

Students for the
Exploration
and Development
of Space



Étudiants pour
l'Exploration et
le Développement
Spatial

Canadian Stratospheric Balloon Experiment (CAN-SBX) Design Challenge Corporate Support Package



Visit [seds.ca/projects/can-sbx](https://www.seds.ca/projects/can-sbx) for more information



www.seds.ca



SEDS-Canada



@sedscanada

About SEDS-Canada

We are Canada's only student-run non-profit that works at the national level to inspire and empower students joining the space industry, and to advocate for the advancement of space exploration in the public sphere.

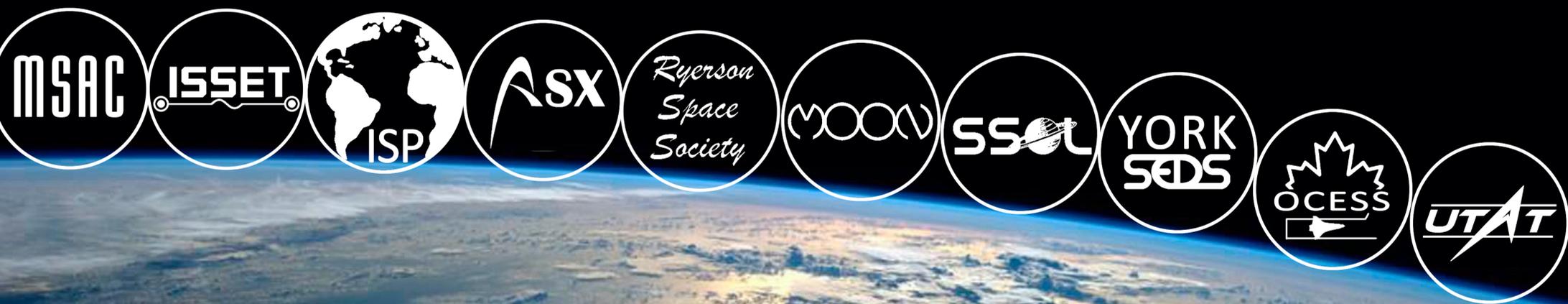
Student Empowerment

Along with our annual conference, design challenges, and competitions in entrepreneurship and astrophotography, SEDS-Canada helps students develop a professional network to not only join, but strengthen the space industry.

Advocacy

Through our growing network of student groups and our political advocacy efforts, we are building a collective student voice capable of advocating for the benefits of space exploration to the public at large, media and government.

**An investment in SEDS-Canada is an investment
in the Canadian space industry of tomorrow.**



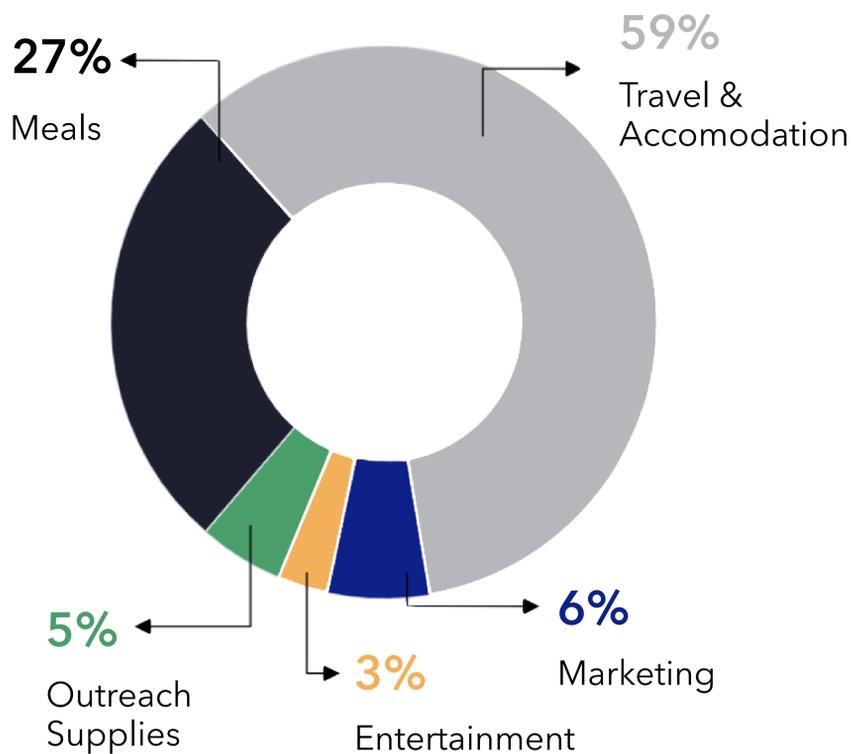
Message from the team

We at SEDS-Canada have big plans for another exciting year packed full of opportunities for our student members. As a sponsoring individual, corporation or organization, you will play a critical role in the realization of those plans. Not only does your support help us put together major events such as our annual conference and design challenges like CAN-SBX, it also allows us to reach as many students as possible across Canada through our promotional efforts. This translates into a greater audience with which our sponsors and partners can communicate. In addition to having the Canadian Space

