

# “Wings of Fire”

Pontiac High School

## FIRST Robotics Team Handbook

# #51

“You get out of this program..... what you put into it!”

Quote by: Mr. Martus

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## **2 - Welcome**

Congratulations on being selected to be on the Pontiac High School FIRST Club / Team. We think you will find your experiences very rewarding and enjoyable. This guide is intended to give you an understanding of the program and your responsibilities as a club / team member. In the following pages you will find information relating to team history, selection process, team rules, team guidelines, organization at events, travel and many other aspects of our team.

Please review all the information very carefully. If you have any other questions that this guide has not covered, or if there are questions regarding any topic, do not hesitate to ask a coach.

You are encouraged to share this manual with your parents, and keep it handy for future reference.

Note: Throughout this handbook the term “FIRST Team” will be used.

## **3 - History**

The Pontiac Robotics FIRST Robotics Team has a rich history of success to grow and build upon. Understanding where you have been lays a firm foundation to where you are going. So where did it all begin .....

The program originated in 1994 when Pontiac Central High School and Delphi Interior & Lighting Systems leadership coordinated an effort to improve student performance in math and science through engineering. Through an organized tutoring program, numerous Delphi engineers and staff were determined to make a difference by inspiring our students through self-esteem building, the development of effective study techniques,

and enhancing math and science skills. The partnership was so successful that Delphi thought that perhaps more active involvement could possibly inspire students even more. Delphi made a decision to become more involved.

Joseph Johnson and Robert Baughman, two engineers from Delphi learned of the U. S. FIRST (For Inspiration and Recognition of Science and Technology) competition from an article that appeared in a magazine. Further investigation yielded an excitement that inspired them to explore the possibilities. They contacted Dr. Barbara Sanders, Director of Engineering to explore the possibility of organizing a team of high school students to partake in this competition. Pontiac Central was but one of the possible choices for a partnership school.

Already familiar with some of the students at Pontiac Central through the tutoring program, they interviewed a team of staff members regarding the possibilities of a partnership for this innovative program in late December of 1995. The enthusiasm of the meeting and the excitement of the staff being willing to get involved forged a solid foundation for the current team.

The official team was formed in January of 1996, our first year of competition. This commitment continues to grow stronger each year of the program.

One year later Engineers from General Motors PowerTrain formed a team at Pontiac Northern High School led by Mr. Ken Patton. This new addition to robotics in Pontiac pushed the awareness of how great these teams really were.

The list of our accomplishments is very extensive. Most notable is the Chairman's Award won in 1997 (Pontiac Central) and a National Championship 2003 (Pontiac Northern). As a result of our continued efforts we were inducted into the FIRST Robotics Hall of Fame in January 2003.

In 2009 due to a downsizing of the school District the robotics teams were merged into a new Team #51 "Wings of Fire". This combined team merged the many strengths of both programs into a new and more powerful team. The legacy of two great robotics teams continues today as one.....

To be continued .....

#### **4 - Qualifications**

Qualifications to be a Club / Team member are important to ensure the goals and objectives of the team are accomplished with quality and efficiency. There are minimum qualifications to be eligible for the Club / Team.

*Note: All selected students are part of the FIRST Club for the first semester. During the second semester selected students become part of the FIRST Team until the end of the school year.*

What makes a good team member? The list below is some of the attributes that are looked at during the selection process and during the club phase. These same qualifications are listed inside the front cover of the application.

##### **Application:**

Each student is required to complete an application. The time lines and directions for the application are very specific. Care should be taken to complete the application as neat and through as possible. The student response portion should be composed with care. It may be word processed and attached to the application, if preferred.

The parent section is also very important. Take care to see that it is complete. If there is a language barrier the student may translate for the parent. Student should indicate that it is translated in the heading of the document.

##### **Grade Point Average:**

There is a minimum grade point average of at least 2.5 cumulative upon being selected to the FIRST team. Additionally, students must maintain a 2.5 GPA each marking period and semester. During the course of the competition season, team activities absorb many valuable hours of a students free and study time. A strong ethic in study habits and a history of achievement in the classroom is essential to maintaining and improving a student's academic progress in the classroom.

##### **Teacher recommendations:**

Teacher's recommendations are given serious consideration.

**Demonstration of Positive learning habits:**

Positive learning habits are related to study skills, classroom assignments, grades, classroom / school involvement. A student's current grades and past achievements are powerful statements about his or her learning habits.

**Good Attendance, Punctually and Dependability:**

Attendance and punctually are indicators of a student's commitment to their education and future. A team member needs to be available and ready to participate as much as possible. When asked to participate, establishing a record of dependability and punctuality is essential to team organization and efficiency.

**Consistent Demonstration of Good Judgment and Positive Behavior:**

Each team member is an ambassador of our team. Team members need to be role models for other students to emulate and respect. Solid behavior choices should be demonstrated at all times, in and out of school activities.

**Ability to Commit to a Project:**

Starting a project and following it through to the end is critical to team performance. Team members need to dedicate themselves and not to get side tracked or discouraged.

**Ability to Work Both Independently and as a Team Member:**

Being able to be a team player, doing what is needed for the team is an asset to all. However, working independently with little or no direction shows dedication and willingness to learn.

**Interest in Science, Technology, Robotics and Related Fields:**

The team member needs to have a genuine interest and an overall goal related to these fields of study. This is demonstrated by activities, classes and career choices.

**Demonstration of Honesty and Integrity:**

Honesty and integrity are looked upon as important attributes of a quality person.

**Time to Spend on Activities:**

This activity requires many hours of a student's free time. Careful planning and scheduling may be required to stay actively involved. In some cases, choices as to other activities may need to be made.

## 5 - Selection Process

Selecting a team is a very difficult task for the coaches. Typically there are 60 or more applications including members from the previous year's team that also have to apply. Being a member on the team the previous year is no guarantee of a place on the team the next year.

