTARIO JANUARY 31, 2020 TO JANUARY 31, 2025

(Replaces AIP Supplement 51/14)

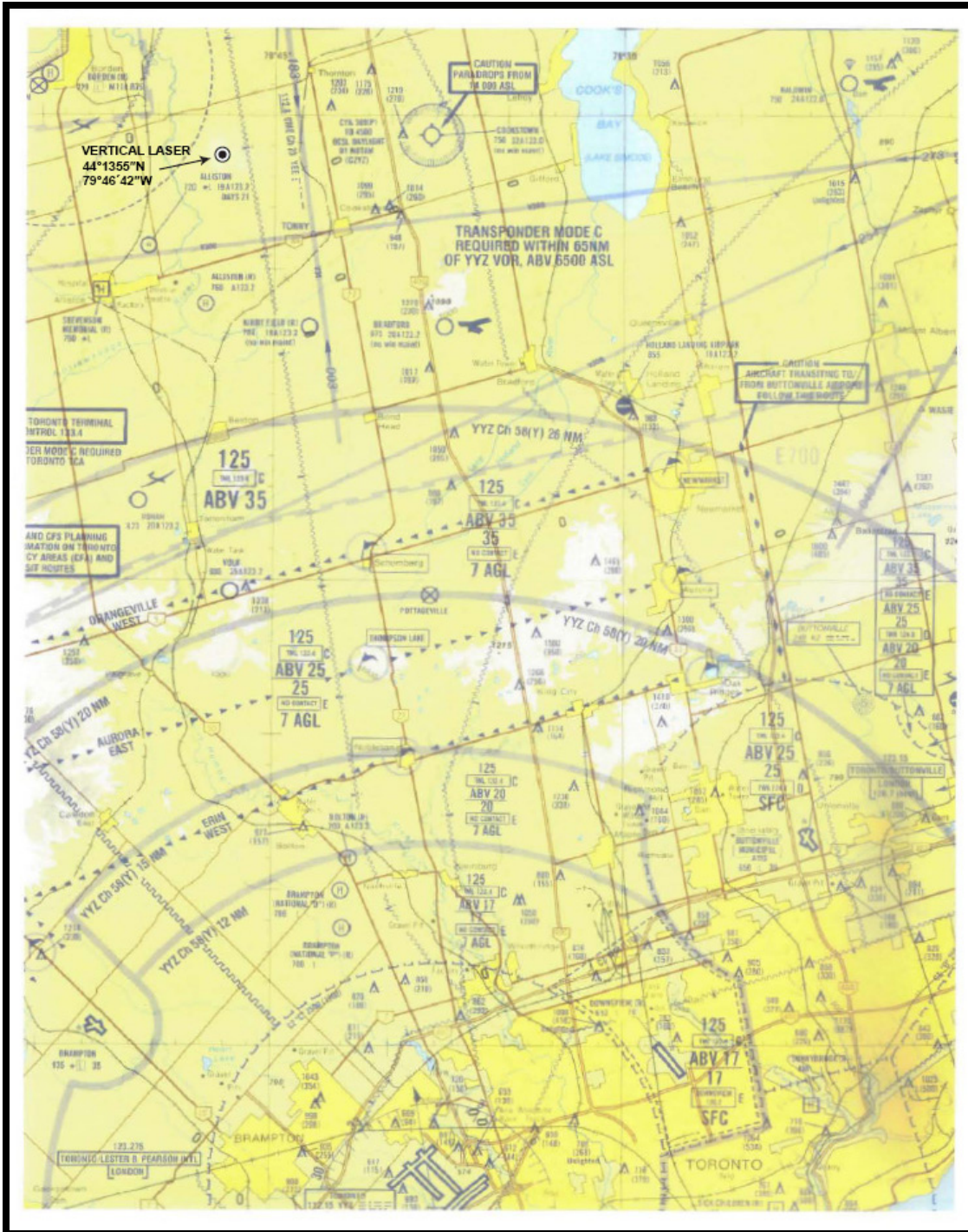
In April 2009, Environment Canada's Centre for Atmospheric Research Experiments began a multi-year study using a laser located on the grounds of the Centre for Atmospheric Research Experiments at coordinates 44° 13' 55" N 79° 46' 42" W. The laser propagates a stationary vertical green beam, which is not visible during daylight. It projects day and night when there is no precipitation.

Several measures have been taken to mitigate risks to aviation. The beam is being significantly diverged to reduce the block of altitude that presents a hazard to aircraft crew and passengers. A radar interlock system has been designed to shut off the laser when an aircraft enters the nominal hazard zone. In addition, the laser cannot propagate a beam if the radar is not transmitting.

In the event of a simultaneous failure of both protection systems, an aircraft overflying the narrow beam and a crew member or passenger looking straight down at the light source, there would be risk of injury to the eyes up to 4 000 ft above the laser source (5 000 ft ASL). Flash blindness could occur up to 7 000 ft (8 000 ft ASL); cockpit and cabin illumination could occur beyond this distance.

Pilots are reminded that *Canadian Aviation Regulation* 601.22(1) stipulates:

"No pilot-in-command shall intentionally operate an aircraft into a beam from a directed bright light source or into an area where a directed bright light source is projected, unless the aircraft is operated in accordance with an authorization issued by the Minister."



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