Agency and the National Research Council as some of our long-term partners, we now seek to be the bridge between students and industry leaders such as you. Our events are excellent advertising and recruitment platforms because our members are exclusively students – most of whom will soon be seeking employment in the space sector.

This document overviews the CAN-SBX competition and opportunities for sponsorship. We are always looking for creative means to provide visibility to our sponsors and look forward to hearing your ideas on how to optimize your benefits.

Without your support, students would not be able to participate in CAN-SBX. Most of the money we're raising for CAN-SBX 2020 goes to student travel, accomodation, and meals. We hope you will be able to support the next generation of Canadian space sector leaders!



Ad astra,

Ilija Hristovski
CAN-SBX PM



James Xie
CAN-SBX Asst. PM



Kristen Cote
Projects Chair



Competition Overview

The Canadian Stratospheric Balloon Experiment (CAN-SBX) Design Challenge is the only national competition for post-secondary students to design and build a small payload for flight onboard a high-altitude balloon provided by the Canadian Space Agency (CSA). The CAN-SBX challenge was conceived to be a real-world opportunity for students to conduct meaningful stratospheric research.

CAN-SBX provides an opportunity for students to complete a full engineering design cycle from conception to execution and gain transferable professional skills for careers in the Canadian space industry. Student teams will gain project management and risk mitigation skills which are critical for many projects in the space industry. In addition, they will have the opportunity to work with Subject Matter Experts (SMEs) who will coach and mentor them throughout the competition and gain unique experience through operating a mission with the CSA.

NEW: In previous competitions, teams designed and tested experiments for a CNES gondola as part of the STRATOS partnership between the CSA and CNES. **This year, student teams will help the CSA demonstrate its own high-altitude expandable balloon launch capabilities for the first time!** These launches will be smaller, so students will need to design payloads that are both compact and lightweight. The launch campaign will also involve students in *launch operations and payload recovery* to provide enough experience to *lead balloon launches from their home institutions!*



Competition Overview

Experiment Selection

The CAN-SBX competition leverages the expertise of scientific personnel from the CSA. These individuals will act as SMEs for the competition, serve as judges, and become objective mentors to the design teams. Judges will choose 2 teams based on criteria such as scientific merit and relevance to Canadian stratospheric science, design feasibility, risk assessment, project management, and educational outreach plans.

