

# Hoos Flying Sponsorship Package 2023 – 2024

The Aero Design Team at the University of Virginia

Written by: Sean Jolly and Darsh Devkar

## **Disclosure:**

Although this organization has members who are University of Virginia students and may have University employees associated or engaged in its activities and affairs, the organization is not a part of or an agency of the University. It is a separate and independent organization which is responsible for and manages its own activities.

#### Letter to Potential Sponsor

#### To whom it may concern,

As part of the dynamic team representing the University of Virginia (UVA), we're thrilled to connect with you, sharing a vision that aligns seamlessly with your dedication to pioneering innovation and fostering educational pursuits, particularly in the aerospace sector. Our team is composed of enthusiastic and driven students who actively leverage their academic foundation to embark on a challenging journey, engineering, and piloting radio-controlled aircraft with impressive wingspans nearing 15 feet and substantial weights of up to 45 pounds. Our annual participation in the Society of Automotive Engineers (SAE) International Aero Design Competition sets the stage for us to engage head-on with a medley of distinctive challenges while nurturing the pursuit of excellence.

In the forthcoming academic year of 2023-2024, our mission revolves around the creation of an aircraft that excels in structural efficiency, while simultaneously optimizing payload capacity and minimizing any excess space. This endeavor is bound by the constraints of a 15foot wingspan, a challenge that fuels our collective creativity and propels us to break through innovation boundaries. Our team's meticulous organization involves sub-assembly teams, each specializing in a pivotal component of the aircraft. This structured approach, coupled with a detailed schedule, ensures we stay on course, with our esteemed academic advisors contributing invaluable insights and recommendations to propel our mission of designing a high-efficiency aircraft. Your support is instrumental in translating our dreams into reality.

To effectively achieve our goals, we are actively seeking funding to secure essential building materials, spare components, tools, and resources required for participation in the competition. These encompass a wide array of necessities, from building supplies essential for constructing multiple airframes to accommodate testing and design refinement to additional resources for comprehensive testing and the procurement of vital spare components. In addition, your support will extend to covering competition-related expenses, including travel costs, and enable us to host student engagement activities like educational field trips and team dinners. Our unwavering commitment to diversity is core to our values, and we actively foster an inclusive environment. We welcome students from diverse academic backgrounds and actively seek to involve students from all schools at UVA, appreciating the unique perspectives each member brings to our projects.

In recent years, our team has consistently demonstrated exceptional performance in the SAE Aero Design Competition. We've navigated through recent challenges and rule changes with determination, persevering in our commitment to upholding a legacy of excellence. With your support and the collective effort of key contributors, we are poised to reach new heights in our journey.

Thank you for considering joining us on this exciting journey. Together, we can push the boundaries of aerospace engineering and inspire the next generation of engineers.

#### Sincerely,

Aero Design Team at the University of Virginia (UVA)

#### Letter from the President

To whom it may concern,

My name is Sean Jolly, and I am the president of Hoos Flying, the Aero Design Team at the University of Virginia. I wanted to thank you for your consideration in supporting our team. We compete in the SAE Aero Design Competition and have a storied history of placing well. In 2019, we placed third overall in the world and first in the US rankings. In 2018, we placed fifth overall and were second in the US rankings. We are looking for support to return to that level of greatness. Our aircraft design last year and this year has a fifteen-foot wingspan displaying the skills that our members have in designing large model aircraft. These larger aircraft also come with a larger cost to build and transport resulting in a budget of \$22,000 for this school year.

I want to take a second to talk about the impact that being on the team has had specifically for me. I grew up in a family already fascinated with aviation. My dad was a pilot in the Navy and flew for the airlines after retiring from the Navy. I worked at an aviation museum in Virginia Beach where aircraft from WWI and WWII were regularly flown for guests to witness the history of aviation and how far the development has come. That sparked my interest in engineering and specifically aerospace engineering. I transferred from Tidewater Community College in Virginia Beach after my first year to the University of Virginia. When I first transferred in, I wanted to get involved with an engineering design team to help advance my skills that I had been learning in the classroom. I started as a member on the Wing team, then coled the Fuselage team last year, finally culminating with becoming the president for the current year. Being on the team has given me countless skills including Computer Aided Design, Finite Element Analysis, Laser Cutting, Manufacturing, Systems Engineering, and Leadership skills to just name a few. These experiences have given me numerous examples to share during interviews and played an instrumental role in me being selected to intern with Iridium Communications last summer.

