FIRESAT Project Sponsorship Package

McMaster

AIAA

2026-2027

McMaster AIAA Student Branch

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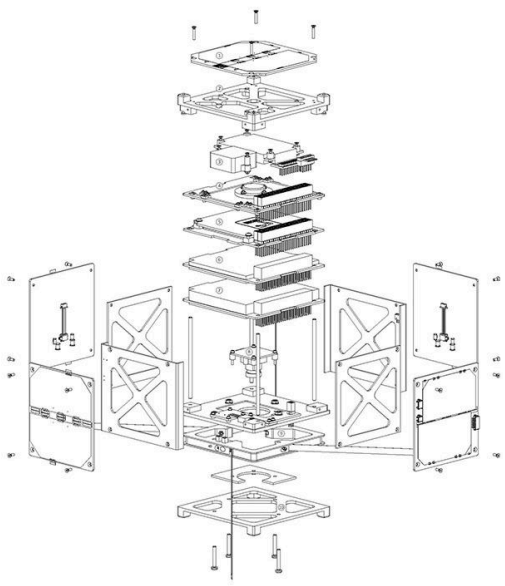
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Supporting the Future of Autonomous Wildfire Detection from Space

FIRESAT (Fire Intervention and Rescue Expedition Satellite) is a student-led aerospace research initiative for developing a lightweight wildfire detection pipeline aimed for use on a 3U CubeSat. Explore our sponsorship opportunities dedicated to only FIRESAT.





Project Overview

The FIRESAT project aims to **validate** a student-developed wildfire detection AI model, Sundance, under mission-like conditions by integrating the model onto an experimental stratospheric balloon payload. Once validated, Sundance would show strong potential for use on **3U CubeSat-based systems**, creating a low-cost and rapidly deployable wildfire detection system. FIRESAT is a **two-year validation-oriented project;** this sponsorship package highlights our Year 1 target goal only.

FIRESAT Goals

- Develop and test a student-led **CubeSat** prototype.
- Present a team research paper at **AIAA Region I conference** in April 2027.
- Launch prototype 2028 summer.

Become a **Founding Sponsor** this year and Support...

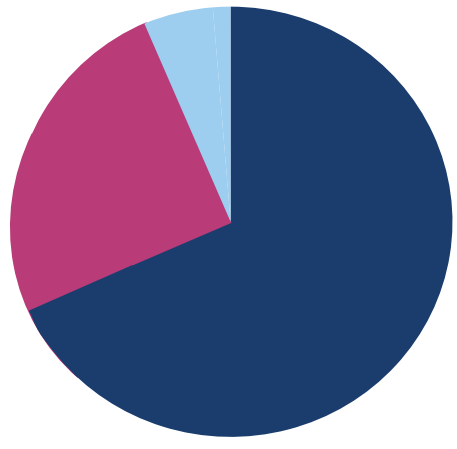
- Development & testing payload
- Hardware integration & validation
- Prototype development, research advancement
- Conference presentation & project dissemination

Why FIRESAT Matters

The FIRESAT project is more than a technical validation mission; it is the foundation for a long-term aerospace community at McMaster University. This project will allow students to gain hands-on experience in stratospheric-focused design, AI-embedded systems, and real-world engineering research. Support will help students advance the project and present their work at aerospace conferences. Every contribution, regardless of size, brings FIRESAT closer to its goals while fuelling the next generation of aerospace innovators.

Year 1 Funding Goal: $1500 CAD

- Hardware, Electronics, & Sensors
- Prototyping & Manufacturing
- Testing & Software Development



Tiers	Contribution	Sponsor Benefits
Founding Mission Partner	$1000+	Premium recognition as a FIRESAT founding partner, logo placement, media features, project updates, technical engagement opportunities, conference recognition
Premium Sponsor	$800+	Logo on project materials, sponsor recognition on website, project updates, mentorship/guest speaker opportunities on campus, conference recognition
Advanced Sponsor	$500+	Logo recognition & sponsor acknowledgments on website, event invitations, conference recognition
Supporting Sponsor	≤$100	Name/logo recognition on T-shirts & sponsor acknowledgment on our website

If you have any questions, or are interested in supporting FIRESAT, please contact us at **mac_aiaa@mcmaster.ca**