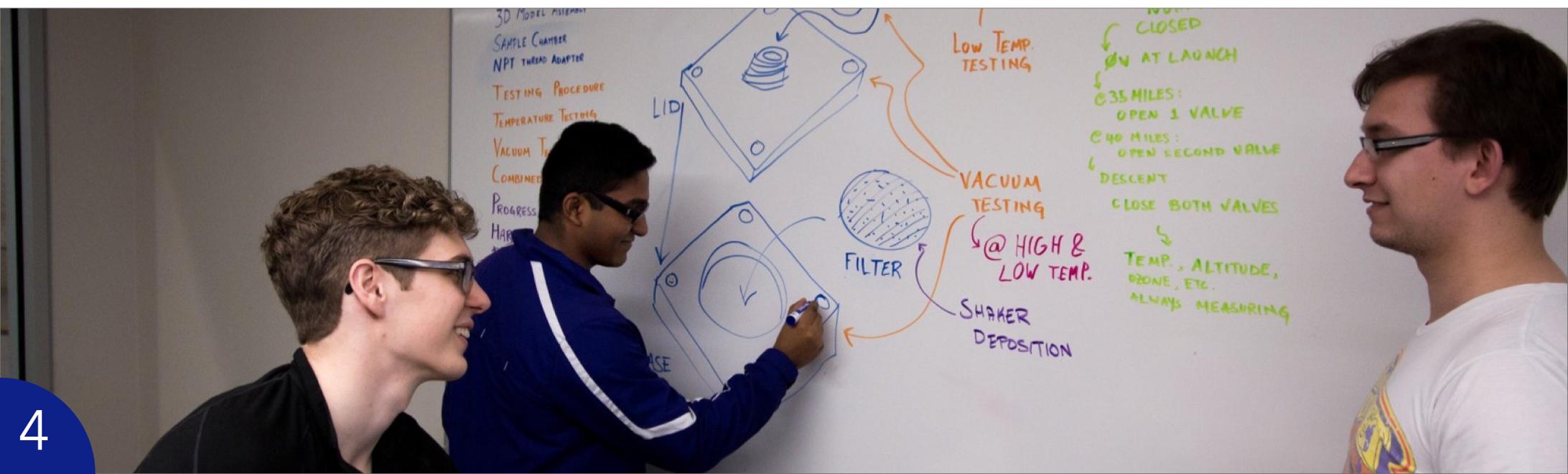


Flight Campaign

The flight campaign will be held near the CSA Headquarters in Saint-Hubert, QC. The campaign, which will be preceded by a small press conference, will consist of 2 or more expandable balloon flights, with each team having dedicated flights. These balloons rise to around 30 km and will eventually pop, parachuting to the ground. Students will be directly involved in launch operations, balloon tracking, and payload recovery in the hopes that teams will be able to bring their newly learned skills to their home institutions where they can continue launching their own balloons. This will train highly qualified personnel for the Canadian space sector. Sponsor logos will be visible on all payloads, and professional photos of sponsor logos will be provided.

Promotion

SEDS-Canada promotes CAN-SBX to Canadian students who are interested in space. We are targeting dozens of university departments and faculty across the country, as well as advertising the competition through our University partners and social media networks. SEDS-Canada will arrange for teams to showcase their work on our website and at certain events, solicit general media participation, invite media to the press conference, and produce a summary video from footage collected during the flight campaign. At each step, our sponsors will be featured in our promotional efforts.



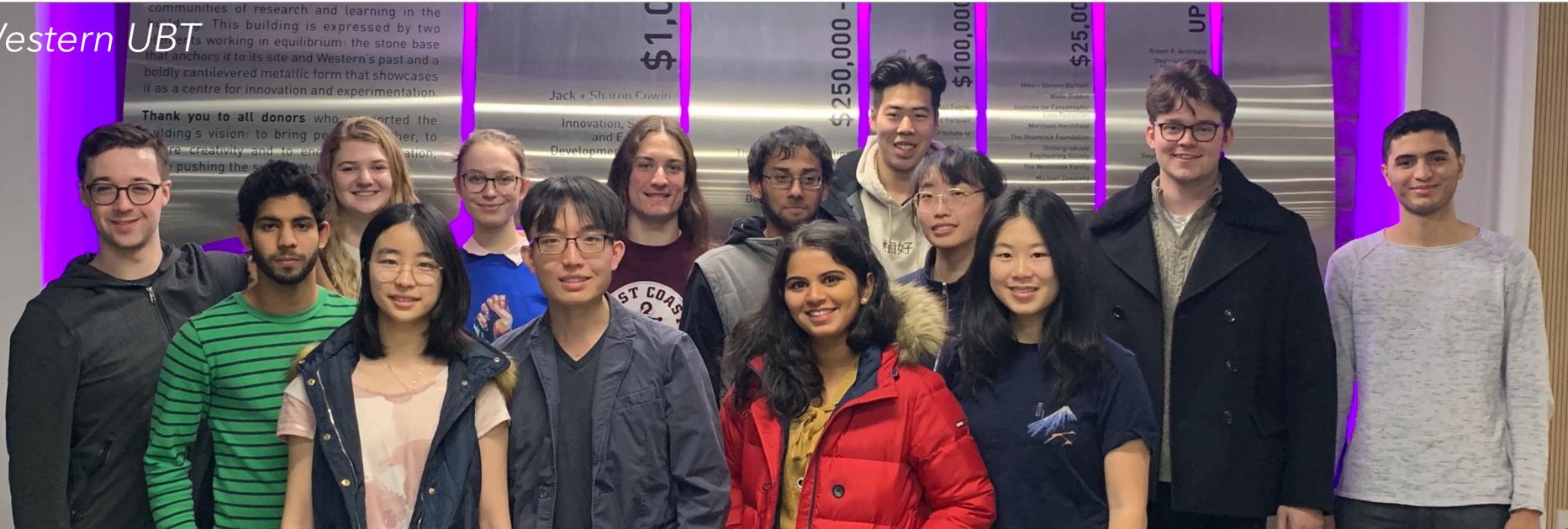
Team Features

In November 2019 a panel of judges from SEDS-Canada and the Canadian Space Agency selected two teams to compete in the 2020 CAN-SBX Design Challenge. A big part of fundraising for CAN-SBX is enabling student teams to travel to the launch site! Read about the two selected team's experiments here:

