

elcome to the inaugural season of the FTC United States Super-Regional Championship Tournaments Sponsored by Rockwell Collins. This 2013-2014 FTC BLOCK PARTY! season introduces a new layer to the FTC event advancement structure. Teams in the United States will advance from state or regional-level Championship Tournaments to one of four Super-Regional Championship Tournaments. Top teams from the Super-Regional Championship advance to the FTC World Championship in St. Louis, Mo. This new event structure allows FTC to retain a merit-based advancement structure as the program continues to grow.

This year's FTC Super-Regional Championships Sponsored by Rockwell Collins:



South: 2/26/14 - 2/28/14 Henry B. Gonzalez Center San Antonio, TX





West: 3/20/14 - 3/22/14 McClellan Conference Center Sacramento, CA





North: 4/3/14 - 4/5/14 University of Iowa Carver Hawkeye Arena Iowa City, IA





East: 4/3/14 - 4/5/14 York Expo Center Memorial Hall York, PA



An estimated 3,000 teams will compete at more than 200 Qualifying and Championship Tournaments taking place in the U.S., Australia, Canada, China, France, Germany, India, Mexico, Netherlands, New Zealand, Romania, Russia, Saudi Arabia, Singapore, South Korea, and Taiwan during the 2013-2014 FTC season. The FTC BLOCK PARTY! season culminates with the FTC World Championship, April 23-26, 2014, at the Edward Jones Dome in St. Louis, Mo. The 2013-2014 FIRST Tech Challenge Sponsors include Official Program Sponsor for the FIRST Tech Challenge, Rockwell Collins, and FTC CAD and Collaboration Sponsor, PTC.





























FIRST®LEGO®League

FIRST® Tech Challenge



Grades K-3

Grades 4-8

Grades 7-12

Grades 9-12

Welcome to the FIRST® Tech Challenge (FTC®)

FTC is designed for students in grades 7-12 to compete head to head, using a sports model. Teams are responsible for designing, building, and programming their robots to compete in an alliance format against other teams. The robot kit is reusable from year-to-year and is programmed using a variety of languages. Teams, including Coaches, Mentors and Volunteers, are required to develop strategy and build robots based on sound engineering principles. Awards are given for the competition as well as for community outreach, design, and other real-world accomplishments.

"...to create a world where science and technology are celebrated...
where young people dream of becoming science and technology leaders."
- FIRST Founder, Dean Kamen



About FTC

FTC is an exciting and fun global robotics program that ignites an enthusiasm for science, technology and discovery in young people and teaches them STEM skills and concepts, principles of leadership, and how to work as a team.

The competitions are the result of focused brainstorming, dedicated mentoring, project timelines and teamwork. Paired with technical mentors, teams learn from and play with the "pros" to experience engineering problem solving first-hand.

- Entices kids to think like scientists and engineers
- Provides a fun, creative, hands-on learning experience
- Teaches kids to experiment and overcome obstacles
- The skills that they learn make math and science tangible, accessible and real
- Endorsed by the National Association of Secondary School Principals
- Teams learn to document their design ideas and discoveries
- Builds self-esteem and confidence
- 90% of students in FTC report learning how STEM can solve real-world problems

BLOCK PARTY!sm Game Description

The Game:

FTC BLOCK PARTY! is played on a 12'x12' square field with approximately 1'-high wal1s and soft foam mat playing surface. Two randomly selected teams are paired together as an Alliance to play one match against a second Alliance. Alliances are designated as either "Red" or "Blue".

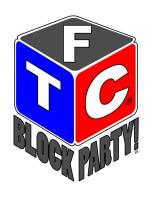
Scoring Elements are 100, 2", 2 oz. plastic blocks. These blocks are yellow and can be used by all robots. At the center of the field is an assembly that includes a center bridge, pull-up bar, and two pendulums—each with four "pendulum goal baskets." Below the pendulums are floor scoring areas. An infrared (IR) Beacon is randomly placed under one of the four goals on each pendulum after robots are placed on the field, but before the Autonomous period starts. The field includes tape to aid robot navigation and to mark protected areas. Each Alliance also has their own flagpole in opposite corners of the field.