The process starts with the application. During the month of May, applications are available to all active students at Pontiac High School. Advertisement and recruiting for the applications is done via the announcements, teachers, word of mouth and postings in the locker areas of the school. The application time period is approximately two weeks.

All applications are due on or before the published date and time advertised. Late applications will not be accepted. All applications will be returned to the designated location.

**Application Review Process:**

All applications are reviewed for missing or inaccurate information. The applicant is contacted as needed to provide the data that is missing.

A review is conducted of the student's records in the office. Data on absences, tardy and referrals is gathered and noted on the application. Specific teachers and staff who are listed on the application are contacted for their input.

**Interview Process:**

All applicants are scheduled for an interview to be held after school hours. At this five minute interview the student has a chance to meet the current coaches and answer questions regarding their skills, talents and interests.

**Final Selection Process:**

The coaches look at all applicants and build a team that will accomplish the goals of the team. Hard decisions will be made to reduce the quantity to a target team size. The final selection will be the best effort at making a team that will represent the school and Corporate sponsors in the FIRST competition.

**Notification:**

Students selected for the team will be hand delivered a letter of acceptance during the school day. An announcement will be made via the PA at the end of the day announcing the team.

Students not making the team will receive a letter of notification the following school day. All students that did not make the team will be encouraged to re-apply the next year.

**Fall Selection:**

Incoming 9<sup>th</sup> grade students and students not enrolled at the school in the previous school year will be given the opportunity to apply to the team at the start of the school year.

**6 - FIRST Club**

The FIRST Club is the phase of the team that operates from September to mid December. During the club phase the members work on the FIRST project and all associated activities. This is the time period when your dedication, grades and team performance is monitored very closely to make sure they are meeting the standards of the team. Close attention is paid to the attendance to mandatory and voluntary events. This probationary period is also a time for students to experience team activities and to determine if this activity is right for them.

There will be an interview in December that will be a review of your activities to that point. At this time you will either be placed on the official team or dismissed from the club.

**FIRST Team:**

Students successfully completing the club phase will be placed on the official team after completing an interview in mid December. The placement on the official team will run until the end of the school year unless situations arise that would put a team member's status in jeopardy.

All team members must reapply to the team each year. Placement on the team is not automatic because of experience.

**7 - FIRST Class**

All team members are **required** to be enrolled in the class called FIRST second semester. This class is an elective class granting a ½ credit upon successful completion. This class meets only second semester and may be offered 7<sup>th</sup> period of the day.

In this class the student will work on the FIRST project specializing in their sub-team activities. Typically students will stay after school additionally to complete their activities. Career exploration, engineering principles, computer applications and general team activities will be the main focus.

Students will be graded on their classroom activities, completion and timeliness of required materials/forms and classroom assignments. A major emphasis in grading will be the activity of the student during the competitions. Their performance, behavior and general participation including following all rules will be a major factor of their grade. At competitions ALL coaches and engineers will have input on the grade of the students.

There will be a final exam based on a detailed program evaluation.

**8 – Participation**

The FIRST Team requires many hours beyond the normal school day. All team members are required to participate in after school workshops, events and other team activities. Usually the team meets many days during the fall semester from 2:15 pm to 4:15 pm or later. These are required after school meetings that focus on team building, OCCRA activities and sub group work on a variety of activities.

Attendance is taken at all activities. It is the student's responsibility to sign next to his or her name on the attendance sheet. All students are expected to be on time and stay the required amount of time.

Students participating in other school sponsored activities may be excused from attendance on a **limited per case** basis. In all cases students missing an after school meeting will be required to spend an equal amount of time to balance out the participation.

### **Participation falls into two categories: Mandatory and Voluntary**

Mandatory activities are those activities that attendance is required. Students missing two (2) or more activities may be placed on probation and possibly dropped from the team. A student may be excused from a mandatory activity by a coach upon written request of the parent or guardian. If excused, the absence will not count towards the two days.

Students participating in athletic teams and other clubs will need to communicate with their coach the requirements of the FIRST Team. Often arrangements can be made for times that are in conflict, including practice on a day of a required meeting. It is however important to keep involvement at an acceptable level. If this is a concern please take the time to talk to all coaches involved to see if a compromise can be worked out.

All students are encouraged to participate in all activities including the voluntary activities that many students find rewarding. If attending a voluntary activity, the student will sign in and log attendance and time spent on the activity.

Students who have problems with participation may be placed on probation and a plan of assistance or dismissed from the team. If the participation is not improved then the student will be dismissed from the Team. A written notification will be given to the student and parent.

## **9 - School Work**

All team members are expected to maintain their grades and class work during the entire time he or she is on the Team. As a FIRST Team member you are held to a high standard that many other clubs or teams do not require. Our high standards and expectations are one of the strengths of our team.

### **Progress reports:**

On a regular basis your grades will be monitored by the coaches. If a problem is evident you will be contacted to discuss the problem. Parents will be involved at all levels and are encouraged to also monitor your grades.

If you are having difficulty with a particular class or staff member it is important that this be brought to the attention of the coaches. We will provide assistance in course work as required to make sure you are maintaining your grades. Assistance is available from your counselor and of course from the teacher of the class you are taking. All class work is your responsibility at all times.

Mentors may be available to assist you on a limited basis.

### **Travel Assignments:**

When we travel you are required to get all class work, assignments and readings before we leave. Please allow teachers several days to get these assignments ready for you. Getting these assignments is your responsibility. Upon your return to school all the assignments are due and must be turned in to the teacher.

When we travel, there will be designated study times for all students. Students should bring all required text and materials on the trip. Often students store their class materials in their travel bag for convenience and availability when traveling.

## **10 - Behavior**

A Club/Team member's behavior is under scrutiny, at all times. It is very important that you understand that you represent Pontiac High School, Sponsors and foremost your team "Wings of Fire".

