

AIP CANADA SUPPLEMENT 41/23

ONTARIO REGION HIGH-ALTITUDE RESEARCH BALLOON FLIGHTS VICTOR M. POWER AIRPORT (CYTS), TIMMINS, ONTARIO 1 AUGUST 2023 TO 1 SEPTEMBER 2023

Four (4) high-altitude unoccupied research balloons (call signs NIMBUS 1 to NIMBUS 4) will be launched from Victor M. Power Airport (CYTS) in Timmins, Ontario (48° 34' 14" N 81° 22' 36" W), between 1 August 2023 and 1 September 2023.

This balloon campaign is being conducted by the Centre national d'études spatiales (CNES) of France and the Canadian Space Agency (CSA).

The balloons range in volume from 150,000 m³ to 400,000 m³ (5,300,000 ft³ to 14,200,000 ft³) and the flight train varies from 1,150 kg to 1,440 kg (2,535 lbs to 3,200 lbs). Flights from lift-off to landing by multiple parachutes, after separation, will last up to 24 hours and will reach altitudes of up to 128,000 feet mean sea level (MSL). The balloons are colourless to start and then turn translucent white when inflated. As the payload clears the ground, the top of the balloon will reach 250 metres, or over 800 feet, above ground level (AGL). The flight train is composed of a) orange- and white-striped parachutes, b) white and orange checkerboard painted avionic gondola and c) red webbing straps for visibility.

In addition, up to four (4) small balloons (call signs ICARUS 1 to ICARUS 4) with a volume of 5.6 m³ to 11.3 m³ (200 ft³ to 400 ft³), a flight train of up to 6.0 kg (13.2 lbs), and a flight duration of 3 hours will be launched between 10 August 2023 and 25 August 2023.

Flight crews should consult the Toronto and Montreal flight information regions (FIRs) and local (CYTS) NOTAMs for details on specific float times and possible restricted airspace.

A series of NOTAMs will be issued for the event.

Flight number(s):	Up to 8 flights
Launch date/time:	Between 1 August 2023 and 1 September 2023, from 0001Z to 1000Z
Payload system length:	up to 250 metres (850 feet)
Payload weight:	4.0 kg to 2,208 kg (10 lbs – 4,870 lbs)
Rate of ascent:	244 metres/minute – 305 metres/minute (800 feet/minute – 1,000 feet/minute)
Balloon diameter “at float”:	100-150 metres (350-500 feet)
Float altitude:	130,000 feet MSL
Estimated duration of “float”:	24 hours max
Description of area:	Timmins Airport (CYTS) up to 600 km (325 NM) radius