At the start of a match, blocks are located in the two corners a the front and back of the playing field and are distributed evenly with approximately 48 per corner at the start of the match. Each robot starts with one block with teams can preload onto their robot. Robots may not possess or control more than four blocks at any time. Each Alliance starts with their robots touching the outer field perimeter wall on their side of the playing field.

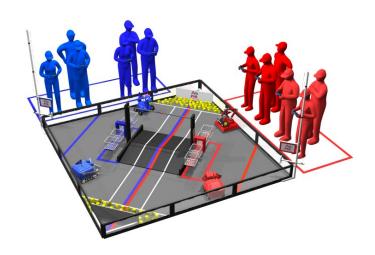
Matches have two distinct periods of play: a 30 second Autonomous period followed by a two-minute Driver-Controlled period, which includes a 30-second End Game.

Autonomous Period:

The Game starts with a 30-second Autonomous period where robots are operated via pre-programmed instructions only. Prior to the end of the match, an IR Beacon navigation aid is placed randomly on one of four pendulum goals. Autonomous blocks placed in the goal designated by the IR Beacon receive bonus points. Robots gain points in Autonomous by: driving to the bridge and parking partially or fully upon it, placing blocks in the floor-scoring area below the balance, or placing blocks in the pendulum goals.







Driver-Controlled Period:

During the Driver-Controlled period, teams retrieve up to four blocks at a time from one of two block zones and place them in pendulum or floor goals. Blocks may not be de-scored from the pendulum goals, but may be de-scored from the floor goals. Alliances may score blocks into their opponent's pendulum goals, except during the End Game period.

End Game:

The final thirty (30) seconds of the Driver Controlled Period is called the End Game. In addition to placing blocks in the scoring areas, robots earn points in the End Game by: raising their Alliance flag up a flagpole, raising themselves off of the grown using the bridge pull-up bar, and ending the match with a balanced pendulum.

Autonomous Period Scoring:

Autonomous block in the IR Beacon designated goal	40 points
Autonomous block in a regular pendulum goal	20 points
Autonomous block in a floor goal	5 points
Robot completely supported by the bridge	20 points
Robot on the bridge and touching the Field floor	10 points

Driver-Controlled Scoring:

Block scored in the floor goal	1 point
Block scored in the inner pendulum goal	2 points
Block scored in the outer pendulum goal	3 points

End Game Scoring:

Raised Alliance flag high level	35 points
Raised Alliance flag low level	20 points
Robot hangs from pull-up bar	50 points
Balanced pendulum goal bonus	50% of block score





Tournament Schedule

Thursday, April 3

12:00 pm	. Team Pits Open
1:00 pm — 6:00 pm	. Judging & Robot Inspection
7:00 pm	. Team Pits Close

Friday, April 4

7:00 am	. Team Pits Open
8:00 am	. Drivers Meeting
9:00 am	. Opening Ceremony
9:30 am — 12:00 pm	. Qualifying Matches
12:00 pm — 1:00 pm	. Lunch Break
1:00 pm — 5:30 pm	. Qualifying Matches
6:00 pm	. Team Pits Close
7:30 pm — 10:30 pm	. Team Social, Banquet Hall



Match Play

During the **Qualifying Matches**, teams are randomly assigned into alliances of 2 teams. A team's alliance partner in one match may be their opponent in the next match.

Teams will be ranked from first through last on the basis of their total Qualifying Points (QPs). If multiple teams have the same QP total, then teams will be ranked on the basis of their Ranking Points (RPs). If multiple teams have the same RP total as well, then teams will be ranked on the basis of their highest match score. If still tied, the next highest match score will be used until the tie is broken.

Qualifying Points: Teams receive 2 points for a Win, 1 point for a Tie and 0 points for a loss or disqualification (DQ).

Ranking Points: All teams receive the score of the losing alliance unless they have a DQ (which gives the team 0 RP).

Alliance Selections are held after all of the qualifying matches take place. Four alliance captains are selected based on the team rankings. These captains then pick one or two (depending on the size of the event) additional teams to be their alliance partners for the Elimination Matches.

