



Team 1718 Budget Summary

Team Budget

Funding Received	Planned Funding	Spending	Planned Spending
\$ 8,000.00	\$ 18,250.00	\$ -	\$ 20,400.00

Total Funds
\$ 26,250.00

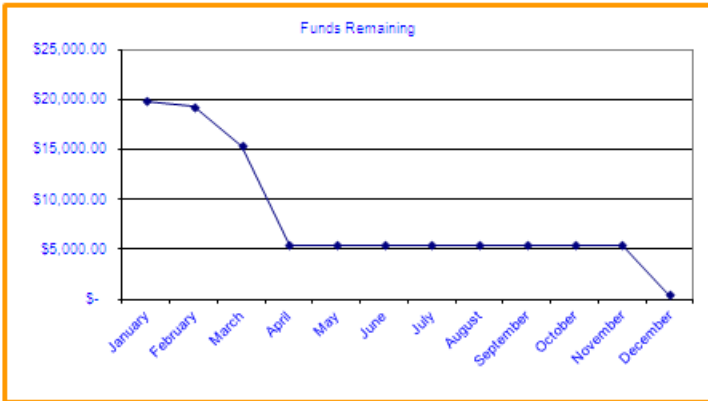
Total Expenditures
\$ 20,400.00

End of Year Amount
\$ 5,850.00

Instructions: The only cells on this sheet that should be changed are the values in the Budget column of the Group Budget table (in light blue). Enter the amount of money each group has to spend in this column.

Group Budgets

Group	Budget	Remaining
Mechanical	\$ 3,000.00	\$ 3,000.00
Electrical	\$ 2,000.00	\$ 2,000.00
Business	\$ 200.00	\$ 200.00
Spirit	\$ 3,000.00	\$ 2,000.00
Miscellaneous	\$ 4,500.00	\$ 4,500.00



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2																
3		Sponsor Name	Amount	Date	Type	Type List										
4		Sponsor F	\$ 5,000.00		Planned	Planned										
5		Sponsor I	\$ 3,750.00		Planned	Planned										
6		Sponsor G	\$ 3,000.00		Committed	Committed										
7		Sponsor H	\$ 1,500.00		Planned											
8		Sponsor T	\$ -		Planned											
9		Sponsor I	\$ 2,500.00		Planned											
10		Sponsor N	\$ 500.00		Planned											
11		Sponsor G	\$ 2,500.00		Planned											
12		Sponsor P	\$ 5,000.00		Committed											
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Instructions: For each expense, add a name, amount, date, and type. The type can be either "planned", or "committed". This can be entered by clicking on the Type column and using the drop down menu to pick the type. This tells the front spreadsheet how to handle each incoming amount.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2																
3	Person	Amount	Date	Description of Purchase	Status	Expense Type										
4	Person A	\$ 5,000.00	12/15/10	Initial Registration	Planned	Registration										
5	Person D	\$ 4,000.00	3/15/11	States Registration	Planned	Registration										
6	Person E	\$ 5,000.00	4/1/11	Championship Registration	Planned	Registration										
7	Person E	\$ 400.00	4/1/11	Travel	Planned	Room & Board										
8	Person E	\$ 400.00	1/10/11	T-Shirts	Planned	Spirit										
9	Person E	\$ 300.00	2/15/11	Buttons	Planned	Spirit										
10	Person F	\$ 5,000.00		Lodging	Planned	Room & Board										
11	Person E	\$ 300.00	1/15/11	Shirts	Planned	Spirit										
12	Person D	\$ 500.00														
13	Person A	\$ 4,000.00														
14	Person E	\$ 2,000.00														
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Person List	Expense Type	Status
Person A	Electrical	Planned
Person B	Mechanical	Committed
Person C	Business	
Person D	Spirit	
Person E	Room & Board	
Person F	Gas	
Person G	Registration	

Instructions: Enter the names of the people who will be paying during the season into the Person list. Leave the top row blank. Enter Expense Types into the Expense Type column. Enter the status tuypes into the status column. Each of these columns can be entered on the spreadsheet by clicking in the cell then using the drop down box to select the desired value.

The One Page Build Season

Team 1718: The Fighting Pi
www.fightingpi.org

Week 1

Build field
Modify or build cart
Purchase game pieces
Learn game rules
Develop strategies & counter strategies
Check Chief Delphi and USFirst Q&A
Determine how to function as a team
Select final strategy
Brainstorm robot characteristics
Weighted objective table to narrow choices
Autonomous programming with kitbot chassis
Teleop programming with kitbot chassis
Concept freeze
Order materials for chassis

Week 2

Prototype manipulators
Controls work:
Controls board laid out
Begin build of controls board
Chassis design completed

Week 3

Compare prototypes
Build chassis
Assemble drivetrain to chassis
Freeze object manipulator design
Complete controls board

Week 4

Competition Robot
Drive System Assembly
Controls assembly
Test Drive System
Design guarding and bumpers
Practice Robot
Order all materials for second robot
Build controls board

Week 5 - Continue on both bots

Competition robot
Complete manipulator tweaks
Test teleoperated code
Test autonomous code
Begin driver training
Practice Robot
Build second manipulator
Build chassis and drive train

Week 6 - Drive practice and programming

Competition Robot
Final Programming
Driver Practice
Bag Robot
Practice Robot
Complete assembly of bot
Test practice bot

The build season doesn't end just because your first robot is bagged!

Post Bag

Train drivers on second robot
Finish scouting system
Judge Packets
Safety Packets
Pit presentations
Watch streaming of other events

Please note, that this does not contain all the deadlines, awards, and other information for the season. Make sure to read the rules and understand FIRST's deadlines for any given year.