Now that I am a fourth year, I have begun to look toward the future to what I will be doing once I graduate. I've always had a passion for aviation and space, but I've realized that my true interest is in space manufacturing. Being a part of the team has shown me how much I enjoy the manufacturing aspects of engineering. I'm looking forward to a career in satellite manufacturing with the goal of working on exploratory spacecraft solving the unknown. With your support you will not only be helping our team attend a competition each year, but you will help students realize their true passion within engineering, having a lasting impact on each of us.

I want to thank you again for your interest in supporting our team and please feel free to reach out to me at my contact below if you have any further questions. I'd love to set up a time to meet.

Thank you in advance, Sean Jolly

Sean Sally

University of Virginia | Class of 2024 B.S. Aerospace Engineering | B.A. Astronomy President | UVA Aero Design Team (Hoos Flying) Vice President & Co-Founder | UVA CubeSat Club (CavSat) (757) 785-6219 | ywg3dz@virginia.edu

#### Programs

#### A Team Open to All

Hoos Flying provides experiential learning and represents the University of Virginia (UVA) through designing, building, and flying large-scale RC aircraft through the SAE Aero Design Competition. We believe in an environment with no barriers. To this end we have no dues or applications to be a member of the team. While this does result in a larger team size, around 90 members this year, and higher program costs, we believe it's an important part of who we are.

#### How You Can Help

Your donation means we can continue to provide high quality programming and experiences to all members. By donating to Hoos Flying, you can also gain access to dozens of top-notch students looking for jobs from disciplines including Aerospace, Mechanical, Systems Engineering, Computer Science, and others. Another great perk is that donations to Hoos Flying are completed through the UVA Fund, meaning that all donations are tax-deductible.

We participate in numerous activities throughout the year where your company would be represented, including SAE Government/Industry Meeting, UVA AIAA AeroDay, UVA Experiential Fund Open House, UVA Engineering Open House, and SAE Aero Design East. Read below for the differing funding needs we have for the year. Have any questions? Send us a message at hoosflying@virginia.edu, we'd love to chat!

Project / Event	Description	Funding Need*
Aero Design Competition Aircraft	Aircraft that will be brought to competition and all the prototype aircraft that are built. Generally, we try to bring at least two full aircraft to competition in case one of them doesn't survive a flight.	\$12,450
Aero Design Competition Travel Costs	Costs to bring members of our team and the aircraft to Lakeland, Florida for the SAE Aero Design Competition	\$9,493
Intro Aircraft Design Project	Design project for new members to build a small aircraft from scratch	\$500 (stretch goal \$1000)
Outreach and Recruitment	Hoos Flying participates in numerous events throughout the year to generate interest in Aerospace Engineering from the public and students already at UVA	\$2,000

\*Hoos Flying receives funding from the UVA Experiential Learning Fund, Travel and Activities Fund, Student Activities Fund, and Parents Program. Sponsorships are used for mostly outreach and our intro aircraft design project.

## **Levels of Support**

#### **Energizing the Future of Aerospace Engineers**

Hoos Flying is here for engineering students at the University of Virginia. We aim to provide an environment where students can build and create without having to worry about where the money for supplies will come from. Your support will help ensure that we are able to create and foster this environment.

Below are some of our most popular plans. Don't see a plan that matches your needs? We'd love to talk to you about tailoring our benefits to align with your interests and needs.

Help us shape the future of all engineers and read below about some of the different plans.

Bronze	Silver	Gold	Diamond
(Up to \$300)	(Up to \$650)	(Up to \$1000)	(Over \$1000)
Х	Х	Х	Х
Х	Х	Х	Х
Х	Х	Х	Х
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### **Final Words**

With a legacy of excellence, Hoos Flying is dedicated to constant innovation and pushing the boundaries in the aerospace and aeronautics community. Your support not only fuels our success but also empowers students to become future leaders and pioneers in aerospace engineering. Join us in shaping the future of this dynamic field and explore the boundless possibilities of innovation together.

# Sponsorship Form

#### **Contact Information:**

Full Name:	Dat	2:	
Company Name:	Titl	Title at Company:	
Mailing Address:			
City:	State:	Zip:	
Email Address:	Pho	Phone:	
Support Level Information: <b>5</b>			
Sponsor Level		Exact Donation Amount	
□ Bronze □ Silver □ Gold □ Diamon	nd	S	
Please use the follow space to explain if (Supplies, expertise, etc.)	you're intereste	d in donations other than money	
	any of the follo	wing items:	
Please let us know if you're interested in			
<u>Please let us know if you're interested in</u> Interested in hosting an event with Hoos		. 🗆	
	Flying students		
Interested in hosting an event with Hoos	Flying students in Hoos Flying		
Interested in hosting an event with Hoos Interested in hearing more from students	Flying students in Hoos Flying letter. □	. 🗆	

Signature: