



WINGSPAN
#7431

**SPONSORSHIP
PACKET**

2022-2023





Who We are

Our Mission

Build a diverse student-driven team in which all members can discover their passions and gain experience through hands-on, interactive learning.

Our Vision

Provide students the tools they need to change the world

What is FIRST?

FIRST (For Inspiration and Recognition of Science and Technology) is a program for students of all ages to gain experience in science, technology, and robotics which helps to prepare them for the future. *FIRST* offers 3 flagship programs which all challenge students to develop robots specifically designed to complete a task provided at the beginning of the season.

What is FRC?

FRC (First Robotics Competition) is a program created for high school students to develop strategy and build robots based on sound engineering principles. FRC teams can often have over 30 members to design, build, and program their robots to compete in an alliance format against other teams. Awards are given for the competition as well as for community outreach, design, and other real-world accomplishments.

What We Do

As an FRC team, Wingspan participates in a six-week build season each year where we build a robot that completes specific tasks. We pride ourselves on being a student-driven team with mentors as guides; team members design, program, and build the robots we compete with. But building robots isn't all we do! Wingspan actively goes out into our community to share our passion for STEM.



Community Outreach

We worked alongside the Kennedy Space Center International Academy (KSCIA) to organize an event in which we met over 900 Brazilian students and introduced them to *FIRST*, Wingspan, and VHS. We have also made connections with Team #2614 MARS who hosts West Virginia Robotics Extreme (WVROX). Forging lasting connections with these students we have spread the message of *FIRST* internationally.

We understand the value STEM has for future generations, which is why we participate in numerous STEM events at Ralph Williams Elementary, Pinecrest Academy, McNair Middle School, and Viera Charter School. In our goal to spread STEM to younger generations we started FLL teams at Endeavor Elementary and Viera Elementary. They received \$7500, \$5000 from a grant and \$2500 as a gift from us. This donation and our continued financial support helps them jumpstart the next generation of STEM careers.

During the Covid-19 Pandemic we had to adapt to new restrictions. Several of our members made and donated handmade masks to the fire department. Our operations department also hosted panels that introduced and discussed STEM for *FIRST* members and their local community. The audience was able to question the panelists about their STEM education, careers, and *FIRST* experience.

We also formed a Diversity, Equity, and Inclusion (DEI) team to educate others on equitable practices. We hosted DEI forums containing content on inclusivity and equitable practices regarding marginalized groups in STEM. Our efforts have a direct impact on our team composition: 40% identify as female or gender non-conforming, and 38% as Asian, Black, or Hispanic.



Code Ninja STEM Night:

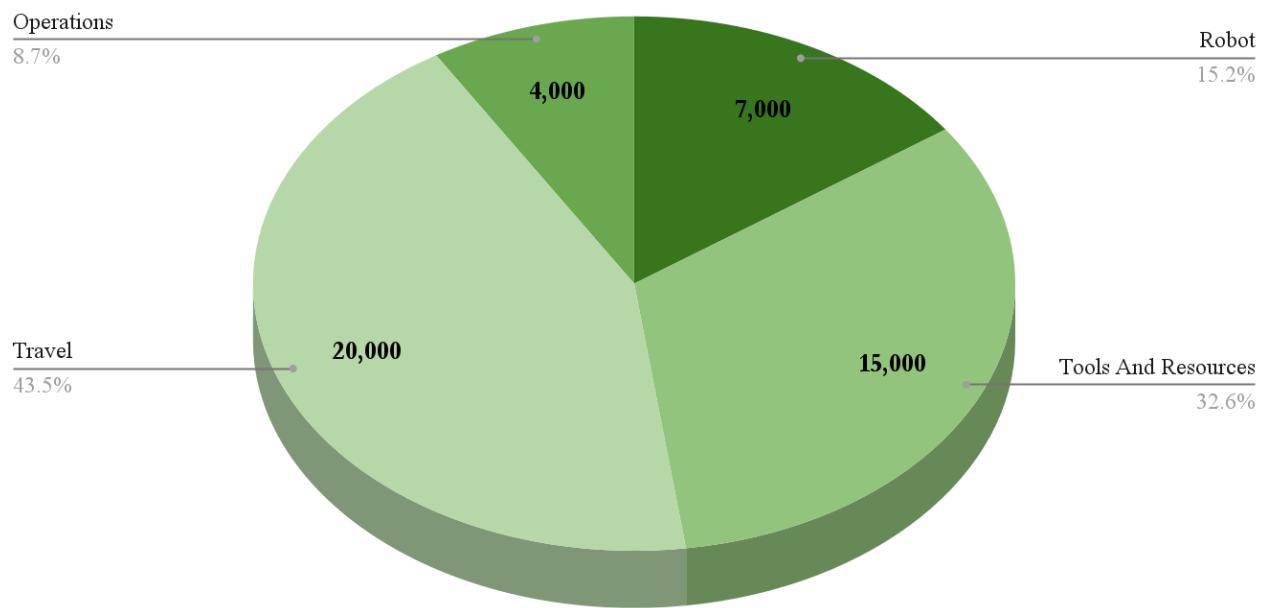
In December of 2021, Wingspan hosted an event to teach 8-10 year old kids about *FIRST* Robotics and competition, while also having them go through the engineering process to make cars as a team for a final race for distance.

