



RoboHawks 5741 AWARDS



2022-23 - Power Play

[Official FTC Tournament Results](#)

[Official Awards Results](#)

1st Place - Tournament Champion Alliance!

22683 JV RoboRedHawks(capt) + 5741 RoboHawks

Tournament Highest Score 170pts ([semi-final 1 - match1](#))

1st Place - Inspire Award celebrates Teams that best embody the 'challenge' of the FIRST Tech Challenge program. The Team is a strong ambassador and a role model team for FIRST programs. Being a top contender for many other judged awards and is a gracious competitor, the Inspire Award winner is an inspiration to other Teams, acting with Gracious Professionalism both on and off the playing field. This Team shares their experiences, enthusiasm and knowledge with other teams, sponsors, their community, and the Judges. Working as a unit, this Team will also have shown success in performing the task of designing and building a Robot.

2nd Place - Innovate Award celebrates Teams whose robot or robot sub-assembly is creative, elegant and unique in its design, as well as stable, robust and reliable. The engineering portfolio clearly and concisely describes the engineering design process for developing these innovative systems.

2nd Place - Design Award celebrates Teams that design a robot that is inspirational, effective and consistent with Team plan and strategy and implements strong industrial design principles. The engineering portfolio and presentation clearly and effectively communicates detailed design content and design journey that incorporates both aesthetics and function into the design of the robot.

2nd Place - Connect Award: celebrates Teams that most connect with their local science, technology, engineering and math (STEM) community. A true FIRST team is more than a sum of its parts and recognizes that engaging their local STEM community plays an essential part in their success. The recipient of this award is recognized for helping the community understand FIRST, the FIRST Tech Challenge, and the Team itself. The Team actively seeks and recruits engineers and explores the opportunities available in the world of engineering, science and technology.

2nd Place - Control Award: celebrates Team's ability to utilize advanced software techniques and algorithms, sensors, hardware, and code to program a robot that can reliably and efficiently carry out tasks during Match play, in a way that improves their ability to score during a match.

3rd Place - Motivate Award celebrates Teams that embrace the culture of FIRST. This judged award celebrates the Team that represents the essence of the FIRST Tech Challenge competition through Gracious Professionalism, Coopertition, and general enthusiasm for the overall philosophy of FIRST. The Team makes a collective effort to make FIRST known throughout their school and community, and sparks others to embrace the culture of FIRST.



JV RoboRedhawk s 22683 AWARDS



2022-23 - Power Play

[Official FTC Tournament Results](#)

[Official Awards Results](#)

The JV RoboRedhawks AWARDS

1st Place - Tournament Champion Alliance Captain!

22683 JV RoboRedHawks(capt) + 5741 RoboHawks

1st Place - Innovate Award celebrates Teams whose robot or robot sub-assembly is creative, elegant and unique in its design, as well as stable, robust and reliable. The engineering portfolio clearly and concisely describes the engineering design process for developing these innovative systems.

Semi-Final

	Blue Alliance	Red Alliance
Alliance Team Capt	10889 (MansField Mechanics United)	22683 (JV RoboRedHawks)
Alliance Team Partner	16221 (Manchester Machine Makers)	5741 (RoboHawks)
(Vid Link) Match 1	67	97 (WIN)
(Vid Link) Match 2	39	142 (WIN)
Match 3	xxxx	xxxx

FINAL

	Blue Alliance	Red Alliance
Alliance Team Capt	22683 (JV RoboRedHawks)	3397 (HiveMind - Essex)
Alliance Team Partner	5741 (RoboHawks)	183551 (Bubbert Innovations - U32)
(Vid Link) Match 1	140 (crushed by penalties!)	179 (WIN)
(Vid Link) Match 2	92 (WIN)	64
(Vid Link) Match 3	119 (WIN!!)	115

2023 Vermont FIRST Tech Challenge Robotics Championship

Champlain Valley Union HS hosted the Vermont FIRST Tech Challenge Robotics Championship this past Saturday (Feb 11th). There were 19 robotics teams from all around the state of Vermont, and what an exciting tournament it was!

With many strong teams in this year's tournament it was a tough battle to the top. For the second year CVU entered two teams, our varsity squad the RoboHawks (#5741) and our JV squad the RoboRedhawks (#22683). Both teams did very well in the qualifying matches, but with a little more luck the JV squad managed to finish ranked 2nd while the Varsity squad ended up ranked 5th going into the playoffs. The top seed went to the excellent robotics team from Essex, the HiveMind (#3397).

