



# **FIRST Buckeye Regional Robotics Competition**

Will be held at the  
Cleveland State University  
Convocation Center

Friday, March 7, 2003, 9 am – 5 pm

Saturday, March 8, 2003, 9 am – 3 pm



If you would like more information on the FIRST Buckeye  
Regional competition log onto  
<http://www.firstbuckeye.org>  
Or if you are interested in getting more information on FIRST,  
Please log onto <http://www.usfirst.org>

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Dear Potential Sponsor of the FIRST Buckeye Regional,

Last year, Cleveland hosted the FIRST Buckeye Regional and over 3,000 high school students from 57 schools descended on the Cleveland State University's Convocation Center to participate in this exciting high school robotic competition. To bring FIRST to Cleveland took the strong support of NASA and the local community – businesses, research hospitals, sports teams and associations, universities, and not for profits.

So successful was the 2002 event, Cleveland has been designated as host site for another regional on March 7-8, 2003, an honor that we hope to maintain for a long, long time.

To make the 2003 FIRST Buckeye Regional as successful as the 2002 Regional, it will take another concerted show of support from the local business community. Towards this end, we have prepared this FIRST Buckeye Regional Fund Raising Package with the hope that your organization will be a sponsor.

If you are not familiar with FIRST, take time to look at the package – especially the pictures – and see the most amazing high technology sporting event ever, an event that will forever change the dreams and aspirations of its participants. FIRST enables students, teachers, parents, and mentors to work together to build a robot that can perform an assigned task in a competitive arena. It is the ultimate application of what you have learned in school to the real world and it is the ultimate training ground for the scientists, engineers, technicians, and computer specialists of tomorrow.

If you are familiar with FIRST, or were a sponsor of the 2002 Regional, won't you please support us again this year and show the community that you still support innovative educational activities that turn dreams into realities.

To make the 2003 FIRST Buckeye Regional a reality will require strong financial support. And that is where you come in.

First and foremost, consider being a Regional Sponsor. For a contribution of \$25,000, Platinum Sponsor, you will be given a major role in the events and awards ceremonies, your corporate logo will be prominently displayed on the Regional Banner and in the official program, and you and your key staff will have VIP status for the entire event. If you can't afford to be a Platinum Sponsor this year, please consider being a Silver Sponsor for a \$5,000 donation to the FIRST Buckeye Regional and have your logo on the sponsor's banner and in the official program, plus receive invites to the key events.

Second, be sure and come to the event. The competition will start at 8:30 am on Friday, March 7 and will end on Saturday, March 8 at 3:30 pm. Come and see what all the excitement is about. Tour the pits with us, meet the kids and mentors, watch the robots up close and personal, and see America's future at work.

Whatever you are able to contribute, be it your time or your money, it will be put to good use and the kids will be the direct beneficiaries.

Thank you for your consideration of our funding request and we look forward to seeing you at the FIRST Buckeye Regional on March 7-8 at the Cleveland State University Convocation Center.

Sincerely,

John Hairston  
NASA Glenn

Marty Kress  
Battelle

Michael Salkind  
OAI



## **FIRST Organization Fact Sheet**

### **THE ORGANIZATION**

The FIRST organization is turning the minds, hearts and lives of middle school and high school students to opportunities in science and technology. FIRST (For Inspiration and Recognition of Science and Technology) was founded in 1989 by accomplished inventor Dean Kamen to inspire an appreciation of science and technology in young people, their schools and their communities. Based in Manchester, N.H., the non-profit organization designs accessible, innovative programs to build self-confidence, knowledge and life skills while motivating young people to pursue academic opportunities.

FIRST provides two well-known programs, the FIRST Robotics Competition for high school students and the FIRST LEGO™ League for children 9-14 years old. Both are supported by a phenomenal network of volunteer teachers, professional mentors and community members, as well as sponsors from corporations, universities and professional organizations among others.

### **FIRST ROBOTICS COMPETITION**

The FIRST Robotics Competition provides high school students with hands-on experience solving real-world problems. Student teams work with corporate and community sponsors to brainstorm, design, build, test and compete robots. The process inspires students to learn more about science, math and technology and to develop an enthusiasm for further studies and career opportunities in engineering, the sciences and design. The 2002 FIRST Robotics Competition season will include more than 600 teams from Brazil, the U.K., Canada and nearly every state in the U.S. The 2002 season consists of 17 regional competitions held in the U.S. and Canada and a FIRST Championship event.

### **FIRST JUNIOR ROBOTICS PROGRAM**

The FIRST Junior Robotics program introduces the fun of learning math, science and technology to middle school students. At the core of the program is the FIRST LEGO League – a junior robotics tournament that combines academic challenge with a sport-like competition. The program is made possible by a partnership between FIRST and the LEGO Company, and through the contribution and volunteerism of companies, schools, teachers, business professionals and community members alike. In 2001, 17,000 students age 9-14 participated in the program.

**FIRST FOUNDING SPONSORS** - John Abele/Boston Scientific Corporation, Baxter International, Inc., DaimlerChrysler Corporation Fund, Delphi Automotive Systems, General Motors Corporation, Johnson & Johnson, Kleiner Perkins Caufield & Byers, Motorola, Inc., Xerox Corporation

- **OFFICIAL SPONSORS** - Autodesk, Inc., SMALL PARTS, Inc
- **OFFICAL SUPPLIERS** - Federal Express, Microsoft Corp.

###

To learn more about FIRST, its board of directors and sponsors, programs and events, go to [www.usfirst.org](http://www.usfirst.org).

# The FIRST Robotics Competition

**A vehicle for achieving the FIRST Vision**

The mission of the FIRST Robotics Competition is to inspire curiosity and create interest in science and mathematics among today's youth by immersing them in the world of engineering, and showing the important connection between classroom lessons and real-world applications.

FIRST is known for its highly successful annual robotics competition known in FIRST lingo as "The Competition," in which corporations and/or universities team-up with high schools in a hi-tech sporting event which pits gladiator robots against each other. Robots are designed and built in just six weeks by teams of students, teachers, corporate engineers, and other corporate professionals. The responsibility of corporations in the Competition is not to teach science and technology, but rather to *inspire* students to pursue careers in these fields. AND IT'S FUN!!



1999 FIRST Robotics Competition grandstand outside of Epcot of Walt Disney World Resort, Orlando, Florida.

# Goals of the FIRST Robotics Competition

**To expose middle and high school students to math, science, and technology**

In breaking through the classroom walls, students are exposed to cutting-edge design and manufacturing processes and energized about learning. Our goal is to expose the students to engineers and the engineering profession.

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*"At FIRST, we make the disinterested interested."*

*...Gary Tooker  
CEO of Motorola Inc.*

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**To create an environment that makes "heroes" out of engineers and scientists**



1999 National Champions Teams 1, 48 and 176 celebrating victory

Most students look to professional sports heroes as role models. These athletes, although highly visible, have little to do with our standard of living. On the other hand, scientists and engineers add value to our society. The environment the Competition creates incorporates many of the same appealing aspects and excitement associated with the world of professional sports. The result is excitement for the field of engineering.

# FIRST Impressions

*"The Competition truly is a fine, creative example of what can be done to excite the next generation about science and technology and motivate young Americans to the pursuit of scientific and technological excellence."*

*William J. Clinton  
President of the United States*

*"FIRST has phenomenal potential to impact and change some of the negative trends of many of today's youth. It provides an avenue for the older and younger generations to work closely together for a common goal."*

*Dean Kamen  
Founder of FIRST*

*"No other program has the potential to influence as many young minds, while reinforcing the national goal of being a world leader in business and education."*

*Paul A. Allaire  
Chairman & CEO  
Xerox Corporation*

*"It's really making a difference. We're working on something that's making a cultural change and holding up engineers as heroes, and it's pretty special being a hero."*

*Joe Johnson, Design Engineer  
Delphi Interior & Lighting*

*"It's what a classroom should be like. It is total application and real life."*

*Shaen McKnight, Teacher  
Richland, TX*

*"FIRST has really been a positive influence on me. Because of my experience with FIRST, I have learned to work on a team and have changed my college major to public relations and communications."*

*Adam Cadd, Student  
Pontiac Northern High School  
Pontiac, MI*

## The FIRST Vision

At FIRST, we see a world where science and technology are celebrated, where kids think science is cool and dream of becoming science and technology heroes.



1999 National Champions Teams 48



1999 National Champions Teams 1 and 176



200 Bedford Street  
Manchester, New Hampshire 03101  
(603) 666-3906  
(800) 871-8326  
Fax: (603) 666-3907  
<http://www.usfirst.org>

Place  
Stamp  
Here

Please send me more information!

Name \_\_\_\_\_

Organization \_\_\_\_\_

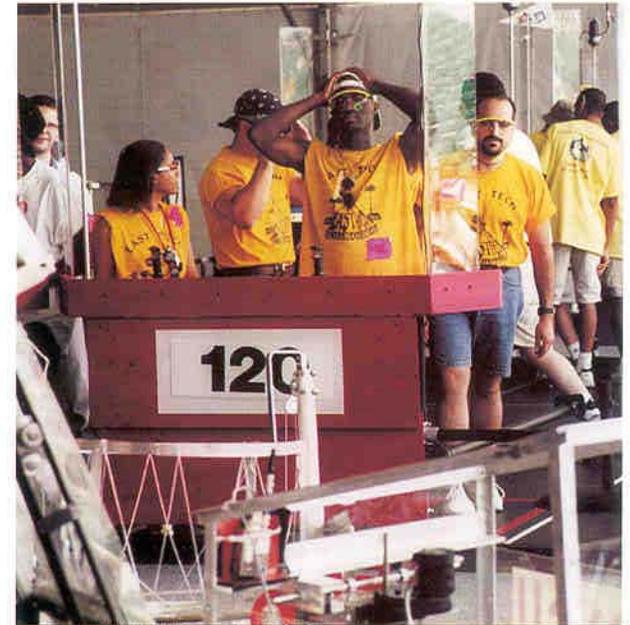
Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

**FIRST**

200 Bedford Street  
Manchester, NH 03101



1999 Chairman's Award Winners  
Epcot of Walt Disney World Resorts  
Orlando, Florida



For Inspiration and Recognition of Science and Technology



## Frequently Asked Questions about FIRST

### **What is FIRST?**

FIRST (For Inspiration and Recognition of Science and Technology) is a non-profit organization, founded by accomplished inventor Dean Kamen, to inspire an appreciation of science and technology in young people, their schools and their communities, and an understanding that mastering these skills can enrich the lives of everyone.

Founded in 1989, FIRST designs accessible, innovative programs to build self-confidence, knowledge and life skills while motivating young people to pursue opportunities in science, technology and engineering. FIRST provides two well-known programs, the FIRST Robotics Competition for high school students and the FIRST LEGO™ League for children 9-14 years old.

### **Is FIRST a non-profit organization?**

Yes. FIRST is supported by a wide variety of sponsors, including national corporations, small businesses, educational institutions and professional organizations. Many of them are among the world's most well-known companies. FIRST sponsors come from such highly regarded organizations as John Abele/Boston Scientific Corporation, Baxter International Inc., DaimlerChrysler Corporation Fund, Delphi Automotive Systems, General Motors Corporation, Johnson & Johnson, Kleiner Perkins Caufield & Byers, Motorola, Inc., Xerox Corporation, and NASA. Autodesk, Inc. and SMALL PARTS, Inc. provide sophisticated software grants and hard goods essential to the robots' design and function; companies like Microsoft Corp. and Federal Express support teams by supplying technology tools for team planning and communication, as well as shipping services vital for transporting robots from site to site.

Sponsors provide resources including time and talent from professional mentors, services, equipment, financial contributions and volunteers. Some sponsors offer scholarships and internship or employment opportunities to FIRST students interested in pursuing studies and careers in engineering, science and technology. Others fund and host regional competitions, proving their commitment to FIRST and the community.

### **What is the FIRST Robotics Competition?**

The FIRST Robotics Competition is an annual event that challenges high school students - working with professional engineering and business mentors - to design and build a robot and compete in high-intensity events that measure the effectiveness of each robot, the power of team strategy and collaboration and the determination of students.

### **When did the FIRST Robotics Competition begin?**

Eleven years ago the FIRST Robotics Competition was christened in a game consisting of 28 teams in a high school gym in New Hampshire. In 2002, the FIRST Robotics Competition anticipates its largest season ever with more than 600 teams from Canada, Brazil, the U.K. and nearly every state in the U.S. competing in 17 regional events and a Championship.

### **How is the game played?**

Each year brings a new, exciting and challenging game. At last year's January kick-off held in Manchester, N.H., organizers unveiled the 2002 game, "Zone Zeal," and distributed the standard

“kit of parts” to adult team mentors from across the country. The announcement was also broadcast live via satellite to regional events around the U.S. and Canada. Zone Zeal calls for students to design their robots to race around a playing field gathering balls, putting the balls into goals and placing those goals in their scoring zone – all in less than two minutes.

From the kick-off, teams have just six weeks to work to solve the season’s common problem using the same kit of parts and a standard set of rules. Once these young inventors create and ship their robot, their teams participate in regional competitions (held in the U.S. and Canada) in March and April. A Championship event will be held April 25-27 at Walt Disney World’s Epcot in Orlando, Fla. A complete schedule of 2002 events can be found on the FIRST Web site at <http://www.usfirst.org/robotics/rgevents.htm>

### **Who participates in the Competition?**

Each team is comprised of professional mentors and an average of 30 students in grades 9-12. In addition, each FIRST team has one or more sponsors. Those sponsors include companies, universities or professional organizations who donate their time, talent, funds, equipment and much more to the team effort.