During the **Elimination Matches**, Alliances compete to be the first to win two matches in a standard best two out of three elimination round.

Saturday, April 5

7:00 am	Team Pits Open
7:30 am — 9:00 am	Qualifying Matches
9:00 am	Alliance Selection
9:45 am — 12:00 pm	Division Elimination Rounds
12:00 pm — 1:00 pm	Lunch Break
1:00 pm — 2:00 pm	Championship Event Finals
2:30 pm	Closing Awards Ceremony
4:30 pm	Team Pits Close

Times are approximate and subject to change.







Participating Teams — Hopper Division

Team #	Team Name	School / Organization	<u>Location</u>
1	Team Unlimited	Team Unlimited	Sharon, MA
61	Ozone	Oxford Robotics	Oxford, PA
248	Fatal Error	Pope John XXIII Regional High School	Sparta, NJ
519	Epsilon Delta II	Herndon High School	Herndon, VA
1885	ILitening Robotics	Battlefield High School	Haymarket, VA
3085	Higgs Bots	Mt. Everett Regional High School	Sheffield, MA
3415	Livingston High School Lancers	Livingston High School	Livingston, NJ
3749	WaWIFATuM	GW Community School	Springfield, VA
4082	RoboSpartans	RoboSpartans Robotics	New Hartford, NY
4102	CHS Cougars	Columbia High School	Maplewood, NJ
4134	Wrench in the Works	Chester County Robotics	Downingtown, PA
4174	Atomic Theory	The Dalton School	New York, NY
4185	Silver Soldiers	gPARSEC	Pottstown, PA
4240	Techno Clovers	GEARS 4H	Accident, MD
4318	Green Machine	Horizons 4-H Club	Ellicott City, MD
4377	SCRAPPERS	New Bedford High School	New Bedford, MA
4554	Robo Mustangs	Putnam Science Academy	Putnam, CT
4856	Minnie MASH	Friends of 401	West Vincent Twp, PA
4970	Loose Screws	Western Albemarle High School	Crozet, VA
4995	Titanium Tigers	Francis Lewis High School	Queens, NY
5017	RoboEpic	Greenwich Academy	Greenwich, CT
5069	Robogamers	Robogamers Robotics Club	New York, NY
5357	CCRT Highlanders	Chase Collegiate School	Waterbury, CT
5414	Techie Tornados	Richlands High School	Cedar Bluff, VA
5468	Finding Blue Moose	Knox Home Robotics	Foster, RI
5602	Bionic Gaels	Kennedy Catholic High School	Somers, NY
6029	Robowiz	Robowiz	Fairfax, VA
6055	GearTicks	GearTicks	Lincoln, MA
6100	Chariots of Fire	New Life Bible Church	Columbia, MD
6217	The Fellowship	C-squared Robotics	North Scituate, RI
6347	Geared Up	Geared Up Robotics	Rome, NY
6508	Radioactive Raiders	North Brunswick High School	North Brunswick, NJ
6820	Team IMPACT	US STEM Foundation	Haymarket, VA
7055	Cruzin' Comets	Abington Heights High School	Clarks Summit, PA
7149	EHT PAL Enforcers	Egg Harbor Twp PAL	Egg Harbor Twp, NJ
7350	Watt NXT?	Say Watt Robotics	Edison, NJ