Bylaws Outline

By Team 1718 – The Fighting Pi

www.fightingpi.org

Bylaws provide structure to a team. They can be extremely useful in managed team conduct, resolving disagreements, or in cases where discipline needs to occur. Team 1718's bylaws contain some of the follow sections that you might want to consider:

- I. Team Name
 - A. *Description*
 - B. *Mission Statement*
- II. Funding
 - A. *Dues*
 - B. *Fees*
- III. Fundraising
 - A. *Team Structure*
 - B. *Member Roles*
 - C. *Mentor Roles*
- IV. Community Requirements
 - A. *Volunteering*
 - B. *Demonstrations*
- V. Code of Conduct
- VI. Disagreement Resolution Process
- VII. Bylaws Amendment Process
- VIII. Definitions
- IX. Authors
- X. Signatures

Team 1718 Comprehensive Tool List

Mechanical - Power	Necessary Tool	Useful Tool
Cordless Drill	x	
Work Light		x
Dremel w/ Carbide Burrs		x
Drill Press		x
Table Grinder		x
Angle Grinder		x
Vertical & horizontal Bandsaw	x	
Heat Gun	x	
Saber / JIG saw		x
Reciprocating Saw		x
Right Angle Drill		x

Mechanical - Hand Tools	Necessary Tool	Useful Tool
Ratchet and Socket Set (1/4" & 3/8" Drive)		x
Wrenches	x	
Regular Screw Drivers	x	
Phillips Screw Drivers	x	
Allen Wrenches (Hex Wrenches)	x	
Hacksaw	x	
Tap Handle (to tap threads)	x	
Vise Grips		x
Channel Lock Pliers		x
Vise	x	
Metal Files	x	
Punches (Center and Transfer)	x	x
Taps (6-32 thru 1/2 -13) w/ correct drill bits	x	
Hammer	x	
Rivet Gun (POP RIVIT)	x	x
Crescent wrench	x	
Pliers	x	
C-Clamps	x	x
Deburring Tool		x
Drill Bits	x	
Utility Knife	x	
Chain Break (#25 / #35)	x	
Small Gear Puller (2 or 3 Jaw)		x
Keyway Broach Set (1/8" & 1/4")		x
Countersink Set		x
Staking Tool for Battery Cables		x
Hole Saw Kit		x
Large Straight Edge (24 - 48")		x
Protractor / Angle Finder		x
Speed Square		x

Electrical	Necessary Tool	Useful Tool
Wire crimper	x	
Wire stripper	x	
Soldering Iron	x	
Digital Multimeter	x	



Starting a Team - Checklist

Team 1718: The Fighting Pi

www.fightingpi.org

Description	Timing (month)	Finished (Y/N)
Register the team on the TIMS website	Early September	
Establish a build location	Mid September	
Establish a location to drive and test the robot	December	
Locate sponsors	September	
Recruit mentors (background checks may be required)	September	
Designate secondary contacts in TIMs	September	
Invite Mentors via TIMs	September	
Choose 2-3 district events and register for them	Late September	
Recruit team members	October	
Collecting student dues	November	
Collect student contracts	November	
Gather tools (see the tool checklist)	November	
Gather miscellaneous materials (wire and fasteners)	November	
Send in the registration fee	November	
Create a team logo	November	
Establish a name and motto	November	
Purchase team shirts	November	
Have students log in to STIMS and add them to team roster	December	
Create a budget	December	
Create a team contact list	December	
Complete the First In Michigan (FIM) consent form	December	
Just Prior to Kickoff:		
Designate personnel to attend kickoff and collect the Kit Of Parts	December	
Print Kickoff Permission Slips	December	
Decide to attend a kick-off day event put on by another team or not	December	
Secure a location with broadband internet to watch the kickoff	December	
Download the encrypted manual from the FIRST website	December	

THE FIGHTING PI: TEAM

Sponsor Packet

Infinite Possibilities...



2011



MACOMB ACADEMY OF ARTS AND SCIENCES
23211 N. PROSPECT STREET ARMADA, MI

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WHAT IS FIRST?



What is First?

FIRST (For Inspiration and Recognition of Science and Technology) is a non profit organization founded by Dean Kamen in 1989 to promote science and technology to high school students. The Robotics competition consists of a game that changes each year. Teams have six weeks to design, create and test a robot for competition with specific restrictions.

What Is FRC?

The *FIRST* Robotics Competition (FRC) is an annual competition that helps young people discover the rewards and excitement of education and careers in science, engineering, and technology. FRC challenges high school aged young people – working with professional 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.



After the six week build season, the robot is shipped to its first event. Currently, FIRST consists of over 2000 teams (including teams from Brazil, Canada, and Israel) and has over 30 regional competitions culminating in the National Competition in St. Louis, MO. More information on FIRST is included in this packet. Not only does FIRST provide an excellent experiences for the students, they also grant many opportunities for varies scholarships. Each year they give out 11 million dollars in scholarship money to FIRST student participants.

How is the game played?

Each year's kick off event unveils a new, exciting, and challenging game. From the kick off, teams have just six weeks to solve the season's common problem using the same kit of parts and a standard set of rules.

How does the education community support *FIRST*?

FIRST provides an education and career path for young people who might not otherwise

have discovered an interest in and pursued education and careers in science and technology. *FIRST* works closely with schools at every level to transform both the perception and reality of education in science and technology.