### **Is scientific, technology or mathematic expertise required for students to participate in the FIRST Robotics Competition?**

FIRST invites students who may not be predisposed to science, math or technology to participate. In fact, the FIRST Robotics Competition is designed to inspire, motivate and encourage students to learn basic principles while challenging more experienced students. Since there are critical roles for students in everything from design and building, to computer animation, to fundraising and research, every student can actively participate and benefit.

### **What do the students win?**

All participating students receive tangible awards such as certificates of achievement and medallions. The most prestigious award that can be won is the Chairman’s Award, which recognizes a team that has built significant and lasting partnerships through active mentoring by students, professional team members and sponsors. In addition, honors and recognition that reward design excellence, competitive play, sportsmanship and high-impact partnerships between schools, businesses and communities are presented at the regional and national level by a judging committee of distinguished professionals.

In 2002, FIRST Robotics Competition student participants were eligible to apply for \$1.7 million in scholarships from leading universities, colleges and companies. All scholarship announcements are made at the Championship in April.

### **Are there other benefits to participating?**

Throughout their FIRST experience, students “win” as they gain maturity, build self-confidence and appreciation of teamwork, and an understanding of professionalism. Students have fun while building a network of friends and professional mentors who continue to enrich their lives.

Goodman Research Group, Boston, Mass., found positive results from their 2000 FIRST Robotics Competition evaluation. Their findings showed:

- Improvement in student attitudes about science, math, teamwork and the working world
- Improvement in students’ self-image, particularly among under-represented groups

- FIRST students' attitudes about teamwork are significantly more positive after FIRST than they were before participating in the competition season
- Two-thirds of student participants indicated interest in working for one of their team sponsors after completing their education, and one fifth planned to work for one of their team sponsors in a summer internship or part-time job

Sponsors win by finding future employees and interns. Professional mentors are rewarded with renewed inspiration and a reminder as to why they chose engineering, science and technology as their careers. Volunteers are recognized as an integral and vital part of the way in which young people connect to the real world, in their own communities and in the world at large. Each year the Founder's Award is given to an exceptional individual or organization in recognition of service to advance FIRST's mission and ideals.

### **How can volunteers and sponsors get involved?**

The best way to start discovering the rewards of FIRST is to attend a regional competition (attendance is free), contact a mentor from a local team, visit the FIRST Web site, or contact FIRST at 1-800-871-8326. Interested volunteers can also log on to <http://www.usfirst.org/robotics/mentoring> for more information about how to become a mentor.

### **What other opportunities does FIRST offer?**

We offer the FIRST LEGO™ League, which is a junior robotics program. Modeled after our high school program, the FIRST LEGO League is a result of a partnership between FIRST and the LEGO Company. Young participants work with mentors to design and build a robot to solve an annual challenge and to compete in a friendly, FIRST-style robotics event specially designed for their age group, 9-14 year old students.

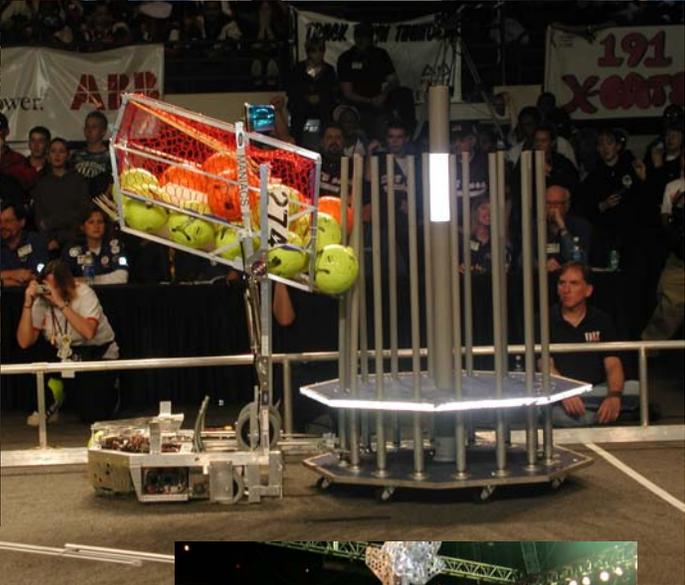
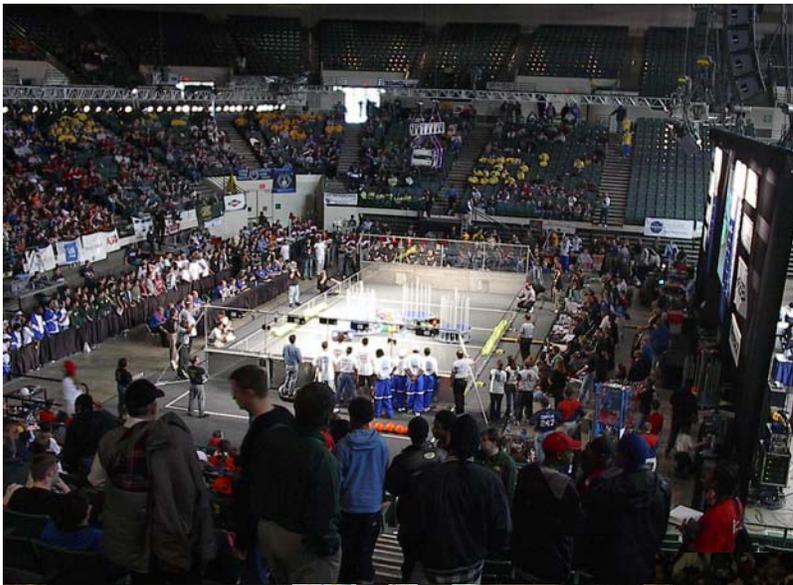
To let everyone discover and explore all types of science, math and technology on their own, FIRST established FIRST Place. The facility has a "working laboratory" that adapts to a classroom or workshop environment. FIRST Place offers a variety of hands-on programs that have real-world applications and activities that support and enrich the robotics programs.

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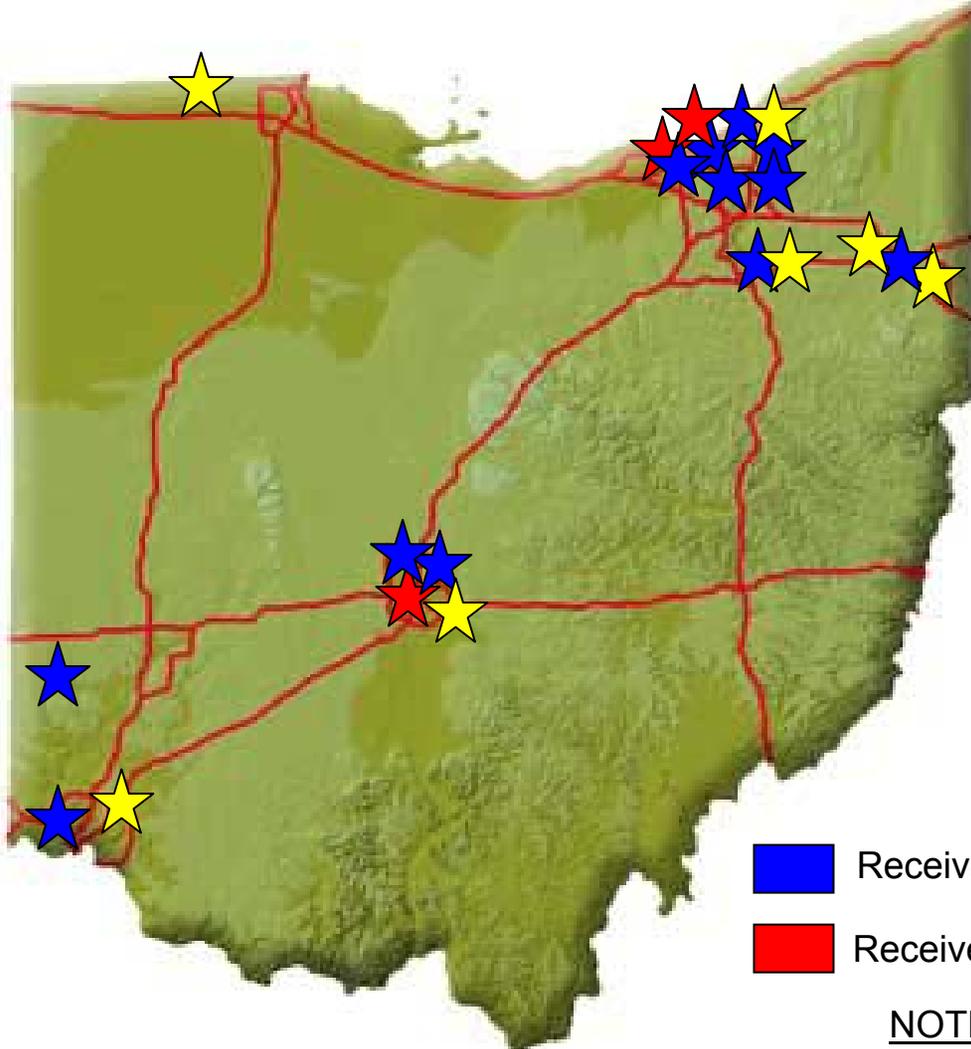
To learn more about FIRST and the 2003 Robotics Competition, go to [www.usfirst.org](http://www.usfirst.org).



# 2002 Buckeye Regional



# 2002 Ohio FIRST Buckeye Regional Teams w/ NASA Funding



- 1 Warren G. Harding High School – Warren, OH
- 2 East Technical High School – Cleveland, OH
- 3 Northwest High School – Cincinnati, OH
- 4 Great Oaks Institute of Technology – Milford, OH
- 5 Rhodes High School – Cleveland, OH
- 6 Chaney High School – Youngstown, OH
- 7 Girard High School – Girard, OH
- 8 Eastmoor Academy – Columbus, OH
- 9 Sylvania City Schools – Sylvania, OH
- 10 Marlington High School – Alliance, OH
- 11 Max S. Hayes Vocational School – Cleveland, OH
- 12 Beachwood High School – Beachwood, OH
- 13 Cuyahoga Hts. High School – Cuyahoga Hts., OH
- 14 Alliance High School – Alliance, OH
- 15 Marion-Franklin High School – Columbus, OH
- 16 Cleveland Central Catholic – Cleveland, OH
- 17 Canal Winchester High School – Canal Winchester, OH
- 18 East High School – Columbus, OH
- 19 Bedford High School – Bedford, OH
- 20 Cleveland Hts. High School – Cleveland Heights, OH
- 21 Shaw High School – East Cleveland, OH
- 22 Sinclair Community College – Dayton, OH

 Received NASA Scholarships

 Received NASA Grant

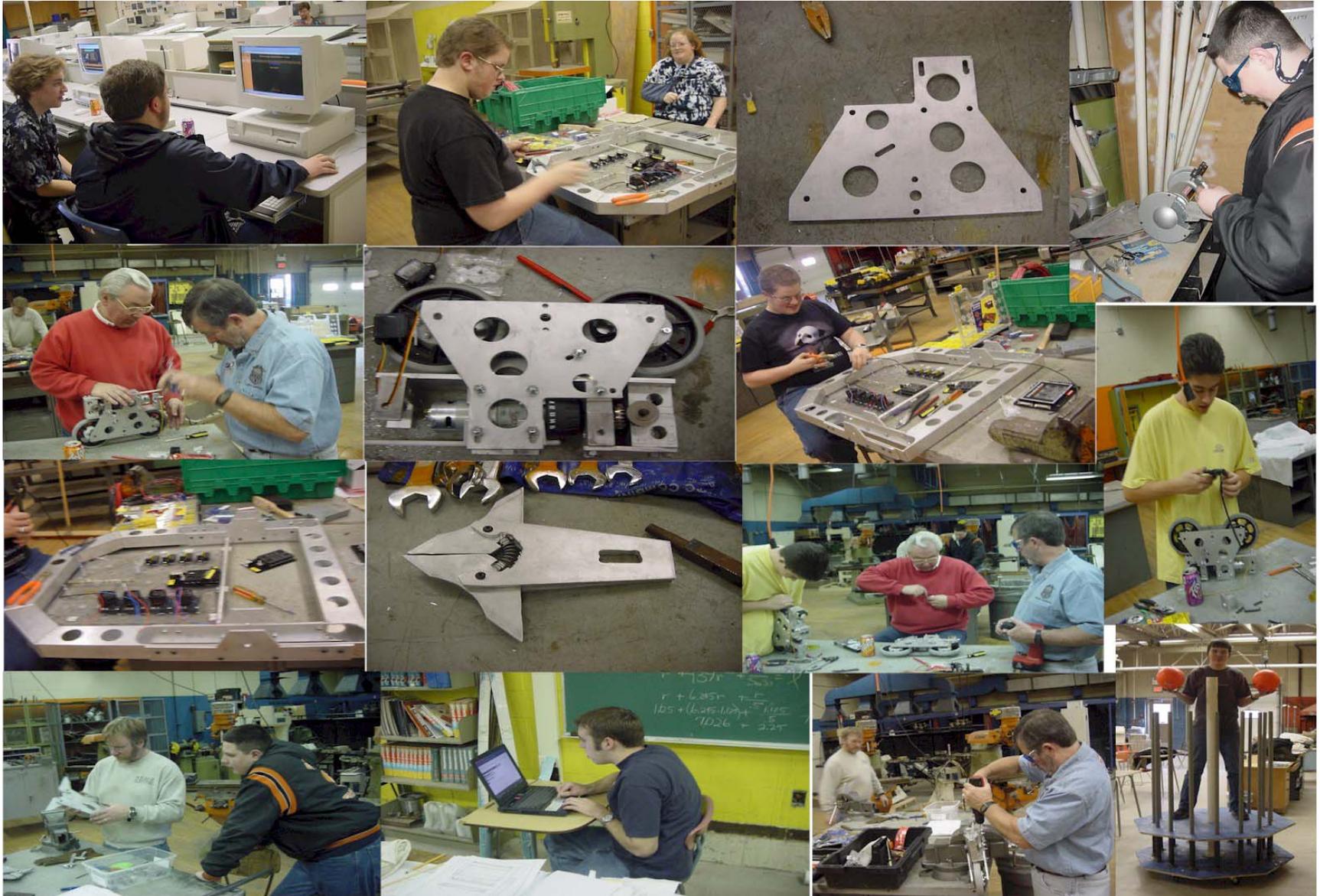
NOTE: Teams 13 and above were rookie teams and are still eligible for NASA scholarships