### **School:**

Your behavior in school and specifically in the classroom is a message to all regarding the caliber of students on our team. You are looked upon as role models, and examples of the best students our school has to offer.

You are expected to at all times be polite and respectful to all staff members and refrain from activities that are considered disruptive. Any club / Team member receiving a disciplinary warning of any type is subject to review by the coaches.

**If you don't think you should do it, then probably you should not.**

**Events:**

All eyes are on you every minute you are in public. Your behavior is a direct reflection on your character and on our team. What you say to one another and how you say it may be over heard by a judge or member of another team. Even the expressions on your face and body language may bring unwanted negative attention and bad impressions.

We are a very close family when we travel and conflicts may arise as a result. Students should refrain from rumors, he-said-she-said, and negative comments about one another. If a problem arises with another student you are requested to speak to a coach immediately. Students are not allowed to have physical conflicts with each other. If a problem such as this arises, both students may be disciplined as per school rules.

**Cooperation:**

Students are requested to cooperate at all times. This is to mean that if a coach requests you to do something you will comply to the best of your ability. Ignoring the directions or requests of a coach, engineer or mentor is not in the team's best interest. If you feel a request is out of order you are encouraged to complete the task if possible then speak to the coaching staff at a later more appropriate time.

**Inappropriate Behaviors:**

These behaviors include but are not limited to the following:

Running in hallways, pushing and shoving, name calling (negative), making messes, fighting, swearing, teasing, stealing, and all other activities that reflect negatively on the team.

These behaviors may also include infractions with the legal system. Any student involved in an investigation of inappropriate behavior or on probation for such will be placed on inactive status (not allowed to participate in any club/team activity). Any student found guilty of a crime may be dismissed from the team.

**Boyfriend/Girlfriend:**

In the event that a relationship develops or is ongoing, there are certain guidelines that must be adhered to at all times when engaged in team activities local and away.

Handholding, hugging, arm around, kissing and other expressions of affection are strictly prohibited at all times. This type of activity may mean immediate dismissal from the team. If at an event, you may be sent home at your parent's expense. You should NOT appear as a couple but as a normal team member. All team members must travel in groups at all times. Couples (boy/girl) may not wander off or sit alone. Common sense should prevail at all times.

**11 - Plan of Assistance / Probation**

There are several reasons why you would be placed upon probation and/or a plan of assistance. A Plan of Assistance is method of identifying a behavior and outlining the steps to correct the behavior within a specified time length of probation. The plan is a corrective method designed to assist the student and keep him or her eligible for the team.

**Academic:**

Monitoring your grades will occur on a regular basis. You are expected to be making academic progress at the minimum 2.5 level or higher at all times in ALL classes. Your overall Grade Point Average (GPA) when you were placed on the Club/Team was 2.5 or above based upon the cumulative classes taken in high school. As the grades are monitored, or we identify a class you are having difficulty in that may affect your GPA in a negative manner, you MAY be placed on probation with a Plan of Assistance. This written document (Plan of Assistance) will be provided and signed by the student and shared with the parents and the administration of the school. This document will contain suggestions for improving and correcting the behavior, a timeline for the correction and a clear explanation as to what is expected. Included will be the outcomes and consequences associated with the behaviors.

You may be dismissed from the team if you receive the grade of "E" in any class, any marking period regardless of grade point average. The coaching staff may choose to put the student on a Plan of Assistance for a specific length of time and/or restrict the student from traveling to an away event. The grade of "E" is very serious and may result in dismissal from the team.

The coach's decisions are final and may not be appealed.

**Behavior:**

As a member of the Pontiac FIRST Club/Team you are expected to exhibit appropriate behavior at all times. This includes behavior within the classroom and school as well as at competitions or events. If a problem arises with the behavior of a student, the student will be asked to explain the events and circumstances surrounding the situation in writing. Depending on the severity and seriousness of the behavior the student may be dismissed from the team, put on probation with a plan of assistance or given a verbal warning. In all cases the situation is expected to be rectified in a timely manner to the satisfaction of the school and coaches.

The coaches reserve the right to discipline a Club/Team member as necessary for safety and the overall good of the team. The parents will be informed of any disciplinary actions as soon as possible.

Poor behavior may restrict the student from traveling with the team to events.

## 12 - After School Activities

Many of our activities are after the school day ends, usually 2:15 pm. During the Club phase, first semester, the activities are on several days a week (M-Th) and last about 1 to 2 ½ hours. During the competition season, 2<sup>nd</sup> semester, we will work every day as required. Students must provide their own transportation home. A phone will be available for student use.

**Procedure:**

As soon as school is dismissed you should go to your locker and secure all materials including homework that you want to take home and come to the FIRST robotics room.

All students will sign in and sign out using the student attendance form.

During these after school activities students will work on many aspects of the competition. This is the time that the focus of your sub group is developed. Strong pre-season preparation makes for less stress during the competition.

There are some specific tool skills that all students will learn during the after school activities. These include using a soldering iron, wiring connectors, drill press, grinder, dremel, hacksaw, wrenches, multimeters, and power hand tools.

Students will also learn about the process to design our robot. Engineers will present lessons on the usage of motors, the control system computer interface and the programming language. Presentations will also include the process of designing a robot for the FIRST competition that will occur second semester.

Students are encouraged to spend as much time as possible above the required activity days. This very important to get the project completed. Attendance will be taken and recorded in the student log book giving extra credit for time spent on the project.

**Other Responsibilities:**

It is understood that our students are very busy in many other school activities. These activities are encouraged and supported by our team. It is the responsibility of the student to manage and balance all their activities, informing the sponsors of their commitments.

Sports teams provide different challenges and different stress upon your time. It is important to communicate with your coaches to work out the timing of your activities. Often these activities can be accommodated to the satisfaction of both activities.

There are some instances however, where the timing cannot be resolved. In this case you may have to choose which activity you will be putting your time and effort into. Please discuss this problem with a FIRST coach before you make a final decision.

### **13 – Health**

Each Club/Team member needs to have a complete medical form on record. This form must contain accurate information and be **updated** as the need arises. This form will be duplicated and taken with us to all events.

Students taking any medication while we are traveling need to have the list of these medications on file with the coaches. This is the parents responsibility to keep the coaches informed. In ALL cases we must have accurate emergency phone numbers available for the coaches.

In the event you become ill on a trip, transportation home will be at the parents expense using first available transportation.

It is suggested that all students take precautions when being exposed to the sun for any length of time. Use of sunscreens is encouraged.

It is important that you do not travel if you are ill. Please discuss this with the coaches before any trip.

### **14 - Uniforms**

Our uniform is an important part of our image and thus must be maintained with dignity and care. There are several parts to our uniform that may be worn in several combinations. The uniform varies from year to year and will be discussed in class.

You will be given a full uniform for you to use. The use of the team shirt and when they will be worn will be determined by the coaches and told to you as soon as possible.

#### **Care:**

The care and cleaning of the uniform is the students' responsibility. Please wash in very mild soap using cold water. To dry the shirt it is suggested that it be placed on a plastic hanger or frame for drying. Please avoid using the clothes dryer as this causes the lettering to peel away from the surface. The shirts should be washed inside out in warm to cold water. Drying should be limited to hanging or drying on the low setting.

Please use NO bleach or harsh detergents on any of the uniform items.

#### **Appropriate Use:**

A full uniform may be a team shirt, black pants or shorts.... This is under review each year and may vary. No other headgear, shirts, pants, jackets or sweaters are allowed in combination with the uniform. Coats may be worn when necessary for outside activities.

Shirts will be worn at designated days and events. It is important not to cover or alter the shirt in any way.

Additional shirts will be available for purchase by students and parents as stock allows.

Students are not allowed to trade any part of their uniform without permission of the coaches.

#### **Warning:**

When we are traveling specific information will be given regarding what we are wearing when. All team members should have at least 1 pair of black jeans for and several pairs of black shorts for wearing with team shirts.

Pants CANNOT contain graphics or designs in any way.

Bathing suits: All bathing suits must be appropriate for the circumstances. It is suggested that you have your bathing garment approved by an appropriate coach. A cover-up over an inappropriate bathing garment is not acceptable.

## 15 - Coaches

The coaches (teachers) for the Pontiac FIRST Team are a group of dedicated professionals who are taking on the responsibility of providing you with the best enriching educational experience in education today. Many of their efforts are behind the scenes pre and post season. Many, many hours of planning are required to coordinate all the activities for our team.

Your coaches in many cases are also classroom teachers with full classroom responsibilities in addition to the FIRST Team activities. Much of the work required is done before and after school. Often the scope of this project requires evening and weekend meetings and organization.

When traveling they are considered your “parents” looking out for your welfare and safe keeping. They take seriously the confidence your parents have placed in them. Their decisions are always aimed at what is best for the student first and the team second. Please be aware that decisions regarding team rules and procedures are based upon experience, school district rules. You are expected to honor any request made by a coach.

If you have any concerns with the activities of a coach or their behavior toward you or others please talk to the team leader first. If the situation is not resolved the next step is to talk to the principal of the building.

## 16 - Engineers

We have some of the brightest and most dedicated engineers in America today on our team. The engineers in their regular jobs are responsible for many of the innovations you see on today's best transportation. These dedicated team members spend many, many of their free time hours on this project and as mentors to our students. Their expertise allows the dreams and ideas of the students to be transformed into reality.

Take the time to communicate and get to know these very talented and nice people. Ask them about their families and do not hesitate to ask advice for they have a wealth of knowledge. They are valuable resources for tutoring while we are traveling.

Students cannot at any time be transported in the private vehicles of the engineers without permission of the coaches. This includes leaving an event to pick up supplies or food.

Students shall treat the engineers and other adults with respect at all times. Just as the coaches, do not address the engineers by their first names. In a treatment of respect, when addressing the engineers, please use appropriate titles.

## 17 - Mentors

### What is a Mentor?

A mentor is an adult or graduated student who has been invited and approved by the team leadership to be an active participant on the FIRST Robotics Team. He or she can provide assistance in any of the following areas:

- Tutoring for students in their area of expertise
- Leadership in sub teams
- Active during robot build season, building robot or field
- Additional limited supervision during events and activities
- Assistance in planning and team operation

A mentor must have the following qualities:

- Proven leadership skills
- Experience working with youth
- Strong moral character
- Reliable, trustworthy and organized
- Enthusiasm for the program
- Time, availability and commitment

All mentors are expected to behave appropriately at all times. They are role models for student team members and should exhibit a commitment to the team as well as enthusiasm for the program. Interaction with the students on the team **MUST NEVER** be on a personal/romantic relationship level at any time.

There are three levels of mentors on the Pontiac High School FIRST Team. Mentorship privileges are based on this multiple level system. Each mentor begins their tenure with the team at Level 1 and may move to another level at the recommendation of the team leadership. Team leadership is defined as the current Pontiac High School Coaches and current engineers.

#### Level 1:

Level 1 mentors are usually students that have recently graduated from the team. They are encouraged to share their first hand experiences and expertise with the team. They will assist with the robot and/or field build, and be active consultants on a sub team. They will be required to post tutoring availability schedules for student team members seeking assistance with their academics. A Level 1 mentor can attend local events, not involving overnight travel. Food expenses will be covered if appropriate.

#### Level 2:

Level 2 mentors are extensively involved in the planning and overall operation of a sub-team and participate with the team on a regular basis. They actively participate in the decision making process for many team operations. Level 2 mentors are given extended responsibilities, which may include limited supervision of students. They may be asked to travel to some events and have appropriate expenses paid for by the team – as needed and planned for by team leadership.

#### Level 3:

Level 3 mentors are extensively involved in the planning and overall operation of the team on a regular basis. They are active participants in the decision making process for many team operations. Level 3 mentors are given extensive responsibilities, which may include limited supervision of students and leadership of sub teams. They will travel to all events and have appropriate expenses paid for by the team.

#### **REQUIRED:**

All prospective mentors will submit in writing a **letter of intent** to be considered for official placement as a mentor on the team. The letter of intent should include a brief resume of skills, availability, and commitment to the team for the coming season. Team leadership will consider all letters of intent and conduct an interview if necessary. Written notification of status/level will be given to all mentor applicants. Being a mentor with the team is not automatic because you are alumni of the team. We do however welcome all alumni to participate in team activities whenever possible.

All level 2 and level 3 mentors are required to offset some of their expenses by selling a banner ad. This ad is valued at \$250.00. The funds raised will help in covering room and food as well as some transportation costs.

Transportation to the events is very limited with available space going to current team and team sponsors. Any remaining space will be designated for level 3 and level 2 respectively.

All candidates for team mentors must submit the documents at the start of each year for consideration as placement to "Mentor Status".

### **18 - Work**

Often the team will meet and work at GMPT. Transportation to this location is the responsibility of the parents in many cases. There is one entrance we will use and specific directions will be given. You will be asked to sign in and follow the process as set forth by GMPT including having your **Safety Card** with you.

We are guests of GMPT and need to treat our presence with care and respect. When we are traveling in the building voices will be kept low and we will keep to one side of the aisle at all times.

Please stay in the designated areas at all times and with your group. Never enter the office spaces unless directed to do so by an employee of GMPT. Remember to pick up any drink or food containers that you have used and deposit them in the proper location.

#### **Work at Pontiac High School:**

Many days and evenings we will be working on the project at Pontiac High School. The area students are allowed to be in will be restricted for school security reasons. Students **MUST** stay within the limits at all time.

All students and parents will enter via the Robotics Shop entrance. This entrance will have specific times that entrance will be available. The door will never be left open or unlocked for security reasons.

A record of all student attendance will be maintained and be available for the parent to review.

All students are expected to follow all safety rules and to clean any area they were working in.

Safety glasses are required at all times in the shop area.

## 19 - Sub Teams

The Pontiac FIRST Team is made of several sub teams to get the FIRST project completed. By dividing into specialized groups students are able to focus on specific aspects of the project. Sub Teams are added or deleted as they meet the needs of the team.

### **Hall of Fame / Chairmans Award / Publications Team:**

Winning the Chairman's Award/Hall of Fame Award is the greatest honor in the FIRST competition. The award is given to the team that best exemplifies the ideals of FIRST. To exemplify FIRST a team must show community involvement, demonstrate their partnership, inspire other teams, be a role model and of service to the community of FIRST.

To win this award the team must demonstrate all aspects of their team by the creation of a Hall of Fame submission in the form of a written submission and/or video. There are very specific criteria for this submission as well as a specific date of submission.

Our team has been the proud winner of the Chairman's Award in 1997 and has been a finalist in 2000,2001 and 2002. Winning this award is very important to the growth and notoriety of our team.

Submission of a current Chairman's Award is a requirement of FIRST and has specific deadlines as well as specifications.

This sub team is made up of students that are interested in documenting our teams efforts in the form of a written and video submission. This submission can take on many forms. Usually a theme is selected early in the fall and the team focuses it's efforts toward this theme. Coordination with the other sub groups is essential for the success of the project. The resulting document is a chronicle of our teams efforts. The Chairmans Team will be part of a presentation at the event we submit our document.

### **Newspaper Team:**

This team will create a publication that will be distributed at the competitions. Creating a newspaper to share information with other teams has proven to be a very good way to share the good news of our team and many articles relating to FIRST robotics. This team coordinates it's efforts with the Hall of Fame and Photo teams.

### **Video Team:**

There are three focuses of the video team. The **first** focus is to create a video that enhances the Chairman's document and is a vital part of the submission. Usually this five to seven minute video is done in a creative way to support the information presented in the Hall of Fame document.

The **second** focus is that of competitive assessment and robot / game analysis. The video team takes critical competitive assessment video of the other robots we may be playing with or against. This record is a useful tool in formulating strategies to play whatever game we are faced with.

The **third** focus is that of analysis of our robot and its performance. The video team will record all the activity of our robot during practices and all matches. This video will be reviewed immediately at the conclusion of the activity at a designated location. The information gathered will allow the team to analyze the performance as well as strategies used to play the game.

The students on this team should have an interest in using the video camera and editing using computer software.

### **Photo Team:**

The photo works very closely with the Hall of Fame team to provide the needed photos for the submission and also with the competitive assessment team at the competitions. For the Hall of Fame award the photo team is responsible for composing a record of our team development to be used as the pictorial portion of the submission.

Skills at composition and an eye for the artistic is necessary. The team will use a variety of cameras, including a digital format.

The competitive assessment team relies upon the photos of each robot that is gathered at the events. The photos are used to identify the strengths and weakness of each robot in the competition.

#### **Web Team:**

The Web Team develops the student section of our website [pontiacrobotics.com](http://pontiacrobotics.com). Members of this team need to have internet access at home and have or be willing to learn basic HTML. The team is also responsible to monitor and respond to questions regarding the “forums” and other team issues.

#### **Pit Crew:**

The Pit Crew has several functions depending on what stage of the competition we are in. In the fall they are responsible for maintaining current robot and tools. Once the competition starts the crew creates the playing field to specific directions. Once this is completed they assist in the development of the robot and operate the pit area at the competitions. A major responsibility is the preventive maintenance and repair of the robot at the competition.

#### **Drive Team:**

The Drive Team consists of an arm operator, a chassis driver and a human player. The drive team is selected by a competitive selection process using several robots from previous years if available. Students interested in becoming drivers should practice as much as possible to develop their skills. OCCRA is a vital and required training ground for driver selection. There is a main team and a back-up crew usually made up of rookie drivers.

The drive team is required to stay with the robot a majority of the time at the competitions. They will also arrive early and stay late to practice at the competitions.

#### **Competitive Assessment Team:**

The Competitive Assessment team is formed prior to the competition. Students on this team will develop materials and methods to assess the competition giving our team as much advantage as possible. The collection of data and the analysis of the information will assist our team in all phases of the competition. The team is also responsible for the creation of the competitive assessment book working closely with the photo team.

#### **Spirit Team:**

The Spirit Team is formed in preparation for the competitions and team activities. At the competitions we show support for our team and other teams by cheering and other activities of support. Showing a positive spirit at the competitions is very important. The spirit team develops the cheers and organizes activities at the events.

At the competitions we also do special activities that allow us to bond and make friends with other teams, a very important aspect of our team. This includes the development of buttons to trade at the events.

#### **Safety Team:**

This team is responsible for safety in the shop and safety efforts at events. A strong emphasis is placed upon activities that promote safety at the events in competition for the safety award. The safety team elects a Safety Captain to lead activities and to be the primary safety contact in the pits. The Safety Captain also makes the safety presentation to the safety judges.

#### **Electrical Team:**

This team is responsible for the electrical systems of the robot build. Skills include wiring diagrams, connectors and general electrical practices. The battery management of power is critical to the robot and needs careful attention.

#### **Programming / Controls Team:**

The main focus of this team includes all aspects of learning the programming language to make the robot perform. Much time is spent on learning software and practicing in simulation.

As you can see there are many teams for which members can specialize. Students will be placed upon a team based upon their interest whenever possible. Other teams are formed as necessary to complete the project

## **20 - Fundraising**

All students are **REQUIRED** to participate in all team fundraising activities. Students failing to participate to the prescribed level may be dismissed from the team. The funds raised are typically used to cover some of a student expenses while we are traveling.

The Web Banner program has proven to be a very fast and efficient way for a student to raise funds and gather community support. The Web Banner has become a cornerstone of our current Business Plan. Each Team/club member will be give specific information as to this process.

If parents have an objection to their student participating in any fundraising activity they are asked to speak to the coaches for an alternate method of replacing this revenue for their student.

The level of fundraising varies from year to year as the needs of the team change. The level will be set by the coaches and the student leadership.

## **21 - C.A.D.E.T. Program**

The C.A.D.E.T. (Children, Aspiring, to Develop, Engineering Talent) program was the first program to involve middle and elementary students in a FIRST like competition. This concept was developed by a coach (Ms. Allen) from Chief Delphi. Our CADET program was the model for the current LEGO League that is operating nationwide.

The activities will involve you as a mentor to a team from our school district. The specific activities and team responsibilities are planned annually.

The current configuration of the CADET program has changed. Classmates Aspiring to Develop Engineering Talent is the new format.

CADETs will be from the Middle school on a limited basis.

Amount of CADETS is limited to available resources.

## **22 - Breakfast Club/Brunch**

The Breakfast Club is a time for students to interact with the engineers and the coaches from Pontiac High School while working on the robot at the school. The Breakfast Club usually starts in January and continues until the robot is shipped, usually 6 sessions. Other dates may be added as needed to work on the FIRST project.

Transportation to the Breakfast Club (school) is the responsibility of the parents and the student. Students should only share rides among each other with the parents permission.

Parents are welcome to stay and have breakfast and to join us in working on the robot. The cost of the breakfast will be paid for by team resources. We will organize parents, students, engineers and coaches into groups to provide breakfast supplies whenever possible.

Generally, we meet from 8:00 am - 9:00 am with a light breakfast. The engineering team leaves and goes to GM until 12:30 pm. Upon their return we have the formal "Brunch" before the afternoon work session. Attendance is required by all team members.

Phones are available for the students to call for rides if needed. Please make sure the arrangements for transportation have been worked out prior to attending any function.

Again, the Breakfast Club is very important in the growth of the team member. This is the best opportunity for the student to work on the robot and get to learn more about engineering. This is the focus of the program and every effort should be made to attend each week.

## 23 - Travel

Traveling as a team is very exciting and rewarding and often the highlight of a student's memories. A great deal of planning and organization is required to coordinate all the associated activities. A strong effort is made to make the travel to be an educational / cultural experience as well as the basic competition. Safety is always the major concern.

All team members are eligible to travel to all events unless otherwise exempted. A student may be exempted from travel due to a prior commitment approved by the coaches in advance or disciplinary reasons from the coaches or principals. All team members are expected to attend all events. Failure to attend an event may result in dismissal from the team.

### **Air Travel:**

Traveling on aircraft is fun and exciting for most team members. There are special procedures we must follow to ensure safe and efficient travel.

We will wear FULL uniform for travel at all times. Items that are not designated as team uniform will not be worn. This includes head coverings, scarves, and other non-uniform items. Note: coat in winter is allowed.

We will meet at Pontiac High School at the designated time and location. Please be on time as we will not wait for students. Have a back up system to your alarm clock and travel to the school. At the school we will meet at the auto shop entrance for the bus to arrive. Note: All students will assist in loading the luggage on the bus and unloading at the airport. This is best done by having several students at the bus handing the luggage out to the waiting students. We must be as quick as possible.

At the airport after unloading the luggage we will form two lines of students moving to designated area. It is key to stay out of the way of other travelers and to keep talking to a minimum at all times. If it is winter students and coaches will remove outer coats to expose our uniform as soon as we are inside the terminal.

Once inside, students will stay in the designated area at all times. Luggage is not to be out of your control at any time. If students need to use the restroom he or she will need permission of a coach. When we are ready to process your luggage and tickets students will form a line based upon alpha order.

### **Packing:**

A word on luggage is critical at this point. It is very important to pack efficiently. That means to bring only the clothes and items that are necessary and required. There are limitations on both size and weight of all baggage. Remember students must carry their own luggage in the airport. There is no prize for the largest luggage. You are only allowed 1 suitcase, and one approved team carry-on. All luggage must be identified with the name and address on a tag prior to entering the airport. Depending on current regulations for travel carry on items may be restricted.

### **Counter Procedure:**

Students will be processing their luggage and ticket at the counter. Again, it will be alphabetical order – except the coaches who will go first to assist the process. At the counter students will show the agents their school Identification. It is important to have the identification ready to be shown. You will also be asked several questions regarding your luggage. This is a serious time pay close attention. When complete move to designated location while the others are processed.

### **Security Check:**

When all members have been processed, the team will proceed through the security checkpoints. At this point all metal items including change, cell phones, pagers and keys should be placed in the carry on item. Form a single line placing items on the conveyer when appropriate. If it is winter, place coat on conveyor. Wait to be directed through the detector by the security person. Collect all items and wait at designated area. Here you will need to stay close to wall out of traffic area. As a reminder, keep talking to a minimum and wait for directions.

When we have all gone through the process we will proceed to the gate. Do not stop at the bathrooms, get a snack or wander away from the group. Permission will be given later if time permits.

At the gate find a seat, stay with our group and wait for further instructions. If time allows, you will be allowed to go to the bathroom or to get a snack. NOTE: We travel in groups of three or more at all times. If leaving your carry-on please ask another student to keep control of your bag.

We will take attendance several times in the airport. Please be aware of your group and refer to the attendance process outlined in the section on attendance.

### **Plane Entry:**

The coaches will issue a boarding pass at the gate. This process will vary depending on the airlines and the workers at the gate. If you are given a boarding pass, do not put it away at this time, have it ready for boarding. The remaining boarding passes will be collected by a coach for safekeeping. Directions will be given for you to board the plane. When entering the aircraft, please go to the assigned seat. Locate an empty spot overhead and store carry on or place it under the seat. Once seated follow all directions as given. Trading seats is only allowed with the coaches' permission.

If the flight serves food or drink please be very careful to avoid spills.

If you feel ill or need assistance please get the attention of one of the coaches. Some persons have a problem with the air pressure and the effect on the ears. Chewing gum, swallowing frequently sometimes helps. Consult your doctor prior to travel if this is a known problem.

### **Plane Exit:**

After we land exit in a safe manner. Be courteous to others as you exit. Remember to get the carry-on luggage and other materials before leaving.

Upon exiting the plane, the team will gather to the side out of traffic. Listen and watch for the directions of the coaches.

We will then proceed after attendance to the baggage area. Walk in double file lines to the side away from traffic. At the luggage claim wait and watch for your luggage. Once you get your luggage go to the designated location and wait for directions. We will follow earlier directions for loading the waiting transportation.

### **Bus:**

Often we use busses as our mode of transportation. We will store luggage (overnight trips) in the lower compartment under the bus. Do not open windows without permission. If having a snack or drink dispose of the mess when finished. When leaving the bus make a check of the area to make sure all belongings have been accounted for.

Students are allotted a single seat only. Certain restrictions apply pertaining to boy / girl seating. Team members are not allowed to sit with the opposite sex at any time.

If the bus has a table for game playing it must be shared by all students wanting access. There is a 1 hour time limit for any group using the table.

Students must stay in their seats as much as possible. Under no circumstances are students allowed to sleep on the floor or to be stretched across the aisle with their feet.

All carry on items must be stowed in the upper racks in a manner that will not cause any danger of items falling to the floor during the ride.

Students may bring personal media players and music storage devices however; they must be used with personal listening devices and not broadcasted for others to hear.

Most busses will have Video capabilities for use during travel. The choice of movies will be controlled by the coaches.

At rest areas you are required to travel in groups of not less than 3 students. This includes all food stops. Every effort is made to provide several options at a location; however you MUST travel to only approved locations in groups of 3 or more.

Noise levels on the bus must remain appropriate as not to cause distractions to the driver or other passengers.

### **Car:**

Often parents, coaches and engineers will transport students to different events. At all times, seatbelts must be worn by all persons.

## 24 - Competitions

Typically our team will attend several District events, the State Championship and The National Competition.

### **District Events:**

A district event may be close or a distance away. Which district events we attend is dependant upon location and timing of the events. Usually we do two district events, state Championship all within Michigan.

If we attend events out of state we can take a bus or airplane. Refer to the section on travel.

Most district events follow a set pattern:

Prior to our arrival, all students will be given a schedule that outlines their responsibilities every hour of the day. All students are expected to follow this schedule as closely as possible. This should be kept with them at all times.

**Thursday Evening:** The drive team and some of the pit crew arrive at the event in the late afternoon to set up the pits, unpack the robot and start the robot inspection process. The main team can attend if transportation is available.

**Friday:** In the morning the team will meet at the school to load the bus. The time will be set in advance. The Bus will depart on time and not wait for late students. The entire team will arrive at the competition as soon as the venue is open, typically 7:00 am. The main team will locate a place in the stands, while the photo team and competitive assessment teams work on their assignments. The video team will prepare to film each match and replay it at the fifth quarter (the debriefing after the match has concluded) to review the performance and strategy. We will have 1 or 2 practice matches in the early morning. We may have as many as 7 or 8 seeding matches on Friday.

During all this activity the judges are touring the pits and talking to team members about their robot and their team. This is the time to be pro-active and communicate at a high level. This will involve explaining the drive system, our team strong points and our efforts toward maintaining the ideals of FIRST. There will be a Communications Teams student in the pits at all times. The pits close at 8:00 pm. The bus may leave earlier if possible. The Drive team may be required to stay as needed.