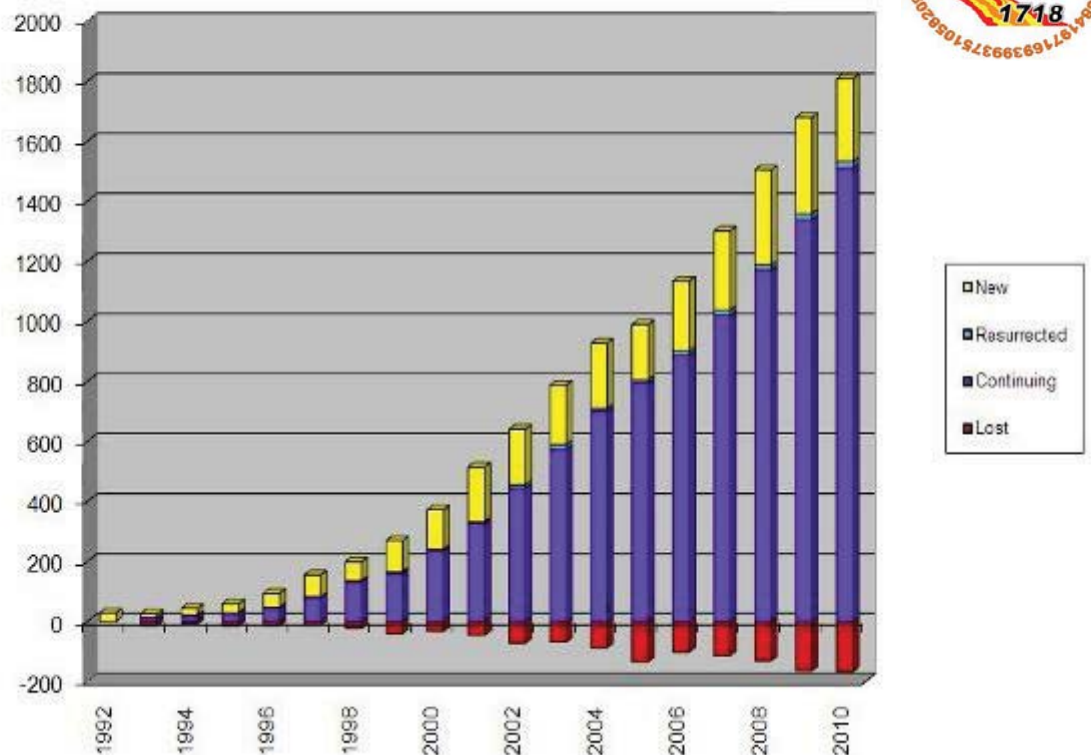


FIRST STATISTICS

- 99% of FRC members graduate from high school.
- 89% went on to college, 79% were still in college or employed after 4 years.
- FIRST also gave students a chance to belong and to experience supportive relationships with caring adults: 95% reported getting to know an adult very well and 91% indicated they felt they learned a lot from the adults on the team. Ninety-one percent felt that they “really belonged on the team.”
- Increase their sense of self-confidence (89%) and their motivation to do well in school (70%).
- Students learn problem-solving and time management skills as well. Students reported learning how to solve unexpected problems or how to find new or better ways of doing things (93%); how to manage their time under pressure (90%); how to weigh issues and options before making decisions (94%); and how to gather and analyze information (88%).
- More than 90% reported learning important communications skills, such as how to listen and respond to other people’s suggestions (94%) and how to talk with people to get information you need (94%). A smaller, but still substantial percentage (73%) reported learning how to make a presentation in front of people they did not know.



FRC Growth



ABOUT US

Who are we?

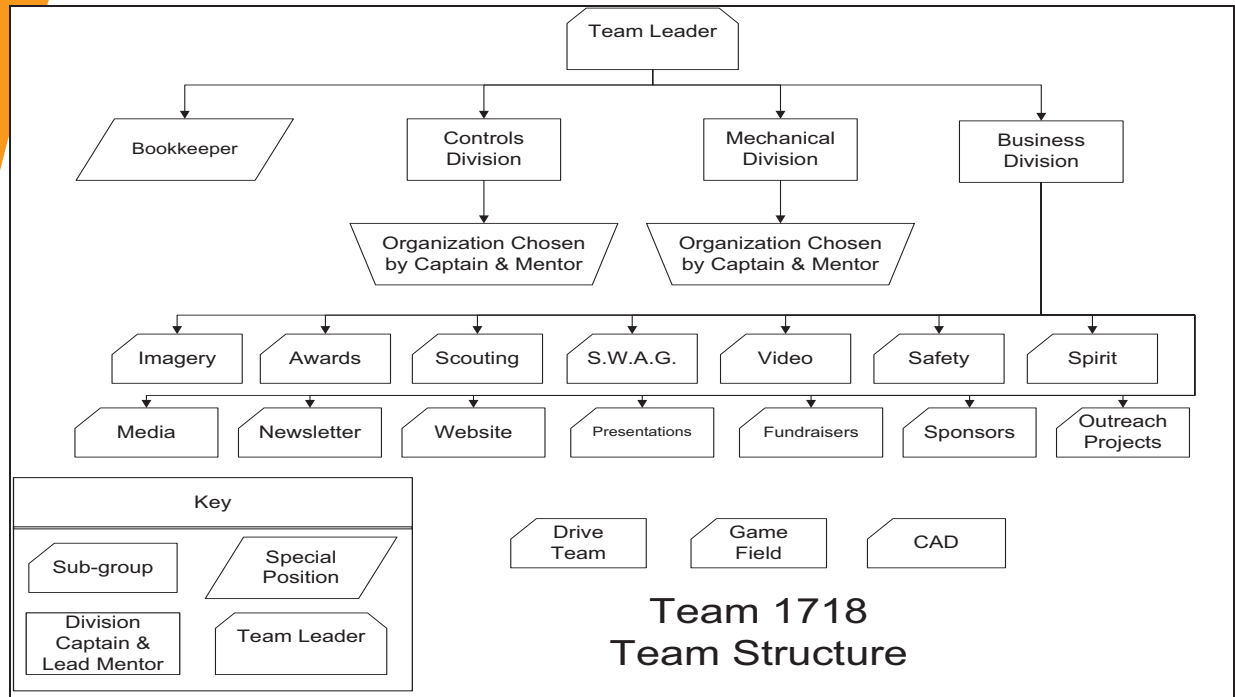
We are a FIRST Robotics team from the Macomb Academy of Arts & Sciences (MA2S). MA2S is a regional math and science center for grades 9-12 in Northern Macomb County. We are part of the Armada Area Schools district, but for half of our day we have students from six surrounding school districts. Team 1718 is in our sixth year of existence. Our team has grown from 15 students the first year to 30 students this year. The female to male team members have increased from 11% our first year to 31% this year. Our current team of 30 students is composed of a variety of students from Armada, Richmond, Memphis, New Haven and Capac schools. Students range from freshmen to seniors. After only five years, we have seen a very diverse assortment of robots and programs controlling them, from a defective tank to a moving LEGO block. One thing they all have in common, though, is that they articulate a desire of the team to be versatile and adaptable. They have all been designed to play offense and defense, and to accomplish all the task set by FIRST for every new game. For example, last year, not only were we able to effectively herd orbit balls and block opposing bots, but we were able to collect balls and shoot them. Every year the team has dealt with multiple problems, both in the building process, (having to completely redesign the robot and rebuild it at the last minute.



ABOUT US (cont)

Team Organization

The team is organized into three departments; Mechanical, Controls, and Business. There are also three outlying groups (Game Field, Drive Team and CAD group are treated separately). Each department is headed by a Lead Mentor and a Team Captain. The Team Captain and Lead Mentor of the Mechanical and Controls groups will organize their departments. Each team Captain is required to create a working calendar in order to track tasks and their progress throughout the build season; in which he/she must present during lunch on Saturdays to show the progress made during the previous week.



Team Offices and Descriptions

Head Mentor: The Head Mentor's role is to handle all incoming and outgoing monies, take attendance at the beginning and end of meetings, receive progress reports from member's teachers before kick-off and before every competition to ensure eligibility, meet with all captains on a weekly basis to discuss their progress, and suggest candidates for the Book-Keeper position, and monitor the position as needed.

Lead Mentor: Lead Mentors for departments are chosen by the other mentors. Their job is to oversee their department, help settle disputes, and assist Team Captains in distributing jobs. They can be in charge of only one department and have no power over any other departments and can only make suggestions.

Team Captains: Are voted on by the student members of the team. All students running for the position of captain are nominated by the members at the Christmas party and voted into their positions immediately after Kick-off. There are only three team captains; and their job is to preside over others in their department by handing out jobs, keeping people busy, etc. They are also responsible for communicating with mentors, maintaining good morale and reporting habitual poor performance.

Business Delegates: These positions are voted upon by the individual business sub-groups however they see fit. These positions have no actual "power" but serve as the representative of the group that report to the captain the progress the group has made. Each delegate should be fully aware of their groups tasks, and progress on each of those tasks.

WHAT WE DO?

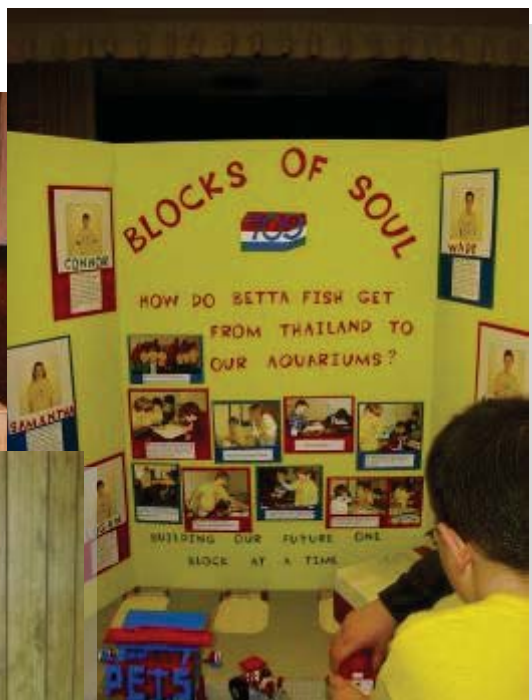
Community Outreach

- Adoption of A Local Road
- Multiple Spaghetti Dinners
- Sock Puppet Marathon
- Bowling Nights
- Public Demonstrations of Robot
- Lego League Mentors
- Presentations at Previous and Possible Sponsors
- Local Festival Volunteering
- Pancake Breakfasts

Public Relations

The message of *FIRST* is spread through our team in our weekly newsletter sent to past and present sponsors, team members, alumni, and schools in the area. The newsletter entails robot and subgroup progress as well as information regarding all on-goings of *FIRST*. We also have a team website, www.fightingpi.org, which contains sponsor information and links, a calendar of upcoming events, a newsletter archive, a team history by year, pictures, district event details, and links to other *FIRST* teams.

Each year, our team holds meetings, parties, and barbeques that promote team unity outside of team building activities. It provides a more collegial feeling amongst all team affiliates. Not only are students and teachers invited, mentors and sponsors are welcome too. Our supporters are thanked both personally by sending a private letter expressing our team's gratitude and publicly using the weekly newsletter. If a sponsor wishes to see the robot in person, we willingly bring it to them.



EXECUTIVE SUMMARY

- **Mission Statement:** Team 1718 focuses on being financially savvy, promoting science, engineering and technology in our community, and drawing students from multiple school districts to the FIRST experience. These goals are met by keeping a close eye on the team budget, giving sponsor presentations, and starting FIRST Lego League and Robotics teams in the local area. In order to ensure our business is successful, welcoming, and has a giving environment in which to learn, both at competitions and as a cooperative, the Fighting Pi donates time, money, and energy to charitable causes in hopes of strengthening bonds among team members, parents, volunteers, mentors, and sponsors.
- **Vision Statement:** As a team, our goal is to spread the message of FIRST by educating all students in the fields of science, engineering and technology, and to provide real life experiences and opportunities to further their knowledge and skills. We hope to bring students and mentors together to work towards common goals and to promote citizenship and social development within the surrounding communities.
- FIRST teaches students a variety of technical skills that apply to everyday life. Participants learn the basics of machining, modeling, electronics, programming, teamwork, leadership, public relations, communication, business and composition. FRC participation teaches individuals how to set goals and manage projects from start to finish, comparable to experiences in the business and engineering worlds. It trains future leaders and instills a love of math, science and technology in young adults.
- A major impact of FIRST on our students is the knowledge they gain, not only of engineering and business skills, but of themselves as well. Students increase their self-esteem and learn to take pride in their work. The FIRST program opens up numerous possibilities for our team members, providing options for college and future careers. We have altered the common perception of engineering in our community and have initiated FIRST related programs at all levels of education in our school district.



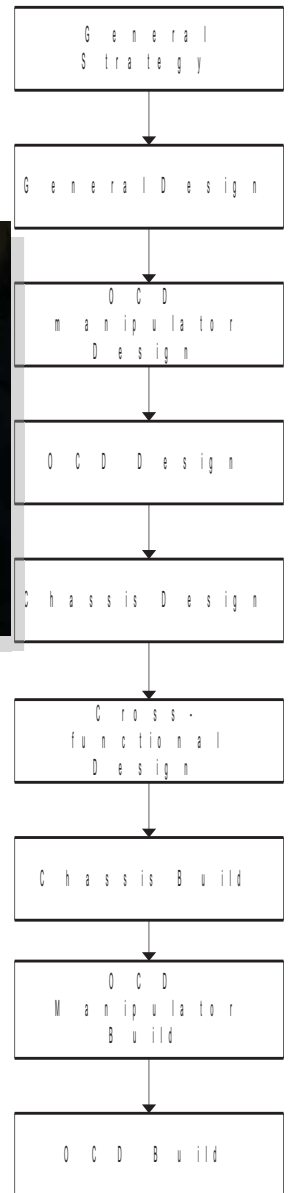
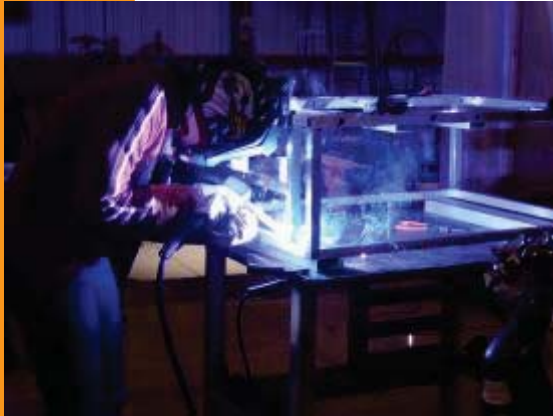
EXECUTIVE SUMMARY

- We pride ourselves in running like an engineering firm. We recently developed a team structure with mechanical, controls, and business departments. We improved our business plan and team bylaws to help us run smoothly throughout the build season. Our team incorporates gracious professionalism in all that we do, and we want to help other teams any way we can. We constantly search for ways to improve by expanding our partnerships, increasing our community outreach, and becoming more professional.
- Our team is dedicated to expanding FIRST as extensively as possible. We constantly give presentations at community events, including the Michigan Association of School Boards conference last fall. Our efforts have resulted in the start of 32 FIRST teams to date. We have close relations with many of our teams. We offer them practice space where we build, as well as any engineering or business assistance they may need. In doing so, all these teams have been successful.
- A variety of partnerships allow our team to function. We have developed mutually beneficial relationships with Macomb County 4-H and Knights of Columbus. They provide us with community service and fundraising opportunities, and we offer volunteers for their events. This year, we shared a build space with rookie Team 3539, as well as sending experienced members to help rookie Team 3621. Our teams shared design and strategy ideas, and we walked them through their first season.
- The message of FIRST is spread by our team in a weekly newsletter sent to team members, sponsors, alumni and schools in the area. The newsletter entails robot and business progress as well as information regarding all on-goings of The Fighting Pi. We also have a team website, www.fightingpi.org, which contains sponsor resources, a calendar of upcoming events, a newsletter archive, a team history organized by year, flash animation, pictures, district event details and links to other FIRST teams.
- While we have found success building and competing with our robot, we realize this is but an exercise to allow us to reach our ultimate goal-changing an individual for the better. FIRST is many things: math, science, technology, dedication, persistence, teamwork, lifelong friendships and fond memories. Any of these would be a selling point for FIRST. Yet there is one thing that any student, mentor or parent will tell you is the real motive- the moment when an individual realizes "I can do this!"

THE ROBOT

DESIGN PROCESS

Brainstorming/Strategies- This is the stage where we decide on the kind of robot we want to build. This typically takes a week of planning to work out the final details. We then take our ideas and physically design the robot in a computer aided design (CAD) software program.



Building- The second phase is building and production and takes the majority of the build season. This is where a lot of the fun and physical labor occurs. All major components are prototyped. These mockup, and sometimes actual pieces, ensures that our design concepts will work and are often used in a practice robot. As parts are being packed onto the robot, we encounter many problems that had not been anticipated, and changes are made. Once all or most of these changes are made, the final touches, such as protections and decals, are placed onto the robot.

Testing- The third phase of our season is the actual driving and testing of the robot. This is the part of the season where any problems in the code are worked out. This usually takes the last two weeks of the build season to complete, and may not even be done by the time build season ends. Once all the programmers have had time with the robot to fix the programming code, it is time for the drivers to get their practice.



AIM HIGH 2006



Two alliances, composed of three teams each, compete in each match. The object of the game is to attain a higher score than your opponents by scoring balls in the center or corner goals and robots on your platform or ramp.

