

Annual Report 2021-22 REC Foundation www.recf.org

2021ANNUAL2022REPORT

Robotics Education & Competition Foundation

1519 Interstate 30-West Greenville, TX 75402 USA recf.org robotevents.com



The Robotics Education & Competition (REC) Foundation's mission is to increase student interest and involvement in science, technology, engineering, and mathematics (STEM) by engaging students in hands-on, affordable, and sustainable robotics engineering programs.

We see a future where all students design and innovate as part of a team, experience failure, persevere, and embrace STEM. These lifelong learners emerge confident in their ability to make the world a better place.





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REC Foundation

1519 Interstate 30 West Greenville, Texas 75402 United States

CEO Statement

After almost two years of being apart, the robotics community was once again able to gather together in Dallas in May of this year for the VEX Robotics World Championship, presented by the Northrop Grumman Foundation.



Dan Mantz CEO and Chairman of the Board

It was an incredible celebration of perseverance as nearly 3,000 teams from Indiana to Istanbul competed in the championship. Both the crowd and competitors shook the Dome with excitement and enthusiasm...it was truly a wonderful sight. On behalf of the entire RECF, thank you to all of the sponsors, staff, coaches, and volunteers who made it all possible.

The Aerial Drone Competition (formerly known as RADC) continues to grow and was showcased at this year's Worlds. With a new name and an unwavering focus on equipping students with skills easily transferable to the modern workforce, I am confident that the competition will inspire the next generation to reach for STEM careers.

Our expansion into the world of drones also included a new partnership with Bell, as we launched the Bell Advanced Vertical Robotics Competition. One of the most advanced competitions of its kind, Bell AVR combines land based robotics with aerial drones, challenging students to come up with solutions to real-world problems through building, coding, programming, and operating cutting edge robots. Even the field itself is an engineering marvel, and I cannot wait to see what next season brings.

Congratulations to this year's World Champions, Online Challenge Winners, and Inspiration All-Stars, all of whom exemplify the spirit of innovation, mutual respect, and integrity that we at the REC Foundation hope to embody. If the pandemic has taught us nothing else, it is that the STEM community is needed now more than ever as leaders in uncertain times.

Once again, thank you for your continued support of the REC Foundation's mission and vision. Our future is full of possibility, and I look forward to the challenges and victories that the 2022-23 season will bring.



Global Events and Interaction

VRC High School

Finals

TX 20066

01.

VEX GO WORKSHOPS MARCH, 2021

This past season, we launched a workshop series using the VEX GO platform. Designed for students in grades 3 and 4, VEX GO is an affordable construction system that teaches the fundamentals of STEM through handson activities that help young students learn coding and engineering while having fun.

02.

03.

RETURN TO IN-PERSON VEX WORLDS APRIL 2022

The 2022 VEX Robotics World Championship, presented by Northrop Grumman Foundation and the REC Foundation, brought over 3,000 teams from 36 nations together to celebrate STEM excellence. This was the first time students competed at an in-person World Championship since the COVID-19 pandemic.

Student-led teams ranging from elementary to university-level showcased their strategy, teamwork, and desire to be crowned champions at this worldclass global event held at the Kay Bailey Hutchison Convention Center in Dallas, Texas.

FIRST RADC CHAMPIONSHIP AT VEX WORLDS APRIL 2022

The inaugural REC Foundation Aerial Drone Competition (RADC) Championship was held during VEX Worlds in Dallas. Using Parrot Mambo and CoDrone EDU drones, over 65 teams from across the country vied for aerial supremacy during this exciting World Championship event. The RADC Championship showcased student piloting, programming and teamwork skills.



Our Sponsors

The Robotics Education & Competition Foundation is grateful for the generous support of our sponsors who provide team grants, support local tournaments, state championships, and the VEX Robotics World Championship. "Don't let anyone hold you back. If you work hard and stay focused, you can achieve your dreams no matter if they're in robotics or STEM. Don't give up. Always go forward and have confidence in yourself."

> -Samantha Robotics Student



Donor Spotlight

The 2021-2022 season saw a return to in person REC Foundation competitions as students from across the country convened for the 2022 VEX Robotics World Championship. A huge thank you to our presenting sponsor, the Northrop Grumman Foundation, for continuing to support our students' efforts as they returned to Dallas after a year-long hiatus.

Additionally, we continued to expand our programmatic offerings with the introduction of the Aerial Drone Competition. This program encourages students to learn about the principles of flight, piloting, programming, and working together as a team to traverse a series of game elements using an off-the-shelf drone. With the help of our sponsor, the Defense Science, Technology, Engineering, and Mathematics Education Consortium (DSEC), hundreds of students took to the air for this exciting inaugural season. Thank you to the United States Department of Defense and DSEC for the contributions to this important endeavor.

Also, we expanded our partnership with Google with the introduction of the Google MOVER program to provide additional financial support for new or under-resourced teams in the form of the Rising Teams initiative. Google employees provided technical and strategy support to teams in order to foster a sense of belonging to underrepresented groups in STEM. We thank Google for their continued engagement with our talented students.



Annual Numbers



Financial Highlights

Fiscal year ended August 31, 2022

Revenue and Support	Total	Program Services	General Operating Expenses	Fundraising
Contribution and grants	\$8,475,472	\$8,475,472		
Event income	\$9,336,257	\$9,336,257		
Total revenue and support	\$17,811,729	\$17,811,729		

Expenses	Total	Program Services	General Operating Expenses	Fundraising
Salaries	\$4,449,358	\$ 3,114,551	1,334,807	-
Advertising	\$249,899	-	-	\$249,899
Travel	\$870,319	\$870,319	-	-
Insurance	\$7,764	\$6,910	\$854	-
Facility	\$428,809	\$381,640	\$47,169	-
Event Support	\$11,308,305	\$11,308,305	-	-
Scholarships	\$3,052	\$3,052	-	-
Office Expenses	\$102,615	\$91,327	\$11,288	-
Other	\$1,820	\$1,620	\$200	-
In Kind Expense	\$9,000	\$9,000	-	
Depreciation	\$ 11,669	\$11,669	-	-
Total expenses	\$17,442,610	\$15,798,393	\$ 1,394,318	\$249,899



EAM APPRE

Future in STEM

Amazing things are in store for the REC Foundation community this upcoming season! With the announcement of the 2022-2023 season games, VRC Spin Up and VIQC Slapshot, participants from around the world are already gearing up for an exciting year of competition. Aside from VRC and VIQC offerings, we will once again partner with Bell Flight to reveal this year's AVR competition in August - perhaps the most advanced game of its kind in the world.

The Aerial Drone Competition continues to thrive, and we expect more teams than ever before to fly with us this season. As always, we are proud to provide programming to students that prepares them for the STEM and computer science careers of the future.







"My experience with #VEXRobotics actually began in elementary school when my Dad took me to watch a competition at CSUN, where my future team was competing. I remember going up to the field and getting as close as I could to watch the robots, honestly mesmerized by them. This sparked a new interest in me, which led me to compete in the VEX Robotics Competition from 6th through 12th grade on Teams 83 and 1138. I grew especially fond of programming, which led me to finish 1st in the Starstruck Virtual World Online Challenge. Now, I have secured a software internship at Amazon this summer and am working towards a Computer Science degree at the University of San Diego."

> - Christian Gideon REC Foundation, Alumni



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