# 2002 Buckeye Regional Team List

Team	Team Name	Team Location
1	1 Oakland Technical Center Northeast	Pontiac, MI
2	27 Collins & Aikman & Oakland Schools - OSMTech Academy & Oakland Schools - Walter P. Chrysler Manufacturing	Clarkston, MI
3	45 Delphi Automotive Systems/Ivy Tech State College & Kokomo High School	Kokomo, IN
4	47 Delphi Automotive Systems & Pontiac Central High School	Pontiac, MI
5	48 Delphi Automotive Systems & Warren G. Harding High School	Warren, OH
6	49 NASA GRC/Dow Chemical Company & Buena Vista High School	Saginaw, MI
7	67 General Motors Milford Proving Ground & Huron Valley Schools	Milford, MI
8	68 General Motors North America Engineering & North Oakland County Schools	Pontiac, MI
9	94 Lear Corporation/NASA GRC & Southfield High School	Southfield, MI
10	117 Pittsburgh Public Schools/Equitable Resources/Taylor Allderdice High School Alumni Association & Taylor Allderdice	Pittsburgh, PA
11	120 Advanced Manufacturing Center at Cleveland State University/TRW Inc/NASA Glenn Research Center/Battelle Memorial Institute/Progressive Computing Corporation & East Technical High School	Cleveland, OH
12	135 PHM Community/BOSCH/Patrick Metals/Allied Screw Products & Penn High School	Mishawaka, IN
13	144 NASA GRC/Miami University/ProcessPlus/P&G & Northwest High School	Cincinnati, OH
14	158 EDS PLM Solutions & Great Oaks Institute of Technology	Milford, OH
15	191 Xerox & Wilson High School	Rochester, NY
16	201 Visteon Corporation/UAW Visteon & Rochester High School	Rochester Hills, MI
17	229 Clarkson University & Massena High School & Salmon River High School	Potsdam, NY
18	234 Rolls-Royce/IUPUI & Perry Meridian High School	Indianapolis, IN
19	240 Monroe Visteon & Jefferson Schools	Monroe, MI
20	245 Eaton/Siemens & Rochester Adams High School	Rochester, MI
21	247 ComauPICO/University of Detroit Mercy & Berkley High School	Berkley, MI
22	249 Daimler Chrysler & Breithaupt Career & Technical Center & Renaissance High School	Detroit, MI
23	254 KPC&B/NASA Ames Research Center/Unity Care/Dionex Corporation/Cypress Semiconductor & Bellarmine College Preparatory	San Jose, CA
24	274 Ford Motor Co/NASA Glenn/Battelle/Biomec/Andersen/Cleveland Punch & Die/ Delzani Machines & Rhodes High School	Cleveland, OH
25	276 Youngstown State University/Youngstown City Council/Youngstown School Board & Chaney High School	Youngstown, OH
26	291 NASA Goddard Space Flight Center/GE Transportation Systems & Central High School & Villa Maria Academy & East High School & Collegiate Academy	Erie, PA
27	302 DaimlerChrysler & Lake Orion High School	Lake Orion, MI
28	306 NASA Goddard Space Flight Center/Associated Spring, Barnes Group Inc./Bova's Hardware/Chase Manufacturing/Corry High School	Corry, PA
29	314 GM Flint Truck Assembly/UAW Local 598 & Carman-Ainsworth High School	Flint, MI
30	379 General Motors/UAW 1112/OAPSE/NASA GRC & Girard High School	Girard, OH
31	382 NASA Glen Research Center/Columbus State Community College/Battelle/American Electric Power/Pepsi & Eastmoor Academy	Columbus, OH

32	448	General Motors Sales and Service & Cranbrook Kingswood Upper School	Bloomfield Hills, MI
33	451	DANA Spicer & Sylvania City Schools	Sylvania, OH
34	461	Purdue University/Schlumberger & West Lafayette High School & Jefferson High School & Harrison High School & McCutcheon High School	West Lafayette, IN
		NACHI Robotics/EXIDE/Faurecia/Lawrence Technological University/Norgren Automotive & Lahser High School &	West Bloomfield, MI
35	469	International Academy	
36	471	NASA GRC/Search Plus International/Castaing Foundation/Lear Corporation/TRW & Fenton High School	Fenton, MI
37	493	Stark State College/ACme Industrial Group/Roberetson Heating Supply & Marlinton High School	ALLIANCE, OH
38	519	General Motors/ABB Auburn Hills/Detroit Science Center & Golightly C.T.C.	Detroit, MI
39	535	United Technologies Electronic Controls/Wabash Technologies/Bendix Commercial Vehicle Systems & Huntington North High School	Huntington, IN
40	541	Cleveland State Univ.-Mechanical Engineering Technology/NASA GRC/Schultz Engineering Associates/RML Tool & Die Inc./MBNA Foundation/Accurate Instrument Service Co./WIRENET/Diamond Wheel & Fabricating Inc./Custom Metal Fabrication Inc. & Max S. Hayes Vocational H. S. & CMSD	Cleveland, OH USA
41	578	The Gleason Works/NASA GRC & Fairport High School	Rochester, NY
42	642	NASA GRC/DuPont/Simonton Windows/Pickering and Associates/Avatar Metalworks/McHenry Electric/Domino's Pizza/Murray's Sheet Metal/General Electric/St. Joseph's Hospital/Lowe's & Parkersburg High School	Parkersburg, WV
43	652	NASA Goddard Space Flight Center/Eriez Magnetics & Seneca High School	Erie, PA
44	695	NASA GRC & Beachwood High School	Beachwood, OH
45	779	NASA-Glenn/Timken Products/Bohning and Associates & Cuyahoga Heights High School	Cuyahoga Heights, OH
46	808	NASA GRC/Lockheed Martin & Alliance High School	Alliance, OH
47	829	NASA GRC/Trilithic & Walker Career Center	Indianapolis, IN
48	830	NASA GRC/Pfizer/MDI - Mechanical Dynamics, Inc/ACTI - Automation Computer Technologies, Inc & Huron High School	Ann Arbor, MI
49	859	NASA GRC/West Virginia University/Lowe's/Domino's Pizza & Morgantown High School	Morgantown, WV
50	872	American Electric Power/NASA GRC/Columbus State Community College/NSF-DUE & Marion-Franklin High School & Southeast Career Center	Columbus, OH
51	883	NASA GRC & Cleveland Central Catholic	Cleveland, OH
52	892	SAVvy Engineering/NASA & Canal Winchester High School	Canal Winchester, OH
53	963	American Electric Power/NASA GRC/Columbus State Community College/NSF-DUE & East High School & Southeast Career Center	Columbus, OH
54	964	NASA GRC/Ford Motor Company & Bedford High School	Bedford, OH
55	966	Cleveland Clinic Eastern Region/North Coast Tech. Prep. Consortium & Cleveland Heights High School	Cleveland Heights, OH
56	970	NASA GRC/Cuyahoga Community College/Cleveland State University & Shaw High School	East Cleveland, OH
57	979	Sinclair Community College/NASA GRC/Wright Patterson Air Force Base/Xontech/KohlTek & Patterson Career Center & Stivers High School & Northmont High School & Trotwood Madison High School & Dunbar High School & Jefferson High School & Chaminade Julianne & Miamisburg High School & Springfield North High School & Stebbins High School & Shawnee High School	Dayton, OH USA

# 2002 FIRST Buckeye Regional Robotic Kit





## **Key Information for Sponsors**

FIRST is a 501 (c) (3) and your contribution is tax deductible – see attached form.

To help the FIRST Buckeye Regional, we would ask that your checks be made out to the FIRST Buckeye Regional and forwarded to:

OAI  
22800 Cedar Point Rd.  
Cleveland, Ohio 44142

Attention: Ann Heyward

OAI serves as the FIRST Buckeye Regional fiscal agent and Ann Heyward is the FIRST Buckeye Regional Treasurer.

### **CATEGORIES OF SPONSORS**

FIRST has established different categories of sponsors depending on the financial contribution of the sponsor.

#### **Financial Sponsors**

In effect, there are six main categories at the regional level:

<b><u>Sponsor Category</u></b>	<b><u>Contribution Level</u></b>
Regional Sponsor (Sole)	\$200,000
Co-Regional Sponsor	\$100,000
Platinum Sponsor	\$25 - \$50,000
Gold Sponsor	\$10 - \$25,000
Silver Sponsor	\$5 - \$9,999
Bronze Sponsor	\$500 - \$4,999

All Sponsors of the FIRST Buckeye Regional are VIP guests for the competition, have their names included in the program and on the competition banner, and are involved in key events and presentations.

#### **Non-Financial Sponsors**

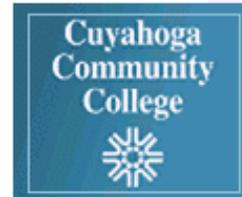
A key element of success at the regional level is the in-kind support of local businesses, associations, universities, etc. To make this event a reality takes a large number of volunteers and in-kind contributions. All in all, over 400 people contributed to last year's success and that probably does not accurately capture everybody. From the generous support of the Rock n Roll Hall of Fame who donated the use of their facility for the Friday night team event to the many local business leaders and physicians who served as judges, Cleveland made the FIRST Buckeye Regional a reality.

In the spirit of building and maintaining that spirit and support, the FIRST Buckeye Regional will continue to treat in-kind support in the same manner it treats cash support.