Heading into the knockout stages of the tournament where the top teams get to choose their alliance partners in a fun sort of mock formal ceremony, Knowing that only the captain team of a winning alliance gets qualified for the World Championship, the 2nd ranked JV RoboRedHawks rebuffed the overtures of joining the 1st ranked Essex team for an easy tournament win. This put the JV RoboRedHawks in charge of their own alliance and thus if their alliance would win they would get a berth to the World Championship. This is a robotics tournament version of pulling the goalie in the last 2 minutes of a game to try to even the score and win in overtime...

In a show of CVU pride and solidarity, the JV RoboRedHawks selected their varsity brethren, the RoboHawks, as their alliance partner for the playoffs! This strong alliance cruised past an alliance between MMU and Manchester, winning the first two matches in a best of three semi-final playoff, with a 97 to 67 and 142! to 39 point victories! Heading into the finals to battle a very strong alliance of Essex HiveMind and U32 Bubbert Innovations!

The finals were just as exciting as last year!

The CVU alliance had an incredible first match with RoboHawks scoring a perfect autonomous run and the alliance's initial score was 40 points ahead! However, penalty points for a bad driving mistake cost them the win...with a massive 50 point penalty awarded to the opposing alliance, the Essex - U32 alliance won the first match. In the second match the CVU alliance had a strong win 92 to 64 to force a tie breaking match 3! The third and final match of the finals was AWESOME! Both alliances were outstanding and scored well in both autonomous period and driver control periods. After the final buzzer, CVU squeaked out a victory 119 to 115...the closest final in the history of the Vermont tournament!

With the win the JV RoboRedHawks team secured themselves a berth to the World Championship in Houston, Texas in April. Not to be outdone by the JV team, the varsity RoboHawks had the better scoring robot and vastly outscored all teams in the judged presentation, design, and engineering portfolio events of the tournament. The RoboHawks were selected as the Inspire Award champions as the best robot and team in the tournament and also qualify for the World Championship!

[Times Argus Newspaper Article](#)

VT State FTC Robotics Championships

(Feb. 10, 2023)

Semi-Final

	Blue Alliance	Red Alliance
Alliance Team Capt	10889 (MansField Mechanics United)	22683 (JV RoboRedHawks)
Alliance Team Partner	16221 (Manchester Machine Makers)	5741 (RoboHawks)
(Vid Link) Match 1	67	97 (WIN)
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RedHawk Robotics
Sponsors



THANK YOU SPONSORS!

Importance of COMMUNICATION (Engineering Notebook, Eng. Portfolio, and Design Presentation)

Award Name	Aspects of Notebook Judged
Inspire Award	Must include Engineering Section , a Team Section and a Business or Strategic Plan . The entire Engineering Notebook must be high quality, thoughtful, thorough, detailed and well organized
Think Award	Must have an Engineering Section that includes entries describing underlying science, mathematics, and game strategies; demonstrate that the Team has a clear understanding of the engineering design process; must recount the Team's journey, experience and lessons learned
Connect Award	Must include Business or Strategic plan that identifies their future goals and the steps they will take to reach those goals.
Innovate Award	Must include Engineering Section that documents the design process and how the Team arrived at their design solution.
PTC Design Award	Must include Engineering Section that includes detailed Robot design drawings (using PTC or CAD).
Motivate Award	Must include Business or Strategic plan that identifies their future goals and the steps they will take to reach those goals.
Control Award	Must include an Engineering Section that documents control components.

[Link to Tips for Better Eng. Portfolio & Notebook](#)

Inspire Award

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event
- Team is a strong contender for several other judged awards. The Inspire Award celebrates the strongest qualities of all the judged awards.
- The Team is an ambassador for FIRST programs. They demonstrate and document their work in their community.
- Team is positive and inclusive, and each team member contributes to the success of the Team.
- Team must submit an engineering portfolio. The engineering portfolio must include engineering content, team information and a team plan. The entire engineering portfolio must be high quality, thoughtful, thorough, concise, and well-organized.
- Robot design is creative and innovative, and the Robot performs reliably on the field. The Team communicates clearly about their Robot design and strategy to the judges.
- Team interview session is professional and engaging.
- The Team should have an engineering notebook available for the judges to review that provides the detailed information to support the information in the portfolio.