The STEM night was a long term project for Wingspan, as our collaboration with elementary schools and kids in general has been a strong improvement point of the team. The hour-long lesson included introducing the kids to robotics and Wingspan, and a car building activity where the kids assembled miniature cars and raced them with their teams to see which was the fastest. Wingspan looks to work more with kids in the near future, introducing robotics as an option even at young age.





Wingspan Season Costs 2022-2023



Where donations go

Sponsorships go towards many things. The main spending category is on the technical side. Besides the Robot we are in need of toolboxes, manufacturing machines like tabletop mills, lathes, 3-D printing material, power tools, and replacement hand tools. These costs add up and support in this area greatly helps our teams competitiveness and teaches students in our program designing, prototyping, and machining skills. Money also goes towards subsidizing travel and paying for team merchandise.



Our Sponsorship Tiers



Hawk Tier- \$5000+

- X Large logo on website, robot, and T-Shirt
- Option to Name a Robot Component
- Featured on Homepage
- Mention at Competition
- Logo on pit banner



Fledgling Tier- \$2500+

- Large logo on website, robot, and T-Shirt
- Facility Visit
- Logo on pit banner



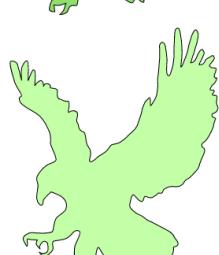
Nestling Tier- \$1000+

- Medium logo on website, robot, and T-Shirt
- Social Media Shoutout
- Logo on pit banner



Hatchling Tier- \$500+

- Small logo on website, robot, and T-Shirt
- Receive thank you cards



Egg Tier- \$100+

- X Small Logo on website
- Receive Team Newsletters



Season Review

The Impact Award

The Impact Award is the most prestigious award in *FIRST*. It honors the team that best represents an outreach model for other teams to emulate, and best embodies the mission of *FIRST*. It was created to keep the central focus of *FIRST* Robotics Competition on the ultimate goal of transforming the culture in ways that will inspire greater levels of respect and honor for science and technology, as well as encouraging more of today's youth to become science and technology leaders. The essay portion of the Impact Award submission provides teams an opportunity to describe their activities and achievements in narrative form. Every year our team creates a video and writes an essay about how we strive to better our community.

RAPID REACT Challenge

In RAPID REACT, two alliances of 3 teams compete to score their cargo (9.5in diameter tennis balls) into a lower and upper hub located in the middle of the arena. The lower hub awards 1 point as while the upper hub awards 2 points with added difficulty. Teams also had the chance to gain extra points if they could traverse the rungs of the hangar. The low rung was worth 3 points, the middle was worth 6 points, and the high rung was worth 10 points. For teams especially skilled, they could climb onto the high rung and use extra mechanisms to reach the traversal, giving a massive 15 points. Robots began on a tarmac to start the match. During the 15 second teleoperated period, robots used their pre programmed functions to move and score without human assistance. A two point bonus was awarded to teams who left their tarmac during this period. Each robot started with one preloaded ball. For the remaining 2 minutes and 15 seconds, the robots moved with human control, continuing to collect up to 2 cargo at a time and shooting into the collectors. Most teams used the final 30 seconds as "climb time", where robots traversed the 4 rungs of the hangars for extra points. The winner was decided by having the most points as a team by the end of the match.