Competitions

Great Lakes Regional (EMU) March 9-11, 2006
West Michigan Regional (GVSU) March 30-April 1, 2006
Championships (Georgia Dome) April 27-29, 2006
Indiana Robotics Invitational July 21-22, 2006

Rankings

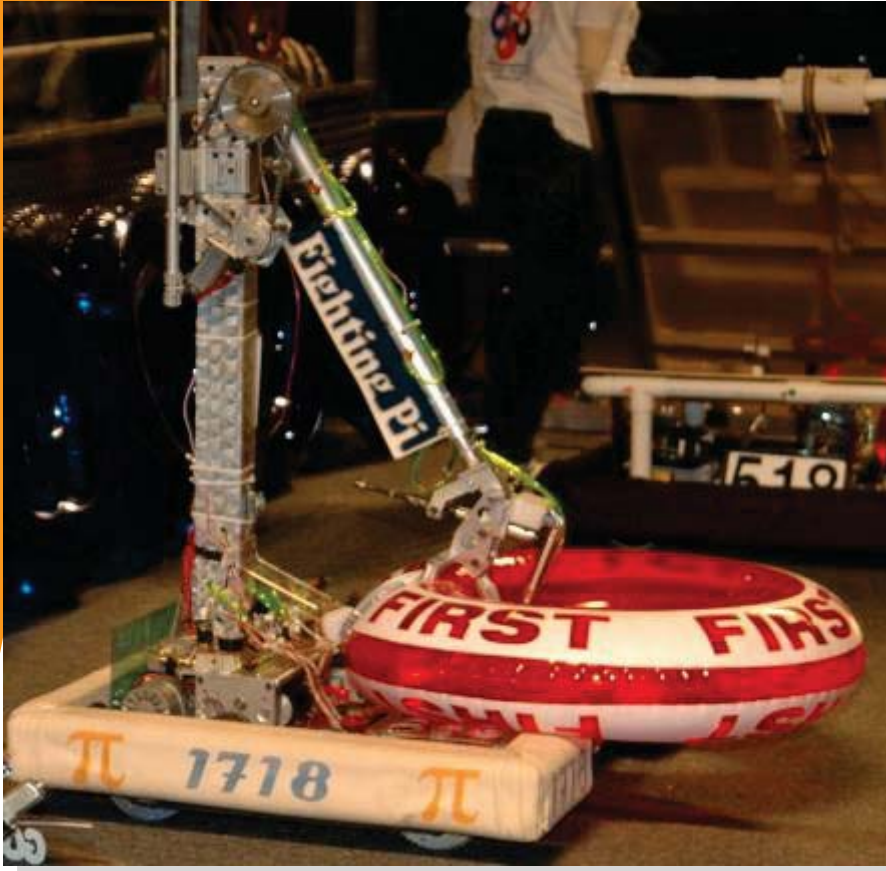
61 of 63 (GLR)
24 of 47 (WMR)
74 of 84 (Championships)
50 of 64 (IRI)

Awards

Rookie All-Star (GLR)
Best Rookie Team (GLR)—302 (Lake Orion Dragons)
Best Rookie Team—1506 (Metal Muscle)
From the Heart (GLR)—27 (R.U.S.H.)
Good Luck and Best Wishes (WMR)—904 (D³)
Team Ford *FIRST* Recognition and Appreciation



RACK N ROLL 2007



Two alliance, composed of three teams, are set to compete in each match . To score points, a team must place game rings on the central goal structure and have their robot in their home zone at the end of the match.

Competitions

Team Ford FIRST Invitational (MCC) October 6, 2006
 Detroit Regional (WSU) March 15-17, 2007
 West Michigan Regional (GVSU) March 29-31, 2007

Rankings

3 of 34 (DR)
 1 of 54 (WMR)
 11 of 23 (ARC)

Awards Received

Judges Award for Autonomous Mode (DR)
 Amazing Autonomous Action Award (DR)-33 (The Killer Bees)
 Awesome Autonomous -67 (The H.O.T. Team)
 Best Autonomous Award -70 More Martians
 Gregory Lau Amazing Auton Award -217 (The Thunder Chickens)
 Most Awesome Autonomous Award (DR)- 302 (Lake Orion Dragons)
 Tough Truck Award (WMR)- 68 (Truck Town Thunder)
 Team Ford FIRST Recognition and Appreciation

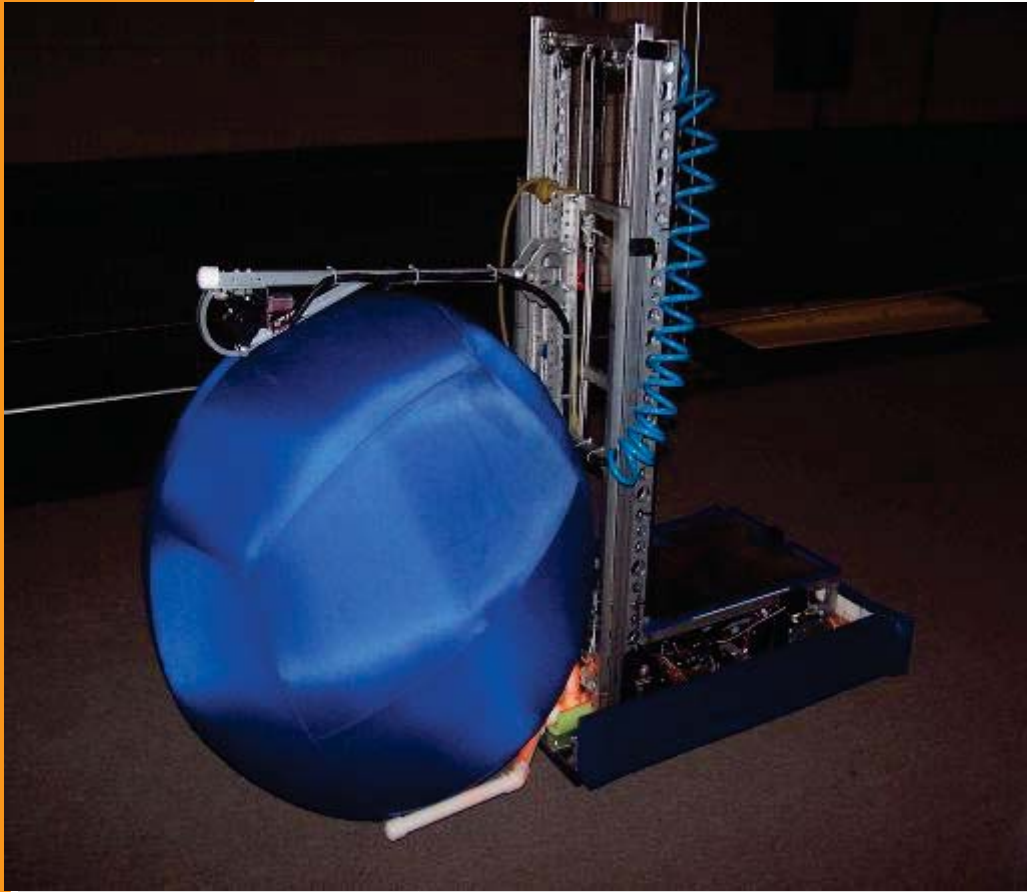


OVERDRIVE 2008



Macomb Academy of Arts and Sciences

Two alliances, composed of three teams for each match. The goal of the game is by making counter-clockwise laps with the robot around the track while moving large track-balls over or under the overpass that bisects the track.



Competitions

- Detroit Regional (WSU) March 13-15, 2008
- Great Lakes Regional (EMU) March 27-29, 2008
- Kettering Kickoff (KU) September 20, 2008
- Michigan Advanced Robotics Competition (MHS) October 8, 2008

Rankings

- 5 of 32 (DR)
- 4 of 63 (GLR)
- 38 of 40 (Kettering Kickoff)
- 20 of 38 (MARC)

Awards Received

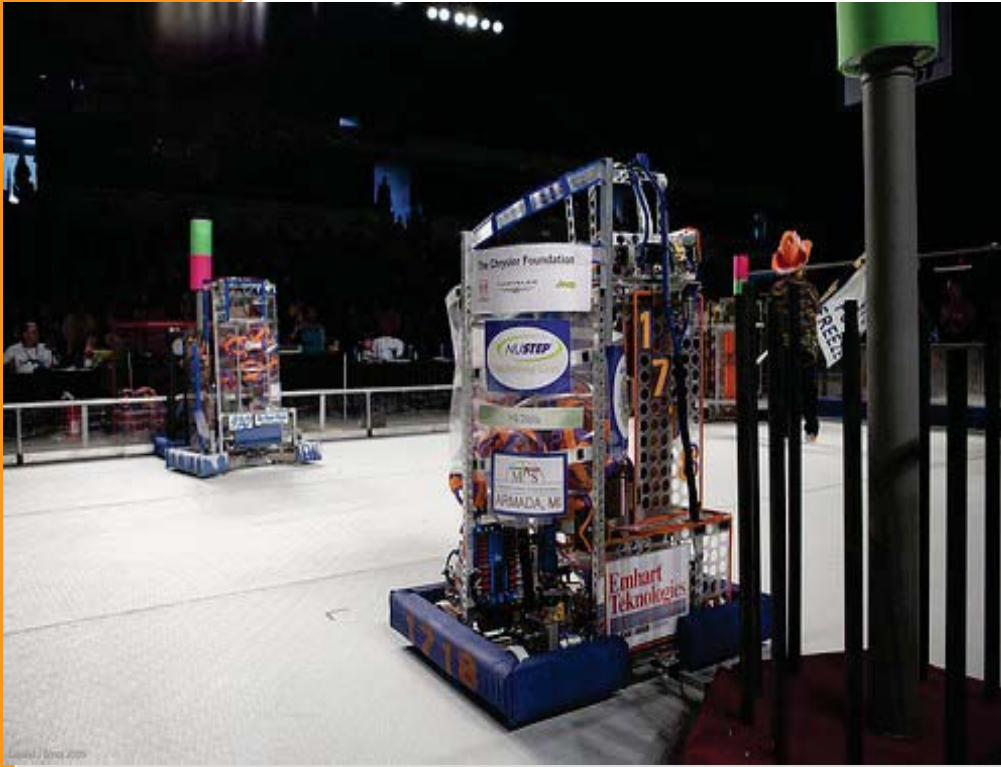
- Judges Award for Coming Close in a Bunch of Other Awards (DR)
- Second Place Safety Award (DR)
- Awesome Alliance Partner (GLR)—548 (The Robostangs)



LUNACY 2009



Macomb Academy of Arts and Sciences



Two alliances, composed of three teams and the object of the game is to have a higher score than your opponent by shooting more game pieces into other robots trailers.

Competitions

Kettering District (Kettering) March 6-7, 2009
West Michigan District (GVSU) March 27-28, 2009
States (EMU) April 2-4, 2009
Championships (Georgia Dome) April 16-18, 2009

Rankings

16 of 40 (Kettering District)
12 of 38 (GVSU District)
of 64 (EMU States)

Awards Received

Xerox Creativity (Kettering District)
Safety Award (Kettering District)—1506 (Metal Muscle)
Safety Award (Kettering District)—1025 (IMPI Robotics)
Blackbeard Award (Kettering District)—2771 (Code Red Robotics)
Engineering Inspiration (GVSU District)
Team Spirit (GVSU District)—548 (The Robostangs)



BREAKAWAY 2010



Macomb Academy of Arts and Sciences



Two alliance of three teams compete on a 27' x 54' field with bumps attempting to earn points by collecting soccer balls in their goals. For each ball shot into the goal team will receive points. When the robot hangs on the tower within the last 20 seconds they will receive extra points and if another robot hangs from that robot their will be even more points given.

Competitions

- Cass Tech District March 12-13 2010
- West Michigan District (GVSU) March 19-20 2010
- States (EMU) April 1-3 2010
- Atlanta Champions (Georgia Dome) April 15-17 2010

Rankings

- 2 of 38 (Cass Tech)
- 1 of 41 (West Michigan)
- 6 of 68 (States)
- Newton Field Finalists

Awards

- Kleiner Perkins Cauldfeild and Byers Entrepreneurship Award (Cass Tech)
- District Chairman's Award (West Michigan)
- Website Award (West Michigan)
- District Finalist Award (West Michigan)
- Cooperation Award (West Michigan)
- Entrepreneurship Award (States)



GETTING INVOLVED



Mentor a Team

Our mentors have faith in the team. They come to meetings religiously and share their knowledge with us. They give us experiences that will be useful for the rest of our lives, and they pass on their skills of programming, building, designing, planning, editing, and so much more. Without their encouragement, we may not have pushed ourselves to excel. They willingly spend their time with us in order to help us prepare for college and the future.

