

AIP CANADA SUPPLEMENT 071/2026**ONTARIO REGION HIGH-ALTITUDE RESEARCH BALLOON FLIGHTS
VICTOR M. POWER AIRPORT (CYTS), TIMMINS, ONTARIO**

**IMPORTANT: This AIP SUP is for situational awareness only
NOTAMs are published in conjunction and take precedence**

Up to seven (7) high-altitude unoccupied research balloons (call signs ICARUS 1 to ICARUS 7) will be launched nominally from the Timmins Stratospheric Balloon Base (TSBB) located at Timmins (Victor M. Power), Ontario (CYTS) airport (48° 34' 03.86" N 81° 21' 56.47" W), between 12 August and 25 August 2026.

Although TSBB constitutes the primary and planned launch site of record, alternate launch pads may be activated when required to satisfy pre-flight dispersion modelling, risk-mitigation criteria, or trajectory-separation constraints relative to populated areas and ground-level hazards. Depending on meteorological conditions, simulated flight trajectories, and airspace considerations, the following sites may be designated as operational launch locations (see Figure 1):

- West Pad 48°39'34.0"N 81°39'20.0"W
- North Pad 49°00'41.4"N 81°09'09.7"W
- East Pad 48°24'26.9"N 80°47'56.4"W
- South Pad 48°20'09.7"N 81°20'28.5"W

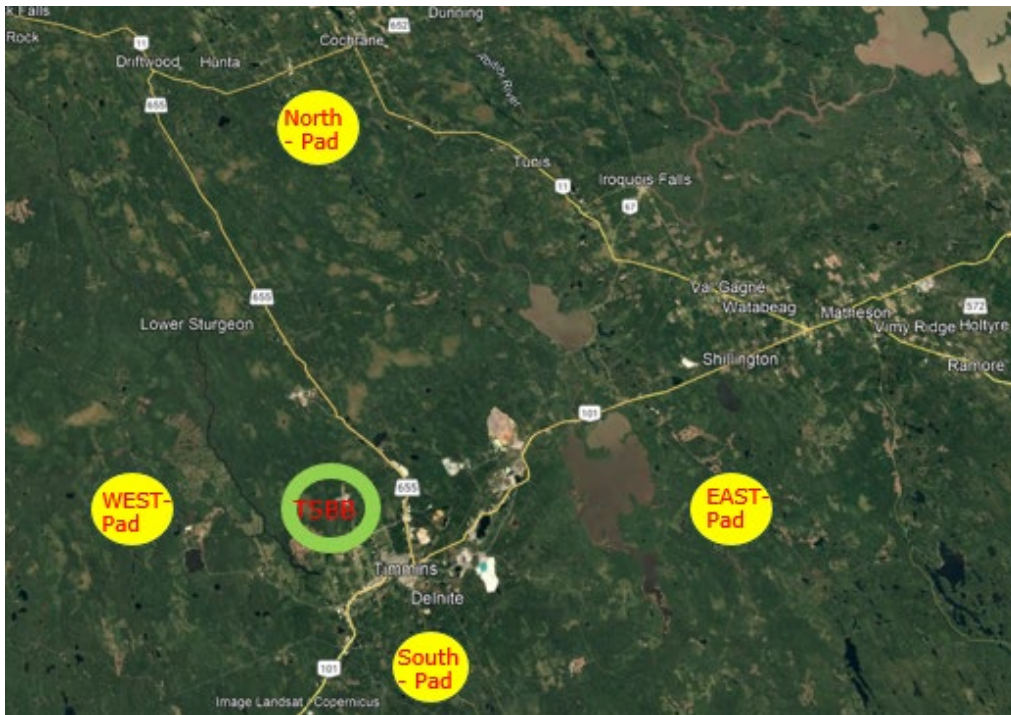


Figure 1. EXPANDABLE BALLOONS: Timmins Alternative launch pads

These alternate sites are employed only when required to maintain compliance with CSA flight-safety criteria, predicted envelope dispersion, and population-overflight constraints.

This balloon campaign is being conducted by the Canadian Space Agency (CSA) using helium filled meteorological (weather) expandable balloons.

Depending on the experiment, the flight train mass will range from 3 kg to 8 kg (7 lbs to 18 lbs) and the balloons will range in volume, on the ground at launch, from 5.6 m³ to 11.3 m³ (200 ft³ to 400 ft³). Flights from lift-off to landing, under parachute after burst, will last up to 3 hours and will reach altitudes between 20 to 30 km (65,000 to 100,000 ft) mean sea level (MSL). The Payload Gondolas (referred as “Cargo” in Figure 2 below) are equipped with a transponder. The latex balloons are light beige to start and then turn white when inflated. As the payload clears the ground, the top of the balloon will reach up to 18 m (60 ft), above ground level (AGL).

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

A series of NOTAMs will be issued for the event.

Flight number(s):	Up to 7 flights
Call Sign(s):	ICARUS 1 to 7
Launch date/time:	Between 12 August and 25 August 2026, from 1000Z to 2100Z
Payload system length:	up to 18 meters (60 feet)
Payload weight:	3.0 kg to 8.0 kg (7 lbs to 18 lbs)
Rate of ascent:	300 meters/minute to 400 meters/minute (1,000 feet/minute to 1,300 feet/minute)
Balloon diameter “at burst”:	8 to 15 meters (30 to 50 feet)
Burst altitude:	20,000 to 30,000 meters (65,000 to 100,000 feet) MSL
Estimated flight duration:	Ascent phase: ≤ 2 hours Burst Descent phase: ≤ 1 hour Total: 3 hours max
Description of area:	Timmins Airport (CYTS) up to 200 km (100 NM) radius

EXPANDABLE BALLOONS ARCHITECTURE

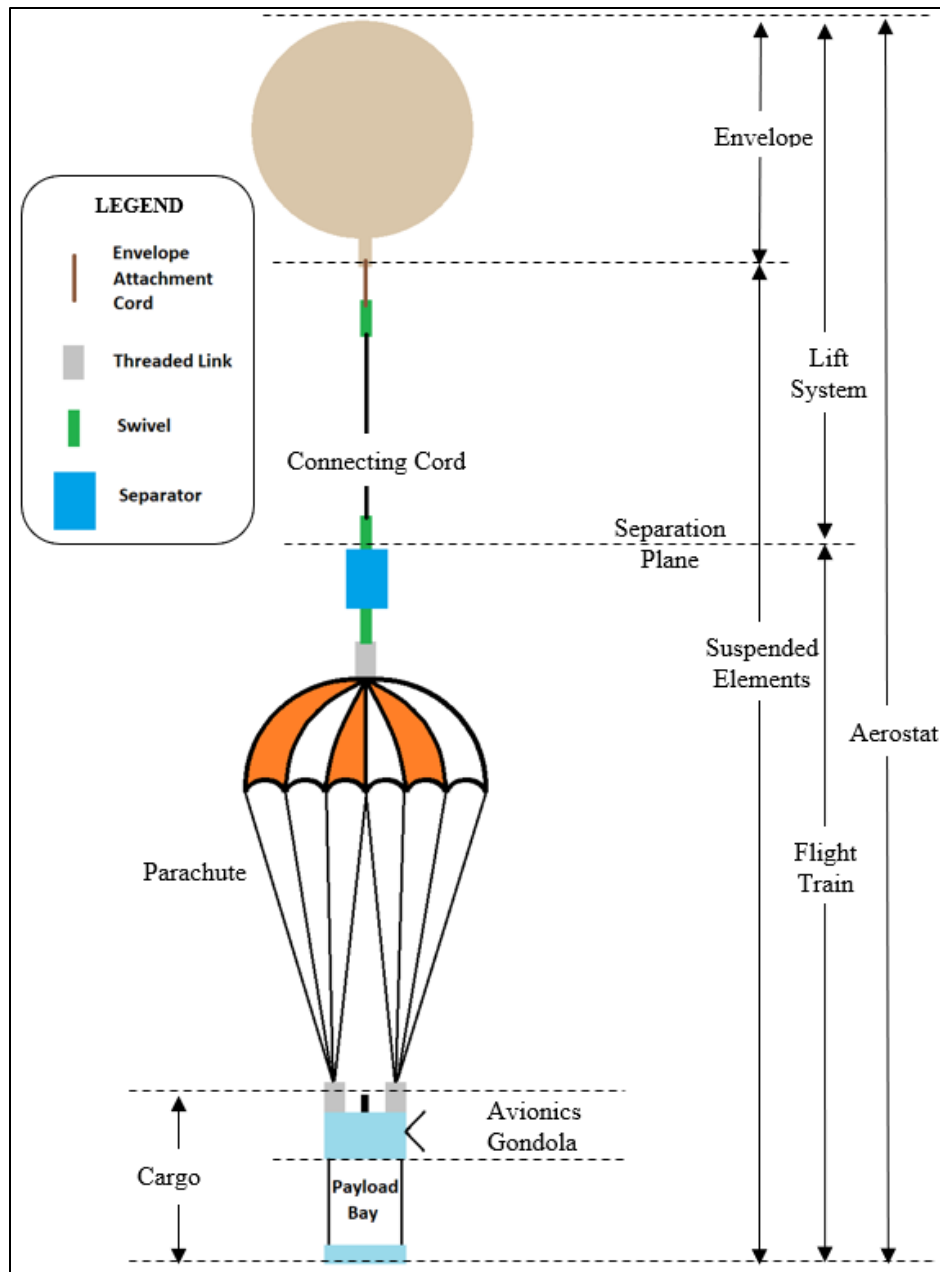


Figure 2. EXPANDABLE BALLOONS ARCHITECTURE

Aerostat and Flight Train Description

Due to the closed volume of the balloon, the latex envelope expands during ascent as the surrounding pressure decreases, until it reaches its burst point. The aerostat is equipped with a separator that detects the relaxation of the rope when the burst occurs. The separator then cuts the remaining connecting rope, allowing the flight train to descend under parachute (see Figure 3).

The Payload Gondola referred as “Cargo” includes all components attached below the parachute. It typically consists of an avionics gondola and a payload (instrument). The gondola’s structure is made from carbon fiber rods, with foam, aluminum, and plastic components. It has a hexagonal shape with an equivalent diameter of approximately 0.35 m (1.2 ft). Its height ranges from 0.4 to 1 m (1.3 to 3.3 ft), depending on the specific payload or instrument (see Figure 4). The nacelle typically weighs between 1 to 10 kg.

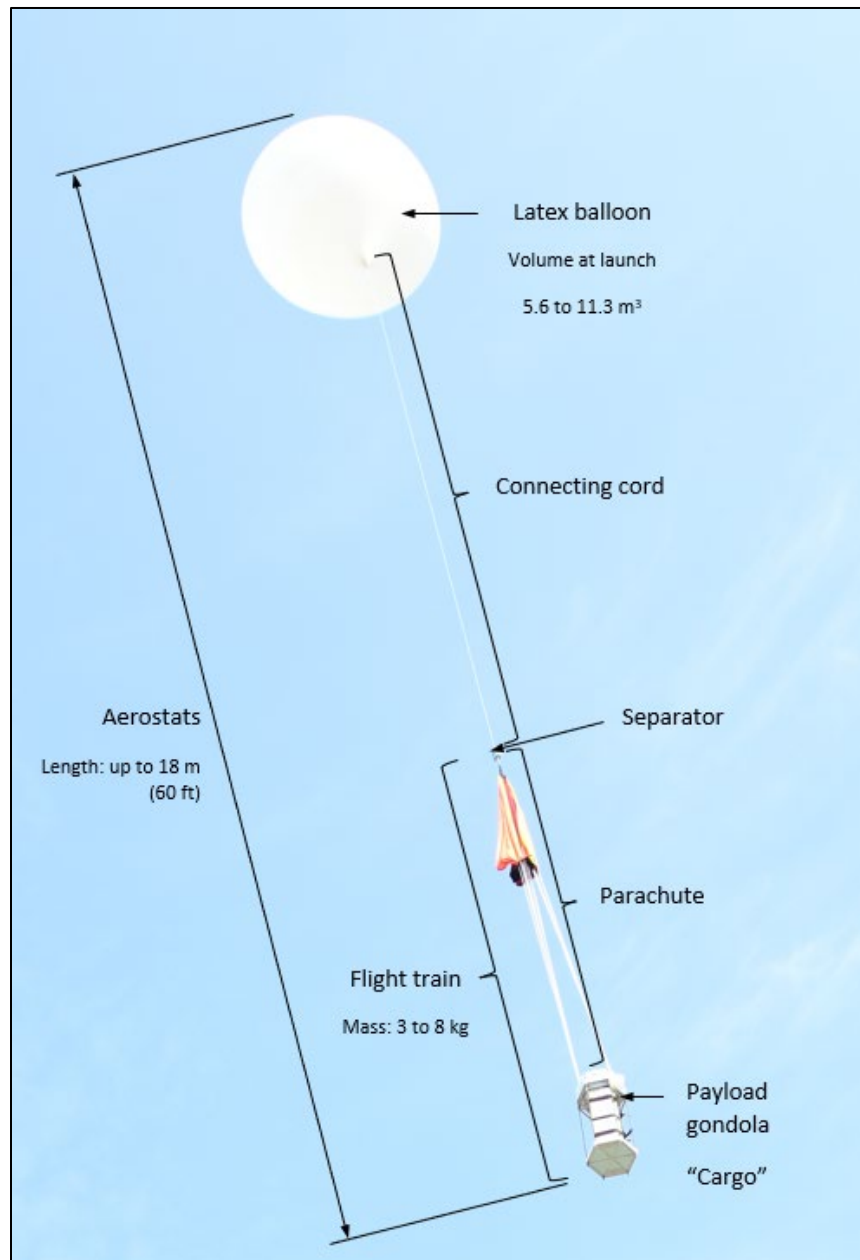


Figure 3. Expandable Balloon Aerostat at Launch



Figure 4. Typical Payload gondola and avionics systems

Further Information

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