Participating Teams — Tesla Division

Team #	Team Name	School / Organization	Location
36	Wyverns	Kingswood Oxford School	West Hartford, CT
154	Renegade Robotics	Burrillville High School	Harrisville, RI
365	MOE	First State Robotics	Wilmington, DE
577	Wreckers Robotics	Wreckers Robotics	Westport, CT
2753	Team Overdrive	Teen Technology	Bridgewater, NJ
3113	Some Disassembly Required	Boy Scout Troop 793	Ellicott City, MD
3737	Hank's Tanks	Natick High School	Natick, MA
4029	2 Bits and a Byte	Lexington High School	Lexington, MA
4084	Brooke Point Robotics	Brooke Point High School	Stafford, VA
4107	MohonBots	Mohonasen High School	Schenectady, NY
4137	Islandbots	Islandbots Robotics	Setauket, NY
4183	The ICEBREAKERS	Girl Scouts of Nassau County	Garden City, NY
4220	Landroids	Livingston Robotics Club	Livingston, NJ
4311	Watt The Hex?	Say Watt Robotics	Edison, NJ
4347	NanoGurus	NanoGurus Robotics	Morris Plains, NJ
4433	Smokin' Motors	Conrad Weiser High School	Robesonia, PA
4592	Nuts and Bolts	Community Team	Centreville, VA
4924	Tuxedo Pandas	New River Robotics	Christiansburg, VA
4977	LANLords	Lancaster Robotics	Millersville, PA
4999	Imagine It	Imagine It Robotics	Palmyra, PA
5030	Ladybots	Mt. Hope High School	Bristol, RI
5169	Watts Up?	Say Watt Robotics	Edison, NJ
5378	Team Aperture	Ashburn Robotics	Ashburn, VA
5421	RM-ed and Dangerous	Richard Montgomery High School	Rockville, MD
5488	RoboDragons	Freire Charter School	Philadelphia, PA
5904	Crazy Bot	Flint Hill School	Oakton, VA
6051	Quantum Mechanics	The Dalton School	New York, NY
6081	i ² robotics	Westport Robotics	Westport, CT
6191	Short Circuits	Central Bucks High School South	Warrington, PA
6337	Metal Marauders	Metal Marauders Robotics	Morris Plains, NJ
6496	SEP Nerd Herd	St. Edmund Preparatory High School	Brooklyn, NY
6657	LEGOtronettes	Girl Scouts of Nassau County	Long Island, NY
7039	Lord of the Bricks	Pierian Springs Foundation	Mechanicsville, VA
7120	Bionica	Hewlett High School	Long Island, NY
7294	Tesla Pandas	Whippany Park High School	Whippany, NJ
8221	Cubix	ETC Robotics	Hampstead, MD

FIRST Tech Challenge Awards

INSPIRE. This judged award is given to the team that the judges feels truly embodies the "challenge" of the program. The team serves as an inspiration as to what this program, and the young minds involved, can accomplish. This team has performed well in all categories and is chosen as a role model for all teams. This is the highest award that a team can be given.

PTC DESIGN. This judged award is presented to the team that has best incorporated both functional and aesthetic design elements into their solution without compromising either one.

ROCKWELL COLLINS INNOVATE. This judged award celebrates the team that not only thinks outside the box but also has ingenuity and inventiveness in their design solution.

MOTIVATE. This judged award celebrates the team that exemplifies the essence of teamwork and team spirit.

CONNECT. This judged award is given to the team that has best connected with their local community and engineering community.

engineering communit









THINK. This judged award is given to the team that best reflects their ideas, season and journey through their engineering notebook.

CONTROL. (*Pilot*) This judged award celebrates a team that uses sensors and software to enhance the robot's functionality on the field.

PROMOTE. This judged award is given to the team that is most successful in creating a compelling video message for the public designed to change our culture and celebrate science, technology, engineering and math.

COMPASS. This judged award recognizes an adult Coach or Mentor who has been nominated by their team members for providing outstanding guidance and support for the team throughout the year.

ALLIANCES. The winning alliance and finalist alliance are both recognized for their achievement in robot game performance.













Honoring East Coast Technology Pioneers

Our two competition divisions are named after these science and technology leaders who lived and worked on the East Coast of the United States and contributed greatly to our society.

Grace Murray Hopper (1906 — 1992)



"Amazing Grace" Hopper created modern programming languages and conceptualized and promoted progressive technologies that are used today in computing and communications. She also coined the term "debugging" to fix computer errors. She served in the U.S. Navy for most of her career and retired at the rank of Rear Admiral.

Nikola Tesla (1856 — 1943)



Nikola Tesla was an electrical and mechanical engineer as well as a prodigious inventor. He developed alternating current (AC), built the first hydroelectric dam with George Westinghouse, invented the induction motor, the rotating magnetic field, the Tesla coil, and the radio remote control for torpedoes among many other achievements.