Mentors also ensure that we are able to compete.

They sign us up for competitions, and make sure we have the proper accommodations during each of the competitions. They push us to find sponsors and to create fundraisers, as well as help us to understand the importance of these activities so that the team can be more student-driven instead of mentor-driven.

Volunteer at an Event

FIRST engages thousands of adults, Team Mentors and Coaches by volunteering with young people ages 6-18. Team Mentors and Coaches work side-by-side with our *FIRST* teams to build self-confidence, knowledge and life skills, while motivating young people to pursue opportunities in science, technology and engineering. They have a variety of backgrounds, but all share in the *FIRST* commitment to inspiring in young people, their schools, and communities, an appreciation of science and technology, and how mastering these can enrich the lives of all. The time needed for a Team Mentor or Coach will vary with the program selected but generally these positions would require a 6-month commitment to team support.



Sponsor a Team

Our sponsors continue to support us and are dedicated to the team. They help us by donating money, giving us parts to build the robot, or a location to build the robot. Even in hard economic times, they still want to help us because they realize the importance of the team. They continually support us even if they cannot help us as much as they would like. They understand that they are helping prepare the future and have shown support and interest in the team.

BENEFITS OF SPONSORS

External and Marketing Benefits to Corporate Sponsors

- Identifies and grows the future engineering and technical workforce
- Creates partnerships between corporations and high schools
- Allows corporations to directly impact student education
- Creates brand/corporate visibility and awareness
- Demonstrates community commitment
- Builds community good will
- Builds responsible citizens/future customers
- Provides positive media exposure
- Provides abundant networking opportunities

Internal Benefits to Corporate Sponsors

- Provides talent pool for internships and scholarships
- Provides platform for developing training and motivating technical workforce
- Provides opportunities for cross-departmental collaboration
- Provides opportunities for cross-industry networking
- Enhance critical time management skills
- Fosters creativity and team-work
- Provides student-run robotics demonstrations for corporate meetings and events

Benefits to Students and Community

- Inspires a desire for scientific learning
- Teaches fundamental skills in science and technology
- Makes connections between classroom lessons and real-world application
- Provides opportunities for disadvantaged students by developing their technological skills
- Builds bridges between science and all other curriculum
- Encourages middle and high school students to consider careers in science and technology
- Reduces anxiety and fear of science and technology
- Fosters needed mentor and role model relationships
- Links students to the wider community
- Breaks down gender, race and cultural barriers
- Teaches teamwork
- Builds self esteem
- Builds community/ school pride and spirit
- Channels competitive spirit similar to traditional athletic contests
- Teaches creativity and problem solving
- Reveals the glamour and excitement of competition
- Recognizes achievement and contribution at every level

SPONSORSHIP LEVELS

Platinum Level

(\$5,000 or above)

- π Name on team shirts
- π Logo displayed on robot
- π Name/Logo on team banner
- π Company name announced with the team at competitions
- π Name in Newsletter

Gold Level

(\$2,500 to \$5,000)

- π Name on team shirts
- π Logo displayed on robot
- π Name/Logo on team banner
- π Name in Newsletter

Silver Level

(\$1,000 to \$2,500)

- π Name on team shirts
- π Logo displayed on robot
- π Name in Newsletter

Bronze Level

(\$500 to \$1,000)

- π Name on team shirts

Friends of 1718

(Any amount)

- π Team 1718 appreciates your help. All donations help us to achieve our goal of creating future leaders in the community and generating an interest in the fields of science and technology.
Thank you.



CONTACT INFORMATION



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Weighted Objective Table

Team 1718: The Fighting Pi
www.fightingpi.org

Game: 2011 Logomotion
Topic: Chassis Development

Chassis	Front/Back Stability	Maneuverability	Speed	Power	Complexity	Weight	Pushing Power	Confidence
Weights:	5	7	0	0	6	4	8	10
4 Wheel, wide configuration	5	4	5	5	8	8	8	10
6 Wheel, long configuration	7	6	5	5	7	7	8	10
8 wheel, long configuration	8	5	5	5	6	6	8	10
8 wheel long with actuation	9	6	5	5	4	4	8	8
4 wheel mechanum	9	8	5	5	2	4	4	8

Front/Back Score	Maneuverability Score	Speed Score	Power Score	Complexity Score	Weight Score	Pushing Power Score	Confidence Score	Total Score
25	28	0	0	48	32	64	100	297
35	42	0	0	42	28	64	100	311
40	35	0	0	36	24	64	100	299
45	42	0	0	24	16	64	80	271
45	56	0	0	12	16	32	80	241

About: These tables are used to objectively evaluate individual traits to make a decision on how well a system will meet the team's needs. Team 1718 has used this same system in our scouting, however it wasn't until John V Neun posted an excellent white paper on www.chiefdelphi.com that we had a formal name to the system. For more information regarding weighted objective tables, we strongly suggest reading John's whitepaper.

Instructions: Choose the different options you have for a given system. In this case the example shown is for a chassis. Put these options in Column "A". Next, pick all the traits that are important to the team, and put these across row 10. Finally, assign a weighting value (higher being better) to each one of those traits on a scale from 0-10. Put these in row 11. Finally, evaluate each of your concepts and put a score into the corresponding box. For instance, A 4 wheel wide-configuration chassis is not very stable front-to-back. It scores a 5. A higher score is better, and lower score is worse. When you are done, look at the total score column to show the concepts that best fit your criteria.

