ARBALEST ROCKETRY

April 1st, 2024

Monthly Flyby

Welcome to "The Monthly Flyby," your all-in-one source for the latest updates from the Goose 4 Rocket project team! This newsletter marks the beginning of a new era in how we communicate our progress, achievements, and milestones directly to you. Through this revamped newsletter system, we'll be providing you with monthly insights into our team's current activities, captivating photographs from our journey, and transparent breakdowns of our financial allocations. "The Monthly Flyby" aims to bring our celestial aspirations closer to Earth, connecting you with the heart of our project as we soar together into the unknown. Stay tuned for our regular dispatches, where science meets transparency, and discovery begins with our shared passion for space exploration.

Mission Trajectory Changes

In the dynamic landscape of our Goose 4 Rocket project, adaptability is key. We've recently reassessed our priorities to align with our resources and goals, leading to a strategic shift in our development focus. Initially, we embarked on designing an advanced RCS (Reaction Control System), a testament to our ambition. However, to ensure the success and timely progression of our mission, we've redirected our efforts toward perfecting the trajectory and recovery systems—essential components that promise to set a solid foundation for future launches.

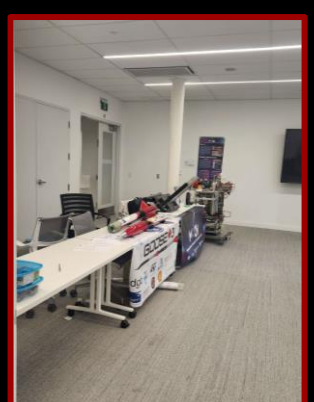
Embracing this change, we're thrilled to share an exciting development: our rocket will now feature a fairing nosecone, designed to accommodate larger payloads, including cube satellites of up to 10 cm by 10 cm. This enhancement not only maximizes our launch capabilities but also opens up new avenues for exploration and utility.

While the RCS system remains a part of our vision for the future, our immediate focus is on ensuring that every aspect of our project is optimized for success. This pivot reflects our commitment to innovation, safety, and the fulfillment of our mission's potential.

We're grateful for your continued support as we navigate this journey together. Each step forward, guided by strategic choices and shared passion, brings us closer to reaching new frontiers in space exploration.

Outreach

Our commitment to outreach has recently taken us to Toronto Metropolitan University's inaugural rocketry conference, where we played an active role in supporting the event. A member of our team contributed as the audio and visual technician, ensuring the event ran smoothly for all attendees. Additionally, we showcased our rocket and related materials at our display table, providing a tangible insight into our project for other teams and enthusiasts. This participation not only allowed us to share our passion and progress but also to connect with the broader rocketry community, fostering a spirit of collaboration and inspiration



Parts & Materials

The success of the Goose 4 Rocket project in procuring essential materials and advanced components has been significantly bolstered by the generous support of our sponsors. Their contributions have enabled us to source cutting-edge flight computer sensors for unparalleled navigation and control. We've also secured high-quality fiberglass and hardware for our rocket's structure, alongside top-tier propellants for a powerful launch. Moreover, access to premium materials for machining custom parts ensures that every aspect of our rocket meets the highest standards of performance and safety. This collaborative achievement highlights our shared commitment to pushing the boundaries of engineering and exploration. Through this partnership, we're setting new benchmarks in rocketry, demonstrating what can be accomplished when we unite in pursuit of innovation and excellence.

Manufacturing

Our manufacturing process is forging ahead, marked by key developments that bring the Goose 4 Rocket closer to reality. We've successfully started rolling fiberglass for our rocket's aerostructure, combining strength with lightweight design for optimal performance.

Concurrently, our foray into 3D printing is producing complex parts with precision, complementing the traditional manufacturing of metal components. This dual approach ensures durability and efficiency across all systems.

Significant progress has been made with the flight computer, too. We've completed PCB printing and are moving towards assembling the avionics bay, integrating advanced electronics with our mechanical design for unmatched control and reliability.

These steps are not just progress—they're leaps toward our launch goal, embodying our mission to blend craftsmanship with the latest in aerospace technology.

A Special Thank You

We are immensely grateful to have the support of our esteemed sponsors, whose logos grace the section below. Their partnership is not just a contribution; it's a shared belief in our mission and a testament to the spirit of innovation and exploration. A special thank you to each of these organizations for joining us on this incredible journey. Together, we are propelling towards new heights, and it's your support that makes this voyage possible.

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The Team

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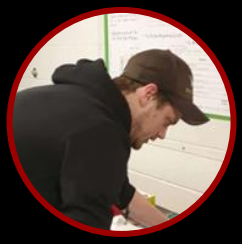

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