FIRST Scholarships

Many colleges and universities, professional associations, and corporations offer college scholarships to high school students on *FIRST* teams. This is official recognition of the knowledge and technical and life skills these students have gained from participating in a *FIRST* competition.

For the 2013-2014 season, we have **150 confirmed scholarship providers** that are making available **887 individual scholarship opportunities** with a total value of **more than \$18 million**!

- Funded and administered by the Scholarship Providers (colleges, universities, corporations, etc.), not by FIRST
- Vary from one-time awards of \$500 to full four-year tuition (estimated at \$160,000)
- Typically merit-based and cover a broad range of scholastic abilities
- Not just for Engineering majors over 35% of FIRST Scholarships can be used for any course of study
- Usually for use at a specific college or university, but a few can be used at any school



2013 — 2014 FIRST Scholarship Providers

Adelphi University American Petroleum Institute -Delta Chapter Arizona State University **Baker University** Bart Kamen Memorial FIRST Scholarship Boston University **Bradley University Bucknell University** California State University, Los Angeles/Boeing Capitol College Carleton University Carnegie Mellon University/Boeing Case Western Reserve University Central Washington University Clarkson University College for Creative Studies College of the Atlantic Colorado State University Columbia University Daniel Webster College Dean and Theresa Klein FIRST Gracious Professionalism **Engineering Scholarship** DePaul University DigiPen Institute of Technology **Drexel University** Eastern Michigan University Eastern Washington University **Edmonds Community College** Embry-Riddle Aeronautical University - AZ Embry-Riddle Aeronautical University - FL Fairleigh Dickinson University Farmingdale State College Florida A&M University/Boeing Florida Institute of Technology Frank Minolli Foundation-Summer Pre-College Scholarship **Gates Corporation** Georgia Institute of Technology **Grand Valley State University** Hampshire College Harvey Mudd College Hofstra University Instituto Tecnologico Autonomo

de Mexico (ITAM)

ITT Technical Institute Johnson & Wales University Kettering University Lake Superior State University Lawrence Technological University Lindenwood University Marguette University Maryville University Massachusetts Institute of Technology McKendree University Merrimack College Metropolitan Community College - Maple Woods Milwaukee School of Engineering Mineral Area College Missouri University of Science and Technology Molloy College New Jersey Institute of Technology NHTI, Concord's Community College Nipissing University North Carolina A&T State University North Carolina State University Northeastern University Northwestern University Nuts, Bolts & Thingamajigs, The Foundation of FMA, Intl. Ohio State University Olin College of Engineering Oregon Institute of Technology Oregon State University Pace University Pacific University Pellissippi State Community College Pennsylvania State University Phil Clancy Memorial Scholarship Plymouth State University Portland State University Purdue University - Computer Science Queen's University Randolph College Redstone College Rensselaer Polytechnic Institute Rochester Institute of Technology Rose-Hulman Institute of Technology Rutgers, The State University of New Jersey

Semester at Sea / Institute for Shipboard Education **SMaRT Education** SME Education Foundation Society of Petroleum Engineers -**Delta Section** Society of Women Engineers -Houston Area South Dakota School of Mines and Technology Southern California Regional Robotics Forum (SCRRF) Southern Methodist University Spring Arbor University Stevens Institute of Technology SUNY Institute of Technology SUNY Potsdam Sweet Briar College Temple University Texas A&M University **Tulane University** University of Advancing Technology Murphy FIRST Scholarship University of Central Missouri University of Connecticut University of Detroit Mercy University of Illinois at Chicago University of Iowa University of Kansas University of Massachusetts Amherst/PTC University of Massachusetts Lowell -Engineering University of Massachusetts Lowell - Sciences University of Minnesota, Duluth University of Minnesota/PTC University of Mississippi University of Missouri University of Missouri - Kansas City University of New Hampshire University of New Hampshire Manchester University of Ontario Institute of Technology University of Portland