Think Award (removing engineering obstacles through creative thinking)

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Engineering Portfolio must have engineering content. The engineering content could include entries describing examples of the underlying science, mathematics, and game strategies in a summary fashion.
- Engineering Portfolio must provide examples that show the Team has a clear understanding of the engineering design process including examples of lessons learned.
- Engineering Portfolio should inspire the judges to want to see the detailed engineering content in the Engineering Notebook.

- Portfolio format is less important but enables the judges to understand the team's design maturity, organizational capabilities and overall team structure.
- Portfolio could reference specific experiences and lessons learned but should capture the summary of the current status of the Team and their robot design.
- Portfolio could also summarize experiences and lessons learned from outreach with concise tables of outcomes.
- Teams should flag or provide a reference to 6 to 8 pages of the engineering notebook(s) to support the engineering content included in the engineering portfolio.
- Engineering portfolio could summarize how the Team acquired new mentors or acquired new knowledge and expertise from their mentors.
- Engineering portfolio could contain summary of overall Team plan.
- Engineering portfolio could contain information about the plans to develop skills for Team members.

Connect Award (connecting the dots between community, FIRST, and the diversity of the engineering world)

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Team must submit an engineering portfolio.
- Portfolio must include a Team plan that covers the Team's goals for the development of team member skills, and the steps the Team has taken or will take to reach those goals. Examples of what the plan could include are timelines, outreach to science, engineering, and math communities, and training

Portfolio must include a summary of how the Team acquired new mentors or acquired new knowledge and expertise from a mentor. Working with mentors from FIRST's Mentor Matching site is an acceptable way to learn from mentors.

- Team provides clear examples of developing in person or virtual connections with individuals in the engineering, science, or technology community.
- Team actively engages with the engineering community to help them understand FIRST, the FIRST Tech Challenge, and the team itself.

Collins Aerospace Innovate Award (bringing great ideas from concept to reality.)

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Team must submit an engineering portfolio.
- The engineering portfolio must include examples of the Team's engineering content that illustrate how the Team arrived at their design solution.
- Robot or robot sub-assembly must be creative, elegant and unique in its design.
- Creative component must be stable, robust, and work reliably.
- The portfolio should inspire the judges to want to see the detailed engineering content in the engineering notebook.

Control Award (mastering robot intelligence.)

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Team must apply for the Control Award by filling out the Control Award Submission Form, located in Appendix E. The Control Award Submission Form should not exceed 2 pages.
- The team must submit an engineering portfolio. The engineering portfolio must include engineering content that documents the control components.

- Control components must enhance the functionality of the Robot on the playing field.
- Advanced software techniques and algorithms are encouraged.
- Control components should work reliably.
- Additional detailed information can be included in the Team's engineering notebook
- Learnings from the team about what they tried and what didn't work with regards to sensors, hardware, algorithms and code

This award focuses on a Team's ability to program a robot that can reliably and efficiently carry out tasks during Match play, in a way that improves their ability to score during a match.

The judges should look for:

- What sensors and hardware the Team is using on the Robot; what worked, what didn't, and why.
- What algorithm or code the team has programmed their Robot with; what worked, what didn't, and why.
- The judges should pay attention to the program and design process. The design process is more critical than the code itself.

Motivate Award (Sparking others to embrace the culture of FIRST!)

(Documenting the learning from failure – what didn't work – and understanding how to improve the team's design process) is what we are assessing.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Team must submit an engineering portfolio. The engineering portfolio must include a Team organization plan, which could describe their future goals and the steps they will take to reach those goals. Examples of what the plan could include are team identity, fund-raising goals, sustainability goals, timelines, outreach, finances, and community service goals.
- The Team is an ambassador for FIRST programs.
- Team can explain the individual contributions of each team member, and how these apply to the overall success of the team.
- Team as a whole takes part in their presentation, and actively engage with the judges.
- Team shows a creative approach to materials that market their Team and FIRST.
- Team can clearly show the successful recruitment of people who were not already active within the STEM community.
- Team could also summarize experiences and lessons learned from outreach

Design Award (Industrial design at its best)

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST Tech Challenge event.
- Team must submit an engineering portfolio with an engineering content which could be CAD images or robot drawings of the Team's overall design and/or components
- Team also documents and implements strong industrial design principles, striking a balance between form, function, and aesthetics.
- Robot distinguishes itself from others by its aesthetic and functional design.
- Basis for the design is well considered (that is inspiration, function, etc.).
- Robot design is effective and consistent with Team plan and strategy.
- The engineering portfolio should inspire the judges to want to see the detailed design content and design journey in the engineering notebook.