Wingspan's Performance

Despite the challenges of being a young team with mostly first year members, we met most of our objectives and are well positioned for continued growth and improvement. We would not be here without our incredibly talented students, coaches, and mentors. We are incredibly thankful for all of the parents, sponsors, and dedicated fans for always supporting us.

Wingspan participated in the Orlando Regional at UCF while playing 9 matches; 5 red alliance/4 blue alliance. Wingspan finished with a rank of 41 out of 56 and a record of 4-5-0, and won the **Safety All-Star** and the **Entrepreneurship Award**.

At our second competition the Tallahassee Regional in the FAMU MCT Gymnasium. Wingspan played 14 matches (6 red alliance/8 blue alliance), finished with a rank of 24 out of 38, a record of 5-9-0 and earned a spot in the quarterfinals as an alliance partner with Exploding Bacon (1902, Orlando) and Edgar Allen Ohms (5276, Tampa). In addition to our playoff placement, Wingspan won a second **Entrepreneurship Award**.



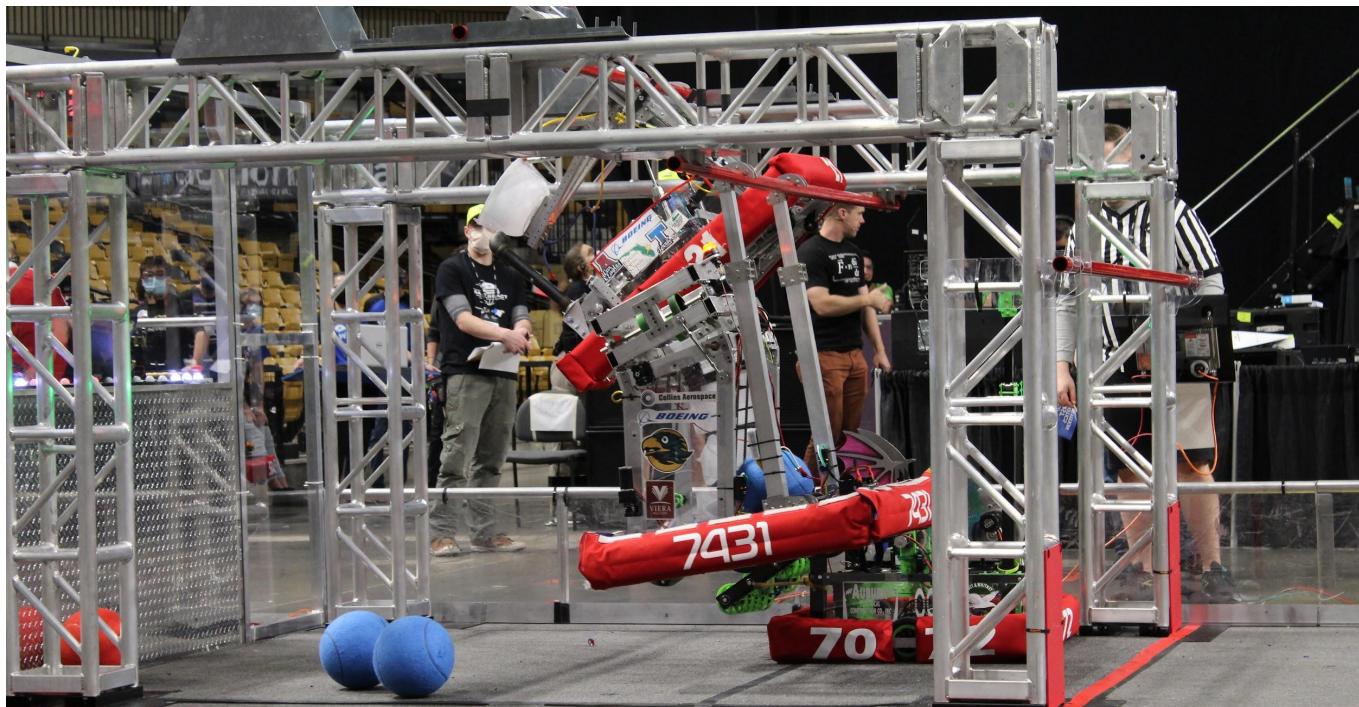


About our Robot

Wingspan's robot, Stymphalian, was built entirely at our school. Without having sponsors to lend us their resources we had to take matters into our own hands. We built nearly everything, from the arms, to the drivetrain, from scratch. We did not have the tools that other teams had, so we were forced to innovate and figure out how to build our bot with what we had. Our frame is made out of 2" x 1" box aluminum primarily held together by bolts. We used files and a drill press to manufacture parts that should be made with a CNC router. A lot of the electrical was also salvaged from previous bots. Despite all of our difficulties, we learned a lot and made a functioning robot.