Schoolcraft College

Seattle Pacific University

University of Southern California University of Tennessee University of Texas Arlington University of Texas at Austin University of Texas at San Antonio University of Toronto University of Washington/Boeing University of Waterloo University of Wisconsin - Madison **US Navy ROTC** Vaughn College of Aeronautics and Technology Virginia Commonwealth University Washington State University - Agriculture Washington State University - Engineering Washington University in St. Louis/Boeing Webb Institute Western University Engineering Westwood College Worcester Polytechnic Institute -Design Innovation Scholarship Worcester Polytechnic Institute -Paul Allaire Future Engineering Leadership Scholarship Xavier University Yale University York University

University of Rochester

University of South Carolina

University of South Florida



Youngstown State University

http://www.usfirst.org/scholarships



About FIRST

FIRST (For Inspiration and Recognition of Science and Technology) was founded by inventor Dean Kamen to inspire young people's interest and participation in science and technology. Based in Manchester, New Hampshire, FIRST is a 501(c)(3) not-for-profit public charity.

As a volunteer-driven organization, *FIRST* is built on partnerships with individuals as well as businesses, educational institutions, and government. Some of the world's most respected companies provide funding, mentorship time and talent, and equipment to make *FIRST*'s mission a reality. As a team coach, you join over 80,000 committed and effective volunteers who are key to introducing close to 200,000 young people to the joy of problem solving through engineering.

FIRST provides four programs: the FIRST Robotics Competition (FRC) and the FIRST Tech Challenge (FTC) for grades 7-12; FIRST LEGO® League (FLL) for 9 to 14 year-olds, and Junior FIRST LEGO League for 6 to 9 year-olds. Also located at FIRST headquarters is the research and development facility called FIRST Place. FIRST Place is integral to game design, new program development, evaluation, and professional development of FIRST mentors.

Gracious Professionalism, A FIRST Credo

Dr. Woodie Flowers, FIRST National Advisor, asks and provides his view regarding the question, "Why do FIRST folks talk so much about that phrase?"

"Obviously it would not make sense to endorse 'asinine professionalism' or 'gracious incompetence.' It is, however, completely consistent with the *FIRST* spirit to encourage doing high quality well informed work in a manner that leaves everyone feeling valued.

Gracious professionalism seems to be a good descriptor for part of the ethos of *FIRST*. It is part of what makes *FIRST* different and wonderful.

Gracious professionalism has purposefully been left somewhat undefined because it can and should mean different things to each of us. We can, however, outline some of its possible meanings. Gracious attitudes and behaviors are win-win. Gracious folks respect others and let that respect show in their action. Professionals possess special knowledge and are trusted by society to use that knowledge responsibly. Thus, gracious professionals make a valued contribution in a manner pleasing to others and to themselves.

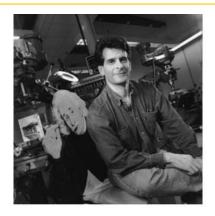
In FIRST, one of the most straightforward interpretations of gracious professionalism is that we learn and compete like crazy, but treat one another with respect and kindness in the process. We try to avoid leaving anyone feeling like they are losers. No chest thumping barbarian tough talk, but no sticky sweet platitudes either. Knowledge, pride and empathy comfortably blended.

Understanding that gracious professionalism works is not rocket science. It is, however, missing in too many activities. At *FIRST* it is alive and well. Please help us take care of it.

In the long run, gracious professionalism is part of pursuing a meaningful life. If one becomes a professional, and uses knowledge in a gracious manner, everyone wins. One can add to society and enjoy the satisfaction of knowing that you have acted with integrity and sensitivity. That's good stuff!"

"We want to change the culture by celebrating the mind. We need to show kids that it's more fun to design and create a video game than it is to play one."

Dean Kamen, Founder, FIRST



Dean Kamen is President of DEKA Research & Development Corporation; a dynamic company focused on the development of revolutionary new technologies that span a diverse set of applications. As an inventor, physicist, and entrepreneur, Dean has dedicated his life to developing technologies that help people lead better lives. Dean's proudest accomplishment is founding *FIRST*.

Thank You Tournament Volunteers!