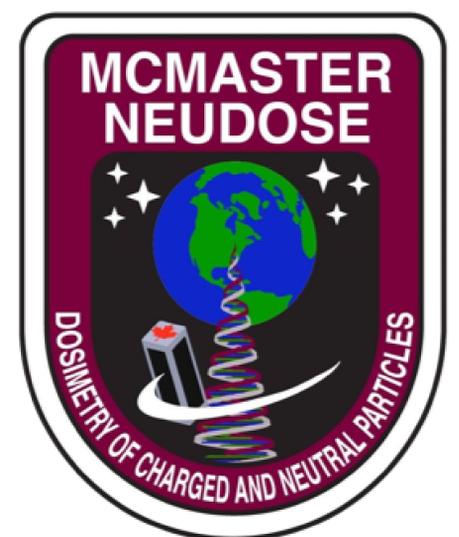


*"The goal of the Western UBT high-altitude experiment is to **measure the effects of ionizing radiation on organic compounds**. Samples of Vitamins B1, B12, and C, under different treatments, will be sent to the stratosphere along with several sensors. Following recovery of the payload, lab tests will be conducted to measure structural and chemical changes in the samples."*

Team Western UBT



*"On Earth, the atmosphere shields us from the harmful radiation of space. However, as we send astronauts further and further into space, and for longer periods of time, they are being exposed to large amounts of radiation. These high amounts of radiation can severely increase chances of developing cancer and other harmful diseases. **The NEUtron DOSimeter Experiment (NEUDOSE) is designed to be able to detect and measure radiation**, specifically being able to distinguish between charged and neutral radiation. This differentiation is important as charged and neutral particles interact with human tissue differently. Knowing more about the extent of each type of radiation can help us better protect humans as we explore the cosmos!"*



Sponsorship Benefits

You can become a Corporate Partner of SEDS-Canada by making an investment of \$250 or more in any of our projects, including our nationwide competitions and annual conference. **For CAN-SBX, your support will go towards funding student travel and lodging for the flight campaign, lunch during the campaign, a small closing ceremony event, and acquiring promotional materials and equipment.** In return for supporting Canada's only reduced gravity experiment design competition we offer a number of benefits:

Advertising

Online

- Our CAN-SBX webpage will feature your logo in a size depending on the level of support.
- You will be featured on our Twitter, Facebook, and Instagram pages prior to and during the Flight Campaign.
- Our promotional and project summary videos will feature your logo. Gold sponsors have an opportunity to provide a brief statement or be interviewed for each video.

Flight Campaign

- You may send 1 representative to a press conference prior to the flight campaign near the CSA headquarters, if interested
- Students payloads will have your branding on their payloads, and professional photos of the payloads will be provided.
- Your logo will be on a banner behind students while filming testimonials.

Past SEDS-Canada Sponsors



Sponsorship Benefits

Participation and Recruitment

As a sponsor, you have the opportunity to not only indirectly support the project through financial contributions but also directly impact SEDS at large.

CAN-SBX Subject Matter Expert

If interested, you can influence the future of our students and their project by becoming a SME of the SBX project.

SEDS-Canada Board of Advisors

A seat on the SEDS-Canada Board of Advisors is available to you, if interested. As an Advisor to SEDS-Canada, you will have the opportunity to guide the next generation of space leaders.

Ascension - Our Annual National Conference

A discount can be made available for the corresponding sponsorship level at our annual conference. This is a great way to further your support and make an impact on the wider student space community. Free tickets to Ascension will also be provided regardless of future sponsorship.

Recruitment

By attracting student space enthusiasts from across Canada to our events, we present a great opportunity for our sponsors to recruit students. We are creating a database of entry-level jobs in the space sector available to our members, with highlighted job postings and ad space given to all of our sponsors. A resume book will be made available for Gold & Silver level sponsors.

Sponsorship Levels

	Gold: \$750+	Silver: \$500+	Bronze: \$250+
Logo Placement (on stratospheric payloads, videos)	✓	✗	✗
Logo Placement (website, social media, documents, and banners)	Large Logo	Medium Logo	Small Logo
Ascension 2021 Sponsorship Discount	50%	30%	20%
Free Ascension 2021 Tickets	2	1	none
Access to SEDS-Canada Resume Book	✓	✓	✗
Subject Matter Expert Opportunity	✓	✓	✓

We hope you join SEDS-Canada as a
Corporate Partner and help
support the next generation of space leaders!



The CAN-RGX competition is a collaboration
with the Canadian Space Agency

Canada



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