# 2002



## Buckeye Regional Robotics Competition Sponsors

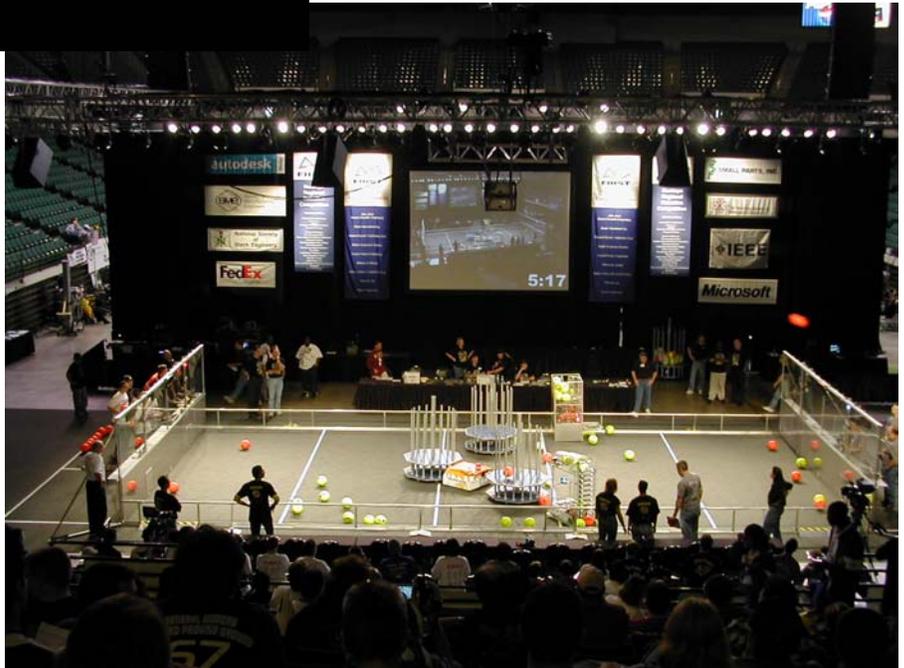


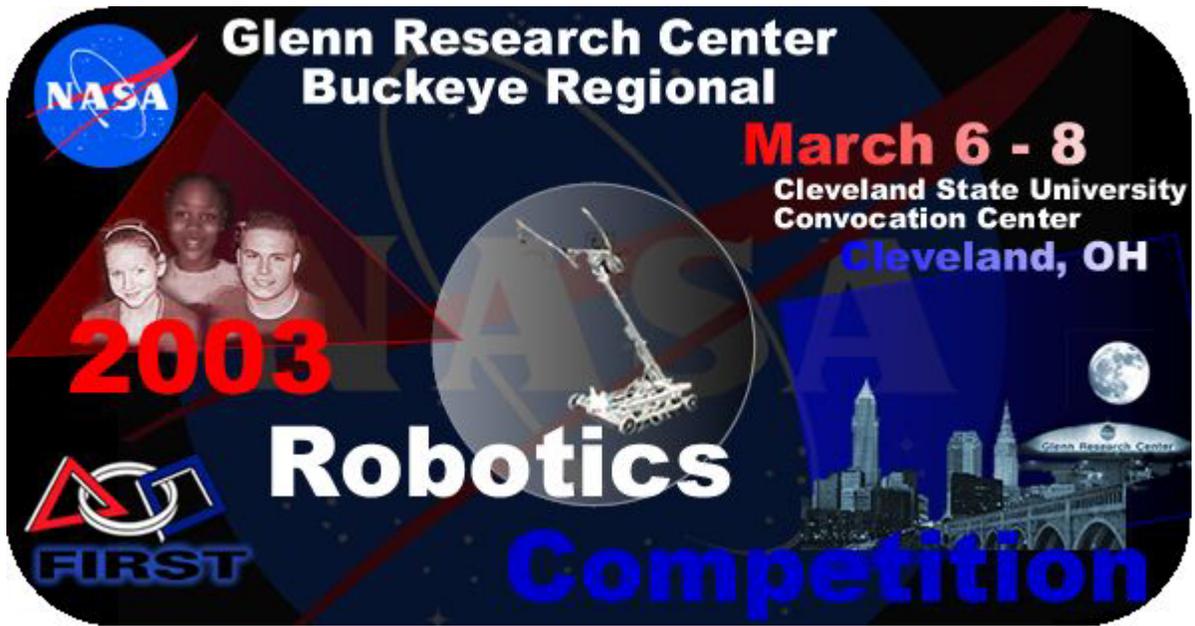
The George Gund Foundation

THE PLAIN DEALER



**Corporate Name  
on the Sponsor  
Banner that is  
hung on each side  
of the video wall**



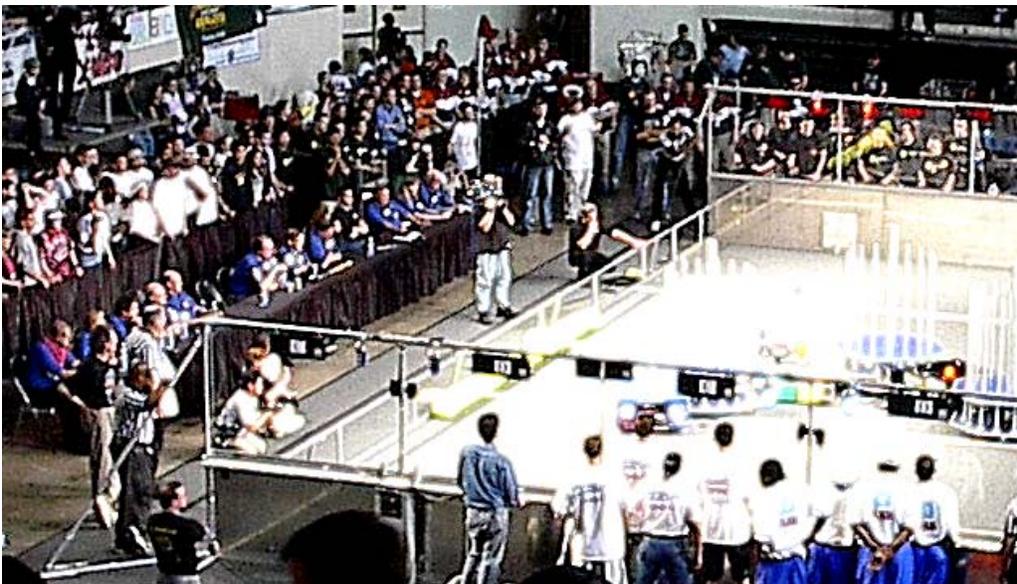


**Corporate name and logo in  
the Program Guide  
and on the FIRST web-site  
with a hyperlink to your site**

 <input type="text" value="SEARCH"/>	<a href="#">FIRST ROBOTICS</a> <a href="#">FIRST JR ROBOTICS</a> <a href="#">FIRST PLACE</a> <a href="#">ABOUT FIRST</a>	<b>FLL Registration Open</b>
	<p><b>FIRST Has an Imperative, Singular Focus:</b>  <i>to excite more young people about the accessibility, fun, and importance of science and engineering.</i></p>  <p>FIRST inspires in young people, their schools and communities an appreciation of science and technology, and of how mastering these can enrich the lives of all.</p> <p>Corporate America provides economic and professional support to FIRST. Many Fortune 500 companies have significantly helped FIRST grow and are committed to its continued progress. Government organizations such as NASA are key partners in this worthwhile cause. FIRST represents a cooperative team effort by students, teachers, communities, corporations, and our government.</p>	<p>Registration for the 2002 FIRST LEGO League season is now open - <a href="#">get the details.</a></p>
	<div style="border: 1px solid black; padding: 5px;">PROGRAM INFORMATION</div>	<b>Chairman's Award</b>
		<p>The most prestigious award FIRST presents, representing the <a href="#">spirit of FIRST.</a></p>
		<b>Championship Event</b>
		<p>The largest and final Robotics Competition Event. <a href="#">Get the details.</a></p>
		<b>Impact of FIRST</b>
		<p>FIRST is helping to change lives. <a href="#">Learn about the impact</a> FIRST is having.</p>
		



**You have a role at one of the events or at the awards ceremony, and if you would like, you can provide a judge for the competition**



INTERNAL REVENUE SERVICE  
DISTRICT DIRECTOR  
P. O. BOX 1508  
CINCINNATI, OH 45221

DEPARTMENT OF THE TREASURY

Date: **DEC 17 1997**

Employer Identification Number  
22-2990308

DLN  
114110055

IS FOUNDATION FOR THE INSPIRATION  
AND RECOGNITION OF SCIENCE AND  
TECHNOLOGY  
~~340 COMMERCIAL STREET~~ **200 BEDFORD ST.**  
MANCHESTER, NH 03103-0000

Contact Person:  
D. A. DOWNING  
Contact Telephone Number  
(513) 241-5199

Our Letter Dated:  
October 6, 1999  
Addendum Applies:  
No

Dear Applicant

This modifies our letter of the above date in which we stated that you would be treated as an organization that is not a private foundation until the expiration of your advance ruling period.

Your exempt status under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3) is still in effect. Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Code because you are an organization of the type described in section 509(a)(1) and 170(b)(1)(A)(vi).

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(1) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(1) organization.

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

You are required to file Form 990 only if your gross receipts each year are normally more than \$25,000. For guidance in determining whether your gross receipts are "normally" more than \$25,000, see the instructions for Form 990. If a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of \$20 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed \$10,000 or 5 percent of your gross receipts for the year, whichever is less. For organizations with gross receipts exceeding \$1,000,000 in any year, the penalty is \$100 per day per return, unless there is reasonable cause for the delay. The maximum penalty for an organization with gross receipts exceeding \$1,000,000 shall not exceed \$50,000. This penalty may also be charged if a return is not complete, so please be sure your return is complete before you file it.

Letter 1050 (DO/CG)

-2-

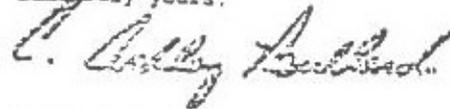
US FOUNDATION FOR THE INSPIRATION

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Because this letter could help resolve any questions about your private foundation status, please keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown above.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "C. L. Kelly".

District Director

Internal Revenue Service  
District Director

Department of the Treasury

P. O. BOX 2508  
CINCINNATI, OH 45201

Date:

**JUN 20 1990**

DHIO AEROSPACE INSTITUTE  
2001 AEROSPACE PARKWAY  
BROOK PARK, OH 44142

Employer Identification Number:  
34-1621676

Contact Person:  
DONNA CARLISLE

Contact Telephone Number:  
(513) 684-3578

Accounting Period Ending:  
June 30

Form 990 Required:  
Yes

Addendum Applies:  
No

Dear Applicant:

Based on information supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from Federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

We have further determined that you are not a private foundation within the meaning of section 509(a) of the Code, because you are an organization described in section 509(a)(3).

If your sources of support, or your purposes, character, or method of operation change, please let us know so we can consider the effect of the change on your exempt status and foundation status. In the case of an amendment to your organizational document or bylaws, please send us a copy of the amended document or bylaws. Also, you should inform us of all changes in your name or address.

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Since you are not a private foundation, you are not subject to the excise taxes under Chapter 42 of the Code. However, you are not automatically exempt from other Federal excise taxes. If you have any questions about excise, employment, or other Federal taxes, please let us know.

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of Code sections 2055, 2106, and 2522.

Contribution deductions are allowable to donors only to the extent that their contributions are gifts, with no consideration received. Ticket purchases and similar payments in conjunction with fundraising events may not necessarily qualify as deductible contributions, depending on the circum-

OHIO AEROSPACE INSTITUTE

stances. See Revenue Ruling 67-246, published in Cumulative Bulletin 1967-2, on page 104, which sets forth guidelines regarding the deductibility, as charitable contributions, of payments made by taxpayers for admission to or other participation in fundraising activities for charity.

In the heading of this letter we have indicated whether you must file Form 990, Return of Organization Exempt From Income Tax. If Yes is indicated, you are required to file Form 990 only if your gross receipts each year are normally more than \$25,000. However, if you receive a Form 990 package in the mail, please file the return even if you do not exceed the gross receipts test. If you are not required to file, simply attach the label provided, check the box in the heading to indicate that your annual gross receipts are normally \$25,000 or less, and sign the return.

If a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of \$10 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed \$5,000 or 5 percent of your gross receipts for the year, whichever is less. This penalty may also be charged if a return is not complete, so please be sure your return is complete before you file it.

You are not required to file Federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, a number will be assigned to you and you will be advised of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

If distributions are made to individuals, case histories regarding the recipients should be kept showing names, addresses, purposes of awards, manner of selection, relationship (if any) to members, officers, trustees or donors of funds to you, so that any and all distributions made to individuals can be substantiated upon request by the Internal Revenue Service. (Revenue Ruling 56-304, C.B. 1956-2, page 306.)

If we have indicated in the heading of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

Because this letter could help resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

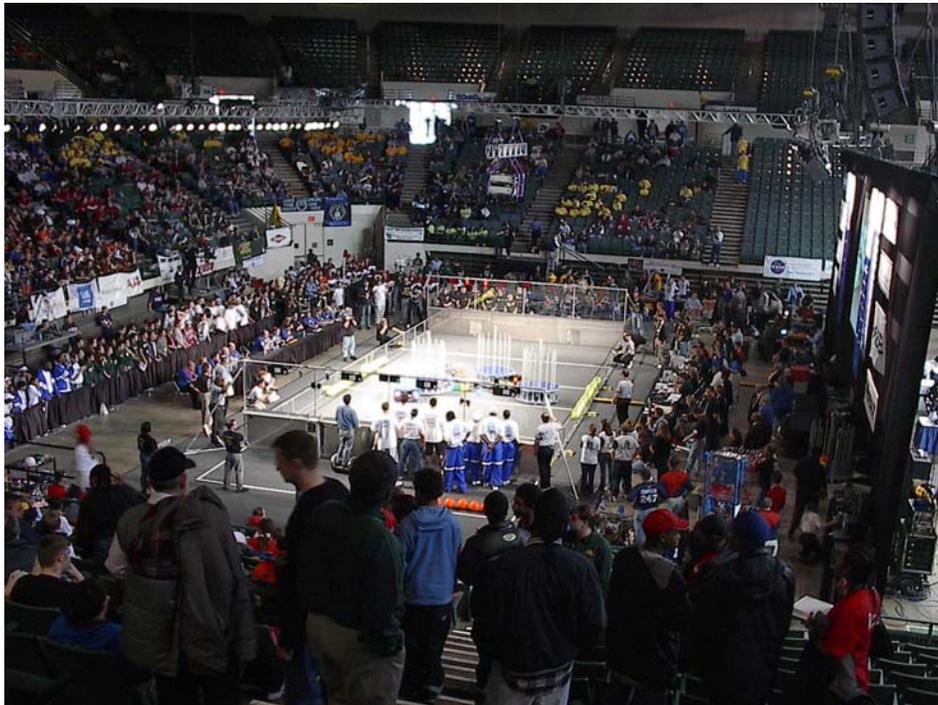
DHID AEROSPACE INSTITUTE

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

Sincerely yours,  
  
Harold M. Browning  
District Director

# FIRST Buckeye Regional Robotics Competition

March 14-16, 2002  
Cleveland State Convocation Center



## Summary Report

**Buckeye Regional Robotics Competition**  
**March 14-16, 2002**  
**Cleveland State Convocation Center**

**Event Attendance:**

57 teams comprising of approximately 1800 students competed and an attendance of 3000 was estimated for the final competition on Saturday.

**Budget (as of 6/24/02 Not Audited):**

<b>Cleveland Regional 2002 – not audited</b>		
	03/01/2002 <i>Est-Actual</i>	06/24/02*
Budget Item - "Local"	Targets	Actuals
<b>A/V-Production</b>	72,600	\$65,027
<b>Food at Regionals( VIP-Judges-Other)</b>	11,515	\$15,581
<b>All Team Party Costs</b>	27,694	\$25,254
<b>Services at Events</b>	3,750	4,575
<b>Disc Jockey</b>	1,750	1725
<b>EMTs-Security-Fire</b>		in venue costs
<b>Cleaning-Custodial</b>		in venue costs
<b>Machine Shop</b>	500	900
<b>All Other - Misc.</b>	1,500	1950
<b>Venue-Rental Fees</b>	40,789	\$38,985
<b>Rental Of Items</b>	12,500	\$12,255
<b>Total Local Costs</b>	<b>168,848</b>	<b>161,677</b>
<b>+ Banners PO</b>	1,060	\$1,134
<b>+ Shirts PO</b>	1,063	\$1,063
<b>Total unbudgeted Items</b>	<b>\$2,123</b>	<b>\$2,198</b>
<b>Total Local Costs &amp; RD's costs</b>	<b>\$170,971</b>	<b>\$163,875</b>
	& TBD	
<b>Sponsorship raised( total of local &amp; RD's cost plus any unbudgeted items such as videos)</b>	<b>\$170,971</b>	<b>\$173,000</b>
<b>Money Raised that was not spent to date</b>		<b>\$9,125</b>

\* We believe that all 2002 Direct local expenses have been received ( and paid by FIRST).

**Web cast site:**

<http://robotics.nasa.gov>

**Regional web site:**

<http://www.grc.nasa.gov/WWW/OEP/first/regional/>

**Regional Competition Image Gallery:**

<http://www.grc.nasa.gov/WWW/OEP/first/regional/gallery/>

**Significant Items of Interest:**

- Certificate of Recognition was received from Congresswoman Stephanie Tubbs-Jones (Representative/11<sup>th</sup> District) on behalf of the 11<sup>th</sup> Congressional District of Ohio for NASA Glenn's participation in bringing the FIRST Buckeye regional competition to Cleveland.
- Marty Kress, VP for NASA Sector, Battelle Memorial Institute, Chairman of Regional Planning Committee, member of NASA Space Science Advisory Board, received the volunteer of the year award for the Buckeye Regional.
- Team Party held at the Rock 'n' Roll Hall of Fame and Museum. Students were invited onstage to perform with the Rock Hall house band.

**Team Statistics:**

57 teams participated representing Ohio, New York, California, Michigan, West Virginia, Pennsylvania and Indiana. 27 NASA sponsored teams were present (23 GRC teams, 4 GSFC teams, 1 ARC team)

<b>Team</b>	<b>Team Name</b>	<b>Team Location</b>
1	Oakland Technical Center Northeast	Pontiac, MI
27	Collins & Aikman & Oakland Schools - OSMTech Academy & Oakland Schools - Walter P. Chrysler Manufacturing	Clarkston, MI
45	Delphi Automotive Systems/Ivy Tech State College & Kokomo High School	Kokomo, IN
47	Delphi Automotive Systems & Pontiac Central High School	Pontiac, MI
48	Delphi Automotive Systems & Warren G. Harding High School	Warren, OH
49	NASA GRC/Dow Chemical Company & Buena Vista High School	Saginaw, MI
67	General Motors Milford Proving Ground & Huron Valley Schools	Milford, MI
68	General Motors North America Engineering & North Oakland County Schools	Pontiac, MI
94	Lear Corporation/NASA GRC & Southfield High School	Southfield, MI
117	Pittsburgh Public Schools/Equitable Resources/Taylor Allderdice High School Alumni Association & Taylor Allderdice	Pittsburgh, PA
120	Advanced Manufacturing Center at Cleveland State University/TRW Inc/NASA Glenn Research Center/Battelle Memorial Institute/Progressive Computing Corporation & East Technical High School	Cleveland, OH
135	PHM Community/BOSCH/Patrick Metals/Allied Screw Products & Penn High School	Mishawaka, IN
144	NASA GRC/Miami University/ProcessPlus/P&G & Northwest High School	Cincinnati, OH
158	EDS PLM Solutions & Great Oaks Institute of Technology	Milford, OH
191	Xerox & Wilson High School	Rochester, NY
201	Visteon Corporation/UAW Visteon & Rochester High School	Rochester Hills, MI
229	Clarkson University & Massena High School & Salmon River High School	Potsdam, NY

234	Rolls-Royce/IUPUI & Perry Meridian High School	Indianapolis, IN
240	Monroe Visteon & Jefferson Schools	Monroe, MI
245	Eaton/Siemens & Rochester Adams High School	Rochester, MI
247	ComauPICO/University of Detroit Mercy & Berkley High School	Berkley, MI
249	Daimler Chrysler & Breithaupt Career & Technical Center & Renaissance High School	Detroit, MI
254	KPC&B/NASA Ames Research Center/Unity Care/Dionex Corporation/Cypress Semiconductor & Bellarmine College Preparatory	San Jose, CA
274	Ford Motor Co/NASA Glenn/Battelle/Biomec/Andersen/Cleveland Punch & Die/Delezani Machines & Rhodes High School	Cleveland, OH
276	Youngstown State University/Youngstown City Council/Youngstown School Board & Chaney High School	Youngstown, OH
291	NASA Goddard Space Flight Center/GE Transportation Systems & Central High School & Villa Maria Academy & East High School & Collegiate Academy	Erie, PA
302	DaimlerChrysler & Lake Orion High School	Lake Orion, MI
306	NASA Goddard Space Flight Center/Associated Spring, Barnes Group Inc./Bova's Hardware/Chase Manufacturing/Corry High School	Corry, PA
314	GM Flint Truck Assembly/UAW Local 598 & Carman-Ainsworth High School	Flint, MI
379	General Motors/UAW 1112/OAPSE/NASA GRC & Girard High School	Girard, OH
382	NASA Glen Research Center/Columbus State Community College/Battelle/American Electric Power/Pepsi & Eastmoor Academy	Columbus, OH
448	General Motors Sales and Service & Cranbrook Kingswood Upper School	Bloomfield Hills, MI
451	DANA Spicer & Sylvania City Schools	Sylvania, OH
461	Purdue University/Schlumberger & West Lafayette High School & Jefferson High School & Harrison High School & McCutcheon High School	West Lafayette, IN
469	NACHI Robotics/EXIDE/Faurecia/Lawrence Technological University/Norgren Automotive & Lahser High School & International Academy	West Bloomfield, MI
471	NASA GRC/Search Plus International/Castaing Foundation/Lear Corporation/TRW & Fenton High School	Fenton, MI
493	Stark State College/ACme Industrial Group/Roberetson Heating Supply & Marlinton High School	Alliance, OH
519	General Motors/ABB Auburn Hills/Detroit Science Center & Golightly C.T.C.	Detroit, MI
535	United Technologies Electronic Controls/Wabash Technologies/Bendix Commercial Vehicle Systems & Huntington North High School	Huntington, IN
541	Cleveland State Univ.-Mechanical Engineering Technology/NASA GRC/Schultz Engineering Associates/RML Tool & Die Inc./MBNA Foundation/Accurate Instrument Service Co./WIRENET/Diamond Wheel & Fabricating Inc./Custom Metal Fabrication Inc. & Max S. Hayes Vocational H. S. & CMSD	Cleveland, OH USA
578	The Gleason Works/NASA GRC & Fairport High School	Rochester, NY
642	NASA GRC/DuPont/Simonton Windows/Pickering and Associates/Avatar Metalworks/McHenry Electric/Domino's Pizza/Murray's Sheet Metal/General Electric/St. Joseph's Hospital/Lowe's & Parkersburg High School	Parkersburg, WV
652	NASA Goddard Space Flight Center/Eriez Magnetics & Seneca High School	Erie, PA
695	NASA GRC & Beachwood High School	Beachwood, OH
779	NASA-Glenn/Timken Products/Bohning and Associates & Cuyahoga Heights High School	Cuyahoga Heights, OH
808	NASA GRC/Lockheed Martin & Alliance High School	Alliance, OH
829	NASA GRC/Trilithic & Walker Career Center	Indianapolis, IN

830	NASA GRC/Pfizer/MDI - Mechanical Dynamics, Inc/ACTI - Automation Computer Technologies, Inc & Huron High School	Ann Arbor, MI
859	NASA GRC/West Virginia University/Lowe's/Domino's Pizza & Morgantown High School	Morgantown, WV
872	American Electric Power/NASA GRC/Columbus State Community College/NSF-DUE & Marion-Franklin High School & Southeast Career Center	Columbus, OH
883	NASA GRC & Cleveland Central Catholic	Cleveland, OH
892	SAVVY Engineering/NASA & Canal Winchester High School	Canal Winchester, OH
963	American Electric Power/NASA GRC/Columbus State Community College/NSF-DUE & East High School & Southeast Career Center	Columbus, OH
964	NASA GRC/Ford Motor Company & Bedford High School	Bedford, OH
966	Cleveland Clinic Eastern Region/North Coast Tech. Prep. Consortium & Cleveland Heights High School	Cleveland Heights, OH
970	NASA GRC/Cuyahoga Community College/Cleveland State University & Shaw High School	East Cleveland, OH
979	Sinclair Community College/NASA GRC/Wright Patterson Air Force Base/Xontech/KohITek & Patterson Career Center & Stivers High School & Northmont High School & Trotwood Madison High School & Dunbar High School & Jefferson High School & Chaminade Julianne & Miamisburg High School & Springfield North High School & Stebbins High School & Shawnee High School	Dayton, OH USA

### Awards received by Teams:

Award	Team Number	Full Name	Home
Regional Chairman's Award	49	NASA GRC/Dow Chemical Company & Buena Vista High School	Saginaw, MI
Regional Winner 1	859	NASA GRC/West Virginia University/Lowe's/Domino's Pizza & Morgantown High School	Morgantown, WV
Regional Winner 2	469	NACHI Robotics/EXIDE/Faurecia/Lawrence Technological University/Norgren Automotive/Citation Tool/Schenck-Motorama & Lahser High School & International Academy	West Bloomfield, MI
Regional Winner 3	201	Visteon Corporation/UAW Visteon & Rochester High School	Rochester Hills, MI
Regional Finalist 1	67	General Motors Milford Proving Ground & Huron Valley Schools	Milford, MI
Regional Finalist 2	68	General Motors North America Engineering & North Oakland County Schools	Pontiac, MI
Regional Finalist 3	302	DaimlerChrysler & Lake Orion High School	Lake Orion, MI
Imagery Award	461	Purdue University/Schlumberger & West Lafayette High School & Jefferson High School & Harrison High School & McCutcheon High School	West Lafayette, IN
Leadership in Control Award	535	United Technologies Electronic Controls/Wabash Technologies/Bendix Commercial Vehicle Systems & Huntington North High School	Huntington, IN
Xerox Creativity Award	68	General Motors North America Engineering & North Oakland County Schools	Pontiac, MI
Delphi "Driving Tomorrow's	47	Delphi Automotive Systems & Pontiac Central High School	Pontiac, MI

## Technology" Award

Kleiner Perkins Caufield & Byers Entrepreneurship DaimlerChrysler Team Spirit Award Judges Award - Friday	519	General Motors/ABB Auburn Hills/Detroit Science Center & Golightly C.T.C.	Detroit, MI
Rookie All Star Award - Friday	191	Xerox & Wilson High School	Rochester, NY
#1 Seed	493	Stark State College/ACme Industrial Group/Roberetson Heating Supply & Marlington High School	Alliance, OH
Highest Rookie Seed	892	SAVvy Engineering/NASA /American Electric Power & Canal Winchester High School	Canal Winchester, OH
Incredible Play Award GM Industrial Design Award	67	General Motors Milford Proving Ground & Huron Valley Schools	Milford, MI
Motorola Quality Award	859	NASA GRC/West Virginia University/Lowe's/Domino's Pizza & Morgantown High School	Morgantown, WV
Johnson & Johnson Sportsmanship Award Judges Award - Saturday	240	Monroe Visteon & Jefferson Schools	Monroe, MI
Rookie All Star Award - Saturday	67	General Motors Milford Proving Ground & Huron Valley Schools	Milford, MI
Engineering Inspiration Award	302	DaimlerChrysler & Lake Orion High School	Lake Orion, MI
	229	Clarkson University & Massena High School & Salmon River High School	Potsdam, NY
	274	Ford Motor Co/NASA Glenn/Battelle/Biomec/Andersen/Cleveland Punch & Die/ Delzani Machines & Rhodes High School	Cleveland, OH
	963	American Electric Power/NASA GRC/Columbus State Community College/NSF-DUE & East High School & Southeast Career Center	Columbus, OH
	120	Advanced Manufacturing Center at Cleveland State University/TRW Inc/NASA Glenn Research Center/Battelle Memorial Institute/Progressive Computing Corporation & East Technical High School	Cleveland, OH

## VIP's Attending:

Stephanie Tubbs-Jones, Congresswoman, Representative/11<sup>th</sup> District

Jane Campbell, Mayor, Cleveland

Louis Stokes, Former Congressman

Merle Gordon, Mayor, Beachwood, OH

Frank Samuel, Science and Technology Advisor, Governor of the State of Ohio

Dave Lavery, NASA HQ

Dean Kamen, Founder, DECCA

David Brown, Executive Director, FIRST

Keith A. Ashmus, Partner, Frantz Ward, LLP

Deborah Beckwit, United Way

Rathindra Bose, Dean of Graduate Studies, Kent State University

Peter Buca, Business Team Leader, Parker Hannifin Corporation

Dr. Hou S. Cheng, Associate Professor, Cuyahoga Community College

Tom Coyne, Cleveland Board of Education  
Alex Croley, NASA  
Daniel Ducoff, Senior Director of Development, Rock and Roll Hall of Fame and Museum  
Richard and David Englund, Penn State –Erie  
Evan Gandola  
Joe Gange, Torque Transmission  
Nick Gattozzi, District Director, Senator Voinovich  
Ross Halliday, Battelle  
Joe Sarakaitis, Swagelok  
Bernadette Kenny, United Way  
Tracey Kirksey, NASA  
Daryl Laisure, Chief Executive Office, Zin Technologies  
James L. Mason, Vice President Public and Community Relations, Eaton Corporation  
Hugh and Sue Mckay, Northhill Directory  
Walt Merrill, Glennan Microsystems Initiative/Battelle  
Ed Pershey, Crawford Aviation Museum  
Julie Rehm, Battelle  
Barbara A. Sanders, Delphi Automotive  
Lonnie Sloane, Key Corporation  
Fatima Weathers, Vice President of Workforce, CAMP Inc.  
Karen White, Key Corporation

## **Media Coverage:**

### Television

#### Channel 3 (NBC affiliate)

- Weather reporter, Carey Coleman, did his weather and interviews with various FIRST teams from the Convocation Center on Saturday, March 16.
- A short spot at the end of the 6 p.m. news on Saturday.

#### Channel 5 (ABC affiliate)

- Leon Bibb did an interview with John Hairston and Terry Krivac of OAI for his Kaleidoscope program on Sunday mornings that will aired on March 24.
- A videographer from Channel 5 was at the Regional on Friday, but I do not know if it made it on the news. I did not see it on the 11 p.m. news that night.

#### Channel 8 (FOX affiliate)

- Kenny Crumpton did live remote interviews with the Beachwood and East Tech teams on Thursday, March 14, during the Fox 8 News in the Morning show.
- They also took some video footage for possible use on the news later in the day, but I do not have confirmation of that.

#### Channel 19/43

- A reporter and videographers were at the Regional on Friday. I did not see the coverage but it was noted in the video clips from Headquarters.

#### Ohio News Network

- A reporter and videographers were at the Regional on Thursday. Not sure of when it aired.

#### WVIZ (PBS)

- Videographer and producer were there to gather footage to be used on a kid's news show that is seen on schools throughout Ohio.

#### Adelphia Cable TV

- Videographers were there all three days getting footage and doing interviews for a documentary they will air.

#### Cuyahoga Community College

- A crew was present all three days getting footage and doing interviews for a production for the college.

#### Cleveland Municipal School District

- A crew was there all three days getting footage and interviews for a program they are doing. They had been gathering footage prior to the regional at the three Cleveland Municipal School District teams participating in the Regional.

### Radio

#### WCPN – Cleveland Public Radio

- Reporter attended Regional on Friday and Saturday. Interviews aired on Tuesday, March 19.

### Print

#### Coverage at the Regional

##### The Plain Dealer

- A reporter and a photographer were in attendance on Thursday, March 14, and a story appeared in the paper on Friday, March 15, on page 2 of the Metro Section with a picture on the front page of that section.
- A reporter and photographer were present on Saturday, March 16, and a story appeared in the Metro Section on Sunday, March 17.
- Donated advertising to be used as filler that appeared at least three times and possibly more during the two weeks prior to the event in the Classified Section and in the Friday Magazine on page 14 on March 15.
- Had a note in the Where To Go column under "Etc." in the Friday Magazine on March 8 and 15.
- Had a mention in the Best of Cleveland column by Chuck Yarborough on Page 3 of the Friday Magazine on March 15.

##### The Sun Herald

- A photographer was at the Regional on Friday, March 14. I will be looking for an article in the March 21 edition.

##### The Call and Post (African American Community)

- A photographer was present at the Regional on Friday. I will look for an article in the March 21 edition.

##### Kaleidoscope Magazine (Minority Media)

- A photographer was present on Friday for the opening ceremony and to get shots of the competition. The reporter was not able to make it but has put together an article from the releases and the press kit.

#### ClevelandLife News Magazine

- A reporter did a phone interview with John Hairston and Jo An Charleston, Chief of the Office of Educational Programs. I believe that was for the March 13 issue.
- Also was to have a large ad (donated) about the Regional in the March 13 issue.

#### Warren Tribune

- A photographer was present on Friday to cover the three Youngstown, OH, area schools.

#### Columbus Dispatch

- A reporter and photographer were present on Friday. An article was to appear in the March 17 Sunday edition.

#### Coverage before the Regional

##### The Cleveland State "On Campus"

- Story about the Regional in the March 4 edition.

##### Bedford (OH) Sun Banner

- Story on the Bedford High School team in the February 21 edition.

##### This Week South Side (Worthington, OH)

- Had an article about the Marion Franklin High School team in the February 18 edition.

##### Call and Post

- Had an article in the February 14 edition about the Regional and scholarships given to 23 schools by NASA Glenn.

##### Cincinnati Enquirer

- Had an article on the Cincinnati (OH) team in the February 7 edition.

##### Alliance Review

- Had an article on the Alliance (OH) team in the November 13 edition.

#### **Sponsors:**

Battelle Memorial Institute

Camp, Inc.

Cleveland Aerospace Partners' Regional Alliance

Cleveland Browns

The Cleveland Clinic

Greater Cleveland Growth Association

Cleveland Indians

Cuyahoga Community College

Eaton Corporation

The George Gund Foundation

Key Bank

NASA Glenn Research Center

Ohio Aerospace Institute

The Plain Dealer

QSS Group, Inc.

Rock and Roll Hall of Fame and Museum

Swagelok

Zin Technologies

## **Volunteers**

155 Volunteers worked over a 4-day period representing 17 organizations:

Accenture

Akima

Battelle Memorial Institute

BTAS Inc.

Cleveland Municipal Schools

Cleveland State University

Cuyahoga Community College

FORD

InDyne

NASA Glenn Research Center

Ohio Aerospace Institute

Ohio State Policeman

Swagelok Micro

Swagelok Snow Metal

Technical Staffing Professionals

Terasphere

University of Toledo

## **Judges**

Cecilia Neumann, Judge Advisor

Monique Aaron

Director of Channel Programs, Intrado Corporation

Chris Bailey

General Manager Automation Division, Lincoln Electric

Theodore A. Beltavski

Manager of Structural Engineering Department, R.E. Warner & Associates

Rebecca Bompiedi

Vice President for Technology, General Electric

Andrew S. Brush

Product Development Manager, Keithley Instruments

Kenneth F. Colucci

Assistant for Strategic Resources, MIT Lincoln Laboratories

Dean Elkins

Vice President of the U.S. Sales Group, Motoman, Inc.

Dr. Joseph Hahn

Chief of Surgery, Cleveland Clinic

G. Jean Hoppert

Operations Manager, M&M/MARS, Inc.

Herschel M. Hoppert

Technology Teacher (retired)

Dr. Richard G. Klein

Vice President (retired), Nordson Corporation

Dr. William P. Murphy

Chairman and CEO, Hyperion Inc.

Diana Pernicka  
Co-founder, Micro Computer Industries  
John C. Pernicka  
Chairman, Pernicka Corporation  
Michael Shoemaker  
Vice President, Zin Technologies Inc.  
Tom Sigafos  
Center of Research in Engineering Education  
Charles Steiner  
Surgeon, Cleveland Clinic  
Dr. Bruce Wolcott  
Department of Electrical Engineering, University of Kentucky

### **Feedback on Regional**

“I have stated far and wide--the Cleveland event was hands down the best 1st year event we have ever seen. Thanks for your enthusiasm and contributions to that success.”

- David Brown, Executive Director, FIRST

“WOW

Congratulations on a fantastic event. General comments rated it as the best first year event ever and maybe the best regional ever. The enthusiasm of the volunteers generated such a positive attitude among all participants. It was a very easy event for the FIRST staff to work due to such great local support. Keep up the good work!”

- Bob Hammond, Regional Manager, FIRST

“Hey what’s going on everyone i am from team 144 one of the drivers I just wanted to say that the buckeye regional has to be one of the most competitive regionals I have seen so far and that I can see it was extremely fun at the CSU convention center and the team party was excellent!!!!”

- Ryan Team 144 Cincinnati, Ohio

“The arena was great. I liked the layout, and not having a split pit was very helpful for scouting. My only concern with the arena was the price of food and the relatively short time the concession stands were open.

I really enjoyed the Hall of Fame. The only thing I would like is more space and such for dancing.

I really don't have much else to say. I enjoyed the competition, and I thought you guys did a fantastic job putting it on. It was probably the best regional I've been to.”

“The city of Cleveland and all the regional sponsors and volunteers deserve a big thanks for all they did to make our experience wonderful.”

- Jeff Waegelin Team 201 - Rochester, Michigan

“The arena was awesome...the pits seemed huge while the spectator area for the playing field seemed to have a great view where you sat/stood. I also think the food was a little pricey there, but I think that’s what u have to expect at a venue like that. (found a really good pizza place about 2 blocks away from the comp. )

The machine shop did an excellent job, we had to make the holes in the center of our sprockets bigger when we geared our robot down and the machine shop was quick and the job was done very well.

The party at the Rock & Roll Hall of Fame ROCKED! It was really cool being able to walk around the entire building and watching the band and stuff from the upper levels.

Cleveland overall was great. Quite a few places to eat (not breakfast )... The Sheraton hotel was also really good. Had a view of the Cleveland Browns Stadium, Rock & Roll Hall of Fame, and Lake Erie from my rooms window.

This regional was really great. Lots of action. I think the TechnoKats have probably found a new favorite regional next to the Motorola Midwest.”

- Clark Gilbert Team 45 - Kokomo, Indiana

“Buckeye Regional, You guys did awesome I would just like to give a huge congrats to all the teams at the buckeye regional. I saw some amazing robots for rookie teams and think that that is great, and want to wish you all good luck for nationals, I hope you will all be able to make it. ... Oh yea, and I met some cool people. Karaoke at Rock and Roll Hall of Fame was sooo much fun! Well thanks guys.”

- Wilson/Xerox Team 0191 - Rochester, NY

“FIRST off, let me start by saying THANK YOU to CLeveland for puting on such a strong regional!

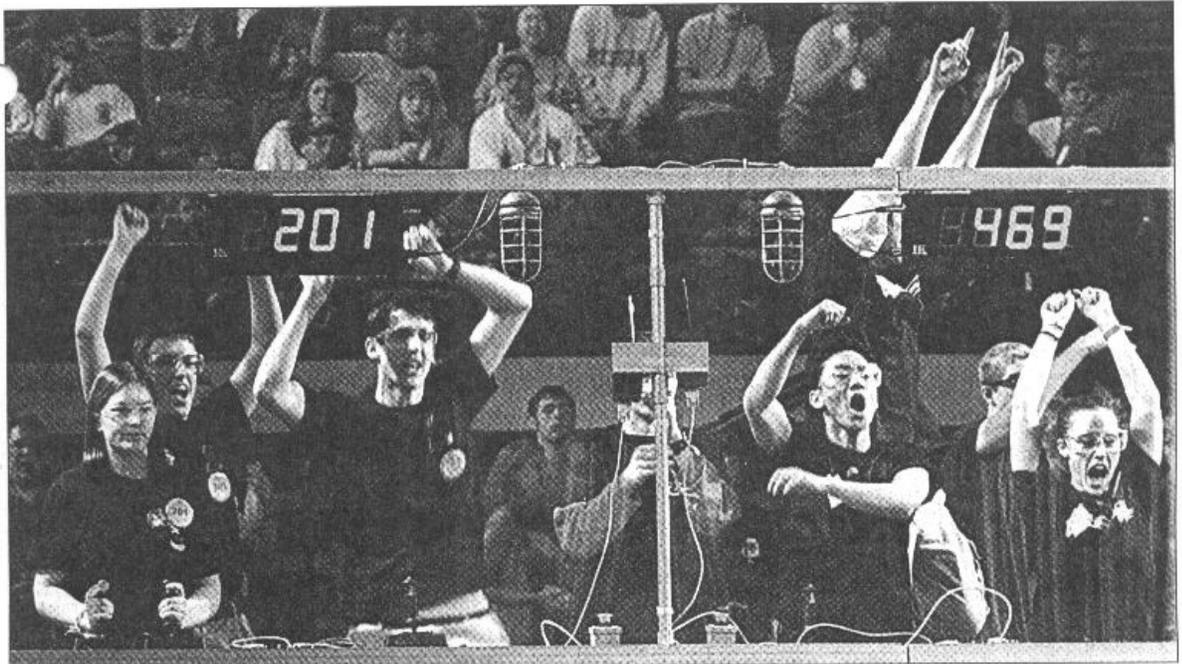
Cleveland had a huge venue and a lot of energetic supporters, I definitely think this will evolve into a big show in the years to come. The arena was HUGE, which leads me to believe that they could pack in about 40 more teams next time around. The party at the Rock and Roll Hall of Fame was a nice touch; I really had a good time!

The event was great, the robots were great, the party was great. I was a little disappointed that a few teams forgot to practice their gracious professionalism while they were going over all those cheers. “

- Emily Will Team 191 – Rochester, Michigan

“Cleveland was a GREAT time - Great matches - Congrats to the winners and runners up, everyone put on a GREAT show!”

- Aubry Team #47 - Pontiac, Michigan



PHOTOGRAPHS BY JOSHUA GUNTER | THE PLAIN DEALER

Combine science, technology and robotics, and a new spectator sport is created. Here, members of the Feds and Las Guerrillas teams, both from Michigan, celebrate their win as regional champs.

## Robotics contest attracts crowds, Segway inventor

CATHERINE GABE  
Plain Dealer Reporter

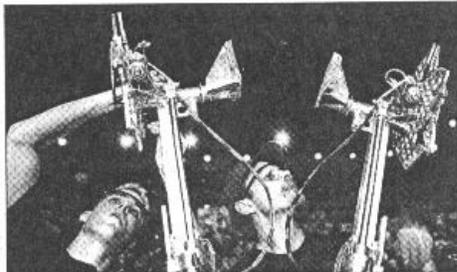
Yesterday, science and technology got a little sports appeal.

Loud music, line dancing, food and cheers filled the Cleveland State University Convocation Center yesterday for the Buckeye Regional robotics competition sponsored by FIRST, a nonprofit organization that aims to inspire appreciation of science and technology.

The event drew crowds as robots bashed other robots, maneuvered the court, clamped onto a goal post and dumped loads of basketballs to score points.

Half the center floor was a pit area where 57 teams from eight states tinkered with robots during a pre-game warmup.

Participants — the human ones — came with the requisite equipment: face paint, spiked hair, neon-colored bandannas, hula skirts and bright team T-shirts, including one that boasted "Splat Attack." And, of



If it breaks and you're in a robotics competition, improvise. Members of Las Guerrillas team from West Bloomfield, Mich., repair their robot before winning two out of three matches in yesterday's final round of the Buckeye Regional robotics competition, snagging the regional championship. They teamed up to win the title with the Feds, from Rochester, Mich., and Boling, from Morgantown, W.Va.

course, empty containers and bags of navy beans.

Hey, if teens can transform a box of 45 gadgets into a robot in six weeks, making noise makers is nothing.

The robotics competition, the

creation of Dean Kamen, who also is the founder of FIRST, now includes more than 600 teams in 17 regional competitions. NASA sponsors 200 teams nationally and 20 of those in yesterday's event. Dozens of workers from

**"A balanced machine is a happy machine,"**

Dean Kamen,

creator of the robotics competition

NASA's Glenn Research Center volunteered at yesterday's event.

The James Ford Rhodes High School team, the Rhodes Maniacs, placed 12th in the semifinals, the best of the 15 Greater Cleveland schools competing. They also won the Judges' Award for unique efforts and performance. East Tech High's team, Scarabian Knights, won the Engineering Inspiration award.

But yesterday, Kamen and his Segway, a powered two-wheel machine he predicts will revolutionize urban transportation, were winners in the teens' eyes.

They practically gathered at his feet. He's a man they can look up to. Literally.

Balanced on his two-wheeled machine, he seemed to hover above the group. "A balanced machine is a happy machine," he told a crowd of admirers. Youth

and parents jammed in for a photo op.

"Robots are almost incidental," Kamen said.

"It's not about building robots, it's about building relationships with individuals and building an understanding of technology. The robots, no pun intended, are just a vehicle," he said, standing atop Segway.

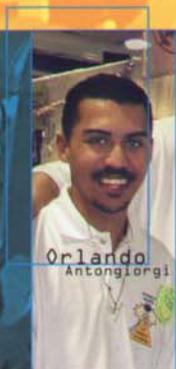
Robert Klayman's Beachwood High School robot did not win the competition, but he met the man he considers his role model.

"You have had a huge influence on me," the 17-year-old Beachwood junior said. "I was hoping one day to follow in your footsteps."

Or at least to follow Segway tracks.

Contact Catherine Gabe at: [cgabe@plained.com](mailto:cgabe@plained.com), 800-767-2821

How do you generate innovation and originality in young people?  
FIRST (For Inspiration and Recognition of Science and Technology)  
believes in providing them with the right tools,  
a little bit of supervision and unlimited freedom to create.



Orlando  
Antongiorgi

B e i n g

F I

More than once in his 20 years, **Orlando Antongiorgi** has been asked to create something from nothing. And each time, the result has been just short of amazing. In fact, the MARS 2001 MATE experiment may fly later this year with a circuit of Orlando's inventing. He was just 16 years old when he designed the circuit for NASA, and all he had to work with was a pile of spare parts.

"I gave him the parts, told him we needed a circuit built and said—Go for it," says Orlando's mentor at NASA Glenn Research Center in Cleveland, Ohio, Mike Krasowski. "If you can understand how a toilet works, you can understand an op amp."

To someone without any engineering background, Krasowski's statement may seem slightly glib. But then,

Krasowski isn't exactly what you'd expect in an electronics engineer. A below-average student, he readily admits that he chose to attend a particular vocational school because their ad was the most colorful in the phone book. Since then, however, he has earned several advanced degrees in electronics. It was just a matter of him finding his calling...and shaking up the system along the way.

"Most kids that go into engineering are pretty wealthy, they come from top schools, middle-class families," says Krasowski. "My case was different. I was totally blue-collar. But I made it—and if I can pull it off, then any kid can."

Krasowski's late father attended the same school Orlando attended, East Tech High, in a rough-and-

tumble Cleveland neighborhood. Orlando, however, selected East Tech specifically over a number of other schools because of a special program they were involved in called FIRST.

For Inspiration and Recognition of Science and Technology (FIRST) is a non-profit organization founded in 1989 by entrepreneur and visionary, Dean Kamen. Each year, FIRST holds a Robotics Competition, inviting high schools from across the nation to pit their custom-built robots against one another. The initial Robotics Competition drew 28 teams in 1992. This year, over 600 teams will compete for a staggering 50-plus scholarships and awards.

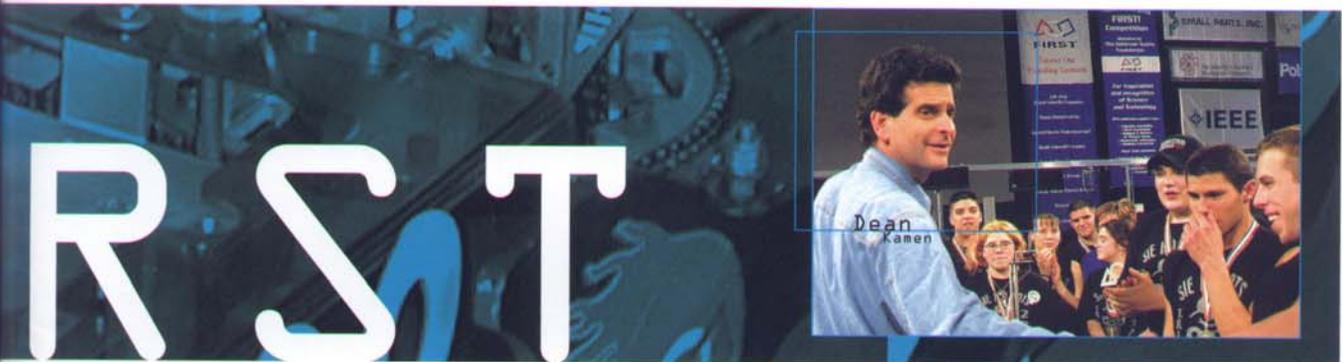
at East Tech in the fall so that I could join their new team.”

East Tech’s inaugural team was a first for NASA as well. Although the Glenn Research Center had been supporting East Tech for over 20 years by providing funding for engineering projects and technical support, the Robotics Competition was an entirely new endeavor

**“FIRST is an out-of-the-box mentor program on steroids.”**

—Mike Krasowski, NASA

for everyone involved. The impact of the program has had long-lasting effects. Ten years ago, East Tech was in danger of being closed down—only 43% of the 900 students passed the State of Ohio’s Proficiency Test.



Every January, Kamen hosts a kick-off workshop for participating teams, unveiling the kit of materials they will use to build their robot. They have six weeks to turn a pile of sensors, fiber optics, motors and

**“If you give them [interns] some responsibility—you can achieve some exciting results.”**

electronics into a lean, mean, fighting machine. Along the way, they’ll learn about teamwork, problem solving and goal setting.

#### READY, SET, BUILD

Orlando’s freshman year was the beginning of East Tech’s participation in the FIRST Robotics competition.

“I heard about FIRST in 8th grade, when I saw a report on television,” remembers Orlando. “I enrolled

Now, enrollment is up to 1400 and passing scores hover above 70%.

Krasowski credits both NASA’s involvement and former principal Terry Butler’s commitment with the school’s revival, but it’s clear he believes FIRST has played a seminal role as well.

“FIRST creates a cycle that self-resonates,” he says. “Each year we draw more talented kids to East Tech, making a positive impact on the school. The teachers feel it, the parents see it and the other kids feed off that energy.”

#### PLUG AND PLAY

Krasowski has a succinct description for the FIRST Robotics Competition: “It’s an out-of-the-box mentor program on steroids.” Krasowski himself may have something to do with the “on steroids” part of the equation. When Orlando arrived at NASA, fresh-faced and eager, Krasowski saw more than just an average teenager.



"You don't have to work

"Interns are sometimes given credit just for being young," says Krasowski. "But if you give them some responsibility, if you make them work, you can achieve exciting results."

Orlando was presented with a challenge—NASA needed an auto-zero circuit for a radiometer amplifier that was part of the Mars 2001 MATE experiment. The engineers gathered up some materials from their shop, provided Orlando with a basic explanation of circuitry building (the "how-a-toilet-works" example) and encouraged him to design. Within a couple of days, Orlando produced the circuit.

"Our reliability engineer was freaking out when he

Award in 1999, which recognizes the best partnership between a school and their corporate sponsorship, validating the bond between NASA and the school.

In his remarks to the Council on Competitiveness in April 2000, J.T. Battenberg III, Chairman, CEO and president of Delphi Automotive Systems talked at length about the program. "I believe FIRST is making a real difference in getting kids interested in science and technology, and that is very, very important to companies like Delphi. FIRST is the only 'sport' I know of where kids get to play with the pros. They can't do that in baseball, football or soccer. But they can with our engineers and corporate executives."



LEFT TO RIGHT:  
A team confers at  
the New York City  
FIRST Regional;  
Orlando and the  
team he mentors  
at the Buckeye  
Regional; students  
at the New York  
City Regional  
cheer their  
teammates.

found out a teenager designed flight hardware," laughs Krasowski. "But the point of that exercise was that it doesn't matter who did it—as long as it made it through qualification. It was a lesson for NASA and Orlando.

"Most people are taught in high school to seek out the 'right' or 'wrong' answer," he continues. "But in the real world, the solution to a problem is usually just something that works. Orlando's circuit fit the project, even if he designed it differently than another engineer would have. It's just like the robots kids build for the FIRST competition—they all solve the same problem in different ways."

#### URBAN RENEWAL

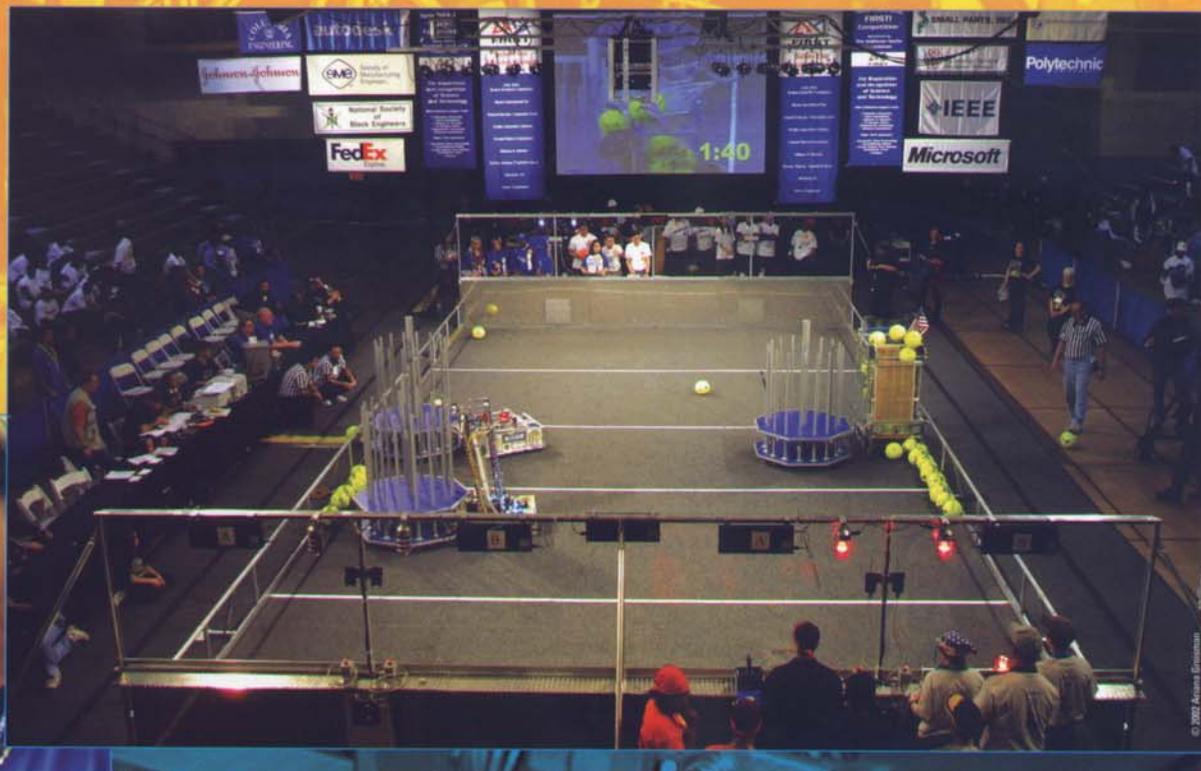
When the East Tech Robotics Team went to their first competition in Orlando, Florida, they were the only urban school in attendance. Yet they placed in the top ten out of 85 teams. Since then, they have received numerous awards, including the National Chairman's

A recent study demonstrated that the number of patents granted in the U.S. is 29.7%—8th place behind countries like South Korea, the Netherlands and even Taiwan. Although inspiration can't be taught, innovative thinking can be, as Orlando has demonstrated so well.

Just this past year, Orlando designed the irreverently named ARMPIT (Artificial Muscle Pneumatic Innovative Technology). "We got the idea from a (spider-looking) robot that they have here at my university, and just decided to try something simple with the artificial muscles, like our arm," explains Orlando simply. Ironically enough, he and a fellow intern from East Tech, Nate Gucik, used parts left over from an old FIRST Robotics kit to assemble the project.

"The robots kids build for the  
FIRST competition all solve the  
same problem in different ways."

in technology to reap the benefits of a degree in electrical engineering."



"To control the system...we made some modifications [to an EMG circuit] and created a digital output. The output, which came from three electrodes that were attached to my bicep, was sent to the controller of the pneumatics, which then caused the artificial arm muscle to contract or expand...when the human arm would raise, so would the robotic arm."

#### SCIENCE AND TECHNOLOGY IN THE "REAL" WORLD

"It doesn't really matter what Orlando ends up doing, as long as he likes it," declares Krasowski. "You don't have to work in technology to reap the benefits of a degree in electrical engineering. He should take the opportunity to enjoy his experiences, and not just look to solve problems."

Krasowski believes that a firm understanding of science fosters an understanding of how the world

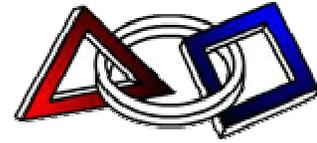
works. "It makes your life easier, from figuring out how to make one-third of a recipe to calculating how you're going to get your truck out of a ditch," he explains. "Engineering helps you problem-solve. As long as Orlando learns that lesson above all, then I get my little piece of immortality for teaching him."

Orlando is now a sophomore at Case Western Reserve University in Cleveland, majoring in Electrical Engineering. He mentors the East Tech team. At the Buckeye Regional Competition in Cleveland this year and again at the Championship Competition, their team won the Engineering Inspiration Award, which recognizes a team's success "in advancing respect and appreciation for engineering and engineers, both within their school, as well as their community"—a piece of immortality for Orlando as well as Krasowski. ♣

*For more information on FIRST and its programs, please visit their Web site [www.usfirst.org](http://www.usfirst.org).*



# 2003 FIRST Event List



Event	Venue	Location	Dates
BAE SYSTEMS Granite State Regional	Verizon Wireless Arena	Manchester, NH	Mar 6-8
<a href="#">Buckeye Regional</a>	CSU Convocation Center	Cleveland, OH	Mar 6-8
NASA / VCU Regional	VCU Siegel Center	Richmond, VA	Mar 6-8
Sacramento Regional	California Expo & Fairgrounds	Sacramento, CA	Mar 6-8
St. Louis Regional	St. Charles Family Arena	St. Charles, MO	Mar 6-8
<a href="#">Arizona Regional</a>	Arizona Veteran's Coliseum	Phoenix, AZ	Mar 13-15
<a href="#">Chesapeake Regional</a>	U.S. Naval Academy	Annapolis, MD	Mar 13-15
Pittsburgh Regional	Pitt Petersen Center	Pittsburgh, PA	Mar 13-15
UTC New England Regional	Meadows Music Theatre	Hartford, CT	Mar 13-15
Central Florida Regional	University of Central Florida	Orlando, FL	Mar 20-22
Great Lakes Regional	Eastern Michigan University	Ypsilanti, MI	Mar 20-22
New York City Regional	Riverbank State Park	New York, NY	Mar 20-22
SBPLI Long Island Regional	Suffolk County Community College	Long Island, NY	Mar 20-22
<a href="#">Canadian Regional</a>	Hershey Center	Mississauga, ON Canada	Mar 27-29
Midwest Regional	Northwestern University	Evanston, IL	Mar 27-29
Peachtree Regional	Gwinnett Civic Center	Duluth, GA	Mar 27-29
Philadelphia Alliance Regional	Drexel University	Philadelphia, PA	Mar 27-29
Silicon Valley Regional	San Jose State University	San Jose, CA	Mar 27-29
J&J Mid-Atlantic Regional	Rutgers Athletic Center	Piscataway, NJ	Apr 3-5
Lone Star Regional	Reliant Arena Complex	Houston, TX	Apr 3-5
Pacific Northwest Regional	University of Washington	Seattle, WA	Apr 3-5
Southern California Regional	Los Angeles Sport Arena	Los Angeles, CA	Apr 3-5
West Michigan Regional	Grand Center	Grand Rapids, MI	Apr 3-5
The Championship Event	TBD	TBD	TBD_



## 2003 Buckeye Regional Team List



Team #	Team Name	Team Location
48	<a href="#">Delphi Corporation &amp; Warren G. Harding High School</a>	Warren, OH
63	<a href="#">General Electric Transportation Systems &amp; McDowell High School</a>	Erie, P
73	<a href="#">Bausch &amp; Lomb/Rochester Institute of Technology &amp; Edison Technical and Occupational High School</a>	Rochester, NY
85	<a href="#">Town &amp; Country Group/ITW/Drawform/Jubilee Foundation of Herman Miller/Midway Machine Technologies &amp; Zeeland East/West High School &amp; Fruitport High School</a>	Zeeland, MI
94	Lear Corporation & Southfield High School	Southfield, MI
120	Industrial Technology Institute at Cleveland State University/NASA Glenn Research Center/Battelle Memorial Institute/MBNA Foundation & East Technical High School	Cleveland, OH
144	<a href="#">Northwest High School</a>	Colerain Township, OH
191	<a href="#">Xerox &amp; Wilson High School</a>	Rochester, NY
211	Eastman Kodak & John Marshall High School	Rochester, NY
274	<a href="#">Ford Motor Co/Cleveland Punch &amp; Die &amp; Rhodes High School</a>	Cleveland, OH
276	<a href="#">Youngstown State University &amp; Youngstown Chaney High School</a>	Youngstown, OH
291	<a href="#">GE Transportation Systems &amp; Central High School &amp; Villa Maria Academy &amp; East High School &amp; Collegiate Academy</a>	Erie, PA
340	<a href="#">Churchville-Chili High School</a>	Rochester, NY
379	<a href="#">Girard High School</a>	Girard, OH
382	NASA Glen Research Center/Columbus State Community College/American Electric	Columbus, OH

	Power & Eastmoor Academy	
451	<a href="#">DANA Spicer &amp; Sylvania City Schools</a>	Sylvania, OH
541	<a href="#">Cleveland State Univ.-Mechanical Engineering Technology/Schultz Engineering Associates/RML Tool &amp; Die Inc./MBNA Foundation/Accurate Instrument Service Co./WIRENET/Diamond Wheel &amp; Fabricating Inc./Custom Metal Fabrication Inc. &amp; Max S. Hayes Vocational H. S. &amp; CMSD</a>	Cleveland, OH
548	<a href="#">Robert Bosch Corporation &amp; Northville High School Robostangs</a>	Northville, MI USA
573	<a href="#">Brother Rice High School</a>	Auburn Hills, MI USA
578	The Gleason Works & Fairport High School	Rochester, NY USA
642	<a href="#">DuPont/Simonton Windows/Pickering and Associates/McHenry Electric/Domino's Pizza/Murray's Sheet Metal/St. Joseph's Hospital/Lowe's &amp; Parkersburg High School</a>	Parkersburg, WV USA
677	<a href="#">Ohio State University/American Electric Power &amp; Columbus School for Girls</a>	Columbus, OH USA
695	<a href="#">Beachwood High School</a>	Beachwood, OH USA
808	<a href="#">Lockheed Martin &amp; Alliance High School</a>	Alliance, OH USA
830	<a href="#">AVL NORTH AMERICA, INC &amp; Huron High School</a>	Ann Arbor, MI USA
835	Any Company & Detroit Country Day School	Beverly Hills, MI USA
859	West Virginia University & Morgantown High School	Morgantown, WV USA
872	American Electric Power/Columbus State Community College/NSF-DUE & Marion-Franklin High School & Southeast Career Center	Columbus, OH USA
883	<a href="#">Tri-C Unified Technology Center &amp; Cleveland Central Catholic</a>	Cleveland, OH USA
892	<a href="#">SAVvy Engineering/American Electric Power &amp; Canal Winchester High School</a>	Canal Winchester, OH USA
902	<a href="#">Delphi Automotive Systems, Saginaw &amp; Heritage High School</a>	Saginaw, MI USA
963	American Electric Power/Columbus State Community College/NSF-DUE & East High School & Southeast Career Center	Columbus, OH USA
964	<a href="#">Ford Motor Company &amp; Bedford High School</a>	Bedford, OH USA
966	Cleveland Clinic Eastern Region/North Coast Tech. Prep. Consortium/The Cleveland Clinic Foundation & Cleveland Heights High School	Cleveland Heights, OH USA

970	<a href="#">Cuyahoga Community College/Cleveland State University &amp; Shaw High School</a>	East Cleveland, OH USA
1000	Urschel Labs/Valparaiso University Engineering & Wheeler High School	Valparaiso, IN USA
1001	Bedford High School	Lyndhurst, OH USA
1008	CSCC & Whetstone High School	Columbus, OH USA
1014	<a href="#">The Ohio State University &amp; Dublin City Schools</a>	Dublin, OH USA
1022	GE Industrial Systems (Motors & Controls) & South Side High School	Fort Wayne, IN USA
1030	Columbus State Community College & Eastland Career Center	Groveport, OH USA
1038	P&G/Miami University & Lakota East High School	Liberty Township, OH USA
1064	<a href="#">Milwaukee School Of Engineering &amp; Milwaukee Trade and Technical High School</a>	Milwaukee, WI USA
1074	CSCC & Thomas Worthington H.S.	Worthington, OH USA
1122	GE Consumer Products-Lighting / Collinwood Computech Senior High School & Collinwood Computech Senior High School	Cleveland, OH USA
1126	Xerox & Webster High Schools	Webster, NY USA

**2003 FIRST Buckeye Robotics Competition  
Planning Committee**

**Martin Kress**

Vice President & General Manager, Battelle Memorial Institute  
Planning Team Chairman - Fundraising Team

**Michael Salkind**

President, Ohio Aerospace Institute  
Planning Team Co-Chairman - Fundraising Team (Lead)

**John M. Hairston Jr.**

Director of External Programs, NASA Glenn Research Center  
Planning Team Co-Chairman - Fundraising Team

**Joanne Belovich**

Associate Dean, for Academic Affairs, Cleveland State University  
Judge Coordinating Team (Lead)

**Eric A. Bobinsky**

Terasphere  
VIP Coordinating Team

**Erskin Cade**

Director, Keybank  
VIP Coordinating Team (Lead)

**Jo Ann Charleston**

Chief, Office of Educational Programs, NASA Glenn Research Center  
NASA Planning Team (Lead)

**Christopher Coburn**

Executive Director, Cleveland Clinic Foundation Innovation  
Judge Coordinating Team

**Frank J. Detardo**

Cleveland Municipal Schools  
New Team Recruitment & Volunteer Coordinating Team

**Gail Dolman-Smith**

President, Paragon TEC  
VIP Coordinating Team

**Carol Galica**

Educational Technology Specialist, InDyne Inc.  
Regional Coordinator - New Team Recruitment & Volunteer Coordinating Team

**Sally Harrington**

Media Relations Specialist, NASA Glenn Research Center  
Media Coordinating Team

## **2003 FIRST Buckeye Robotics Competition Planning Committee**

### **Ann Heyward**

Vice President for Workforce Enhancement, Ohio Aerospace Institute  
Financial Coordinator - VIP Coordinating Team

### **Shanessa Jackson**

Web Designer, BTAS Inc.  
Media Coordinating Team - Team Dinner/Special Events Team

### **Clarence Jones**

Program Support Assistant, BTAS Inc.  
Administrative Support

### **Michael Krasowski**

Electrical Engineer, NASA Glenn Research Center  
Judge Coordinating Team

### **Terry Krivak**

Vice President, Institute for Collaboration in K-12 Education, Ohio Aerospace Institute  
New Team Recruitment & Volunteer Coordinating Team (Lead)

### **Rob LaSalvia**

Office of Educational Programs, NASA Glenn Research Center  
New Team Recruitment & Volunteer Coordinating Team

### **Bobbie Lindenbaum**

Coordinator, East Suburban Business Advisory Council, Beachwood Board of Education  
Team Dinner/Special Events Team (Lead) - Media Coordinating Team

### **Craig McAtee**

Executive Director, Manufacturing and Applied Technologies, Cuyahoga Community College  
New Team Recruitment & Volunteer Coordinating Team (Co-Lead) - Fundraising Team

### **Joan Murdock**

Ohio Aerospace Institute  
New Team Recruitment & Volunteer Coordinating Team

### **William Nyerges**

Office of Educational Programs, NASA Glenn Research Center

### **Maria Torres**

Management Support Assistant, NASA Glenn Research Center  
VIP Coordinating Team

### **Craig Woodson**

Senior Director of Education, Rock and Roll Hall of Fame and Museum  
Team Dinner/Special Events Team