East Super-Regional Planning Committee

Pennsylvania FIRST Robotics, FTC Affiliate Partner, Tournament Organizers

Tom Zawislak, Dave Hackett – Co-Chairs

Marshall Coyle, Lise Hackett, Judy Lobos, Vicki Rispoli, Chad Thomas (PA)

Carol Edelman (VA), Pat Frascella (NJ), Vince Frascella (NJ), Lean Kang (DE), Rick Kline (NY)



Event Volunteers

Tournament Director: Tom Zawislak

Judge Advisors: Bill Brownlowe, Lisa Evans

Judges: Paul Arnab, Denise Arruda, Evan Barnet, Greg Boyle, Eric Cheek, Dominick Dennisur, Sunil Gupta, Andrew Harrison, Jessica Isaacs, Anurag Kanwar, Gene Kern, John McClelland, Sam Muthusamy, Art Nilson, JoAnn Rerek, Robert

Russell, Ravi Saran, Anil Saxena, George Sipe, Rita Wall, David Wall, Cliff Warner **Match Observers**: Robert Debes, Mike McCabe, Bill McCann, Rupesh Sheth;

Judge Assistants: Lena Kang, Carol Perrotto

Head Referees: Jeff Lucas (Event), Joe Houle (Division), Adria Garhart, Chris Fogwell

Referees: David Dennisur, Gajanan Deshmukh, Yan Jura, Artem Karapetyan, Michael Klanica, Carol Perrotto, Dominic

Pirrochi, Alex Quick, J. Reidy

Field Technical Advisors: Dave Hackett (Head), Jim Carr, Ben Martin, John Neave, John Yeh **FTA Assistants**: Eitan Kahn, Dave Kauffman, Rick Kline, Robert Sokolov, Andrew Szeto

Field Managers: Joe Perrotto, Len Rerek

Field Operators: Ramkumar Duraisamy, Melissa Marchant, Kyle Thorpe; Software Help Desk: Jim Rumbaugh

Scorekeeping: George Marchant, Lise Hackett, Jeanne Hovenden, Roslyn Nilson

Emcees: Jack Kentfield, Tom Wexler; Game Announcers: Hope Hensgen, Tristen Wertz

DJ: Tommy Gunn, Thunder Kiss Entertainment; Photography: Nemi Agrawal, George Marchant

Queueing Leads: Chris Coulson, Patrick Fee, JoAnn Halloran, Linda Higham, Chase Liquori, Fred Oleson, Rob Quatrone,

Bryan Randall, Damien Rispoli, Hector Travez

Queueing and Field Reset: J Pierre Amy, Richard Bender, Bryan Cerullo, Sarah Fogwell, Brian Hildebrandt, Georgia Ioannou, Don Knox, Corina Mata, Cristian Mata, Matt Schildknecht, Farida Tinker, Richard Tinker, Dan Webb

Pit Admin and Check-In: Pat Frascella (Lead), Lise Hackett, Kara Hensgen, Jeanne Hovenden, Roslyn Nilson

Volunteer Coordinator: Vince Frascella

VIP Coordinator: Marshall Coyle; Student Ambassador Coordinator: Carol Edelman

Thanks to all additional volunteers whose names did not make it into the printed program!

Special Thanks

Color Guard: Boy Scout Troop 793, Maryland

Practice Fields: Chris Fogwell; FTC Teams M*A*S*H/Friends of 401; Vince Frascella, NJ FTC

Banners: Joe Perrotto, Diamond State FTC Advertising Posters: Vicki Rispoli, Ratzo Robotics

Program: Rick Kline, Hudson Valley NY FTC; printing by Pace University Inspection Management: Dominick Dennisur, NYC/Long Island FTC

Volunteer Shirts: Bobby Crusco, Bobbys Graphics

FIRST FTC Staff: Nancy Paul, Mary Lee, Athena Damdounis, JoAnn Halloran, and Ken Johnson

hank you to all who help make this program possible for our youth. *FIRST* could not exist without the support of the army of mentors, parents, teachers and volunteers who step up to provide their time and expertise to inspire our young people to get excited about science, technology, engineering and math.

FTC National Sponsors

FTC Official Program Sponsor

FTC CAD and Collaboration Sponsor



PTC®

FTC East Super-Regional Sponsors







FTC East Super-Regional Event Contractors