What can it do?

Stymphalian can collect cargo and bring it up to our flywheels, which spin at a speed that depends on the distance to the hub. Our shooter can launch cargo from almost anywhere on the field and score with an 80% accuracy. Our climber is made up of two arms that spring up, hook onto the mid bar, and winch the 120lbs robot 3 ft into the air.





2022-2023 Team Roster

Technical Leaders

Pranav Ponnusamy: Technical Lead
Israel Caballero: Asst. Technical Lead
Ritvik Varada: Software Lead
Stephan Heinzer: Mechanisms Lead
Jansen Joss: Drivetrain/Frame Lead
Lex Dues: Electrical Lead
Alex Adams: Logistics/Safety Lead
Brysen: CAD Lead
Stephen Bowlin: Robot Testing Lead

Business Leaders

Marcos Ward**: Head of Business
Josh Light: Chief Financial Officer
Kayla Orlando & Victoria Reardigan**: Heads of Operations
Alex Vareno: Head of DEI, Recruitment, and Retention
Samantha Walsh: Head of Branding

Mentors

Coach Formanek
Coach Latta**
Coach Kent
Coach Erin
Coach Carlson

**Victoria and Marcos were semi-finalists for the [Dean's List Award](#), Coach Latta was nominated for the [Woodie Flowers Award](#).

Alumni Stats

Since our founding in 2018, Wingspan has been inspiring our members to pursue higher education in STEM fields.

- ✿ 100% of our members graduate from high school
- ✿ 94% of our members plan to attend college
- ✿ 95% of our members plan to pursue a career in a STEM field
- ✿ 70% of our members are interested in mentoring a FIRST team in the future
- ✿ 100% of our alums are pursuing STEM careers



Thank You, Sponsors!

We are so grateful for our sponsors this year! This team's efforts wouldn't be possible without your help!

- ✿ **Brevard Public Schools**, our largest sponsor, has supported us since our founding year. This year, they provided vast financial support to help pay for travel.
- ✿ **Collins Aerospace** provided us with mentors who assist with day-to-day team operations.
- ✿ **L3 Harris** provided our team with financial support this season.
- ✿ **Kennedy Space Center International Academy** (KSCIA) is a sponsor we work closely with for outreach events with international students. They sponsored us financially.
- ✿ **Lockheed Martin** provided financial support for our team this season.
- ✿ **Viera Builders** provided us with plywood, allowing us to create mock game fields for our robots.
- ✿ **Brooklyn Pizza** provided us with food for build season
- ✿ **Boeing** provided our team with financial support this season.
- ✿ **Wabtec** provided financial support for our team this season.





W-9
Form (Rev. November 2017)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

<small>Print or type. See Specific Instructions on page 3.</small>	<p>1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.</p> <p>The School Board of Brevard County, Florida</p> <p>2 Business name/disregarded entity name, if different from above</p> <p>3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.</p> <p><input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate</p> <p><input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____ <small>Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</small></p> <p><input checked="" type="checkbox"/> Other (see instructions) ► Public School District - Governmental Subdivision</p> <p>4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): <small>(Applies to accounts maintained outside the U.S.)</small></p> <p>Exempt payee code (if any) <u>3</u></p> <p>Exemption from FATCA reporting code (if any) _____</p>				
<small>5 Address (number, street, and apt. or suite no.) See instructions.</small>	<p>5 Address (number, street, and apt. or suite no.) See instructions.</p> <p>2700 Judge Fran Jamieson Way</p> <p>6 City, state, and ZIP code</p> <p>Viera, FL 32940</p> <p>7 List account number(s) here (optional)</p>				
<p>Requester's name and address (optional)</p>					

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number	_____ - _____ - _____
or	
Employer identification number	
5 9 - 6 0 0 0 5 2 2	

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ► 

Date ► 3/15/18

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding*, later.