**Saturday:** The pits open up at 7:00 am. Upon entering our team again locates a place in the stands. Opening ceremonies start at 9:00 am with the final seeding matches following. Depending on the format of the competition the finals occur in the early afternoon. The formats of these finals vary from year to year.

At the conclusion of the competition there is an award ceremony where the remaining trophies are passed out. All team members will stay and support the winners of the awards. When this is complete the pit crew and drivers pack up the robot for shipping back to the school. This is usually around 5:00 pm.

### **Competition Protocol:**

There are certain practices that we have found to be very successful and have reaped us many rewards and respect of the FIRST community.

**Cheering:** Cheering is more than yelling at the top of your lungs. True cheering is enjoying the event and celebrating the excitement of the moment. Organization is the key to this being a powerful tool. Your spirit leaders will give you direction and guidance for this activity. You are not expected to be cheering 100% of the time, however, when we are cheering, all team members are expected to stand and cheer to the best of their ability. Sitting in the stands looking bored, carrying on personal conversations while others are cheering is not good for the team image and is not permitted.

**Award Ceremony:** During the ceremony we will applaud the teams that are winning awards. When we applaud we will stand to show our respect for what they have accomplished.

**Greetings:** There are certain persons in the FIRST organization that we make an effort to greet on a personal level. If you see Dean or Woody enter the area and you have not said hello, make an effort to go to where they are and greet them. If they are engaged in a conversation with another person please be respectful at all times and do not interrupt.

**Litter:** If you see a mess (paper or trash) you should make an effort to pick it up. That goes for the area you are sitting as well as any other location in the arena.

**Things We Do Not Do At An Event:**

Wearing of personal music devices is forbidden while in uniform or at an event.

Phones are used for emergencies only. Do not sit and text everyone on earth.

The use of your phone is RESTRICTED at events.

Uniforms may not be altered or worn in any manner not approved by the coaches.

Students may not play cards or any other games at the event.

Students may not wonder or sit away from the team at any time.

Our team will not engage in negative behavior toward another team or team member.

Our team will not display displeasure over any decision by a referee or judge.

Team members will not exchange negative remarks to each other, no matter what the situation.

**Championship Event:**

The championship event is very similar to a District event in many ways but on a larger scale. There will be teams from all over the World and thousands of people.

**Wednesday** we try to arrive very early in afternoon so we can do some local activities. The type of activity will depend on the location of the championship and what is available in our time frame. Students are encouraged to participate in the planning of these activities. The advance drive team will go to the event and set up the pit as well as the Hall of Fame display. The remainder of the team will be doing activities at the hotel. A group dinner will be planned if possible. Activities are often restricted to the hotel.

**Thursday** morning we have a group breakfast at the hotel and all proceed to the event. The pit crew and drivers will go to the pit and prepare the robot for inspection. Button trading, competitive assessment involving the photo and video teams and other specific events occur throughout the day. We will have two practice matches spread during the day. All team members are required to stay at the event and with the team until released by the coaches.

If the practice rounds finish early enough we may be able to do some type of team activity. There will be a team meeting at a specified location and time, usually just before lights out.

**Friday** will start with opening ceremonies in the main arena. The seeding matches will follow this spectacular event. We will usually get three or four matches that are spread throughout the day. Your team activities will depend on your specific assignment for the competition.

Friday is also the day when the judges will make their rounds to each team. There will be two Communications students in the pits at all times. This is the last opportunity to be proactive regarding awards. Every effort must be made to show all the great things our team has done and is doing.

The competitive assessment team will meet back at the hotel after dinner to complete competitive assessment materials in preparation for the competition on Saturday. General activities for the evening will be determined based upon time and availability.

If activities are available locally, students will be attending as a group with coaches. These Friday activities are limited. There will be a team meeting at a specified location and time, usually just before lights out.

**Saturday:** After breakfast as a group, we will proceed to the competition as soon as the pits open. At 9:00 am there will be another opening ceremony. You will not want to miss this event. We will sit together as a team. The seeding rounds continue until about noon. Depending on the configuration of the competition, the finals will be held in the afternoon.

Following the last matches there is a 1 to 2 hour break before the award ceremony starts. This ceremony takes about 1½ hours. The team will sit together for the duration of the ceremonies.

There may be a general FIRST activity at the conclusion of the competition. Planning for this will be done as soon as details are available. There will be a team meeting at a specified location and time, usually just before lights out.

**Sunday:** Usually this is a transportation day back to Pontiac. The team will have breakfast at the hotel and other meals on the road. The bus arrives back at about 9:00 pm..... details will be given.

**National Set-up:**

The setup of the nationals varies each year. Generally there is several fields located in the perimeter of the Dome. This will be very large seating many thousand people. This main field will host the opening ceremonies, some matches and the finals. There will be several fields in the main arena. Which field we are on and when we will play will depend on the schedule provided at the start of the tournament.

In addition there is a main pit area where 400 + teams are located. Maps and directions will be provided as they are available.

**25 - Hotel**

When we travel we often stay at a hotel for several nights. Students will be organized into room groups of either three or four students, depending on quantity of students and room availability. Students will be allowed to select roommates of their choice. There are no co-ed rooms, rooms are either male or female. Each room will have a coach assigned to monitor and coordinate activities, this includes room inspections.

**Check-in:**

When we enter the hotel students will go to a designated location to wait for keys. At that location students will need to be very quiet as to not disturb the other guests. The room captains will be given the room keys to distribute. Often each person will have a key. If this is not the case, each room will need to designate who has the key.

Students will proceed to the rooms as soon as key distribution is complete. If your room is not ready your luggage will be put in another room until your room is ready. Upon entering your room you should complete the room inspection form and have ready for the coach.

Often there is free time in the hotel to get snacks, play in the game room or swim. If there is a pool a coach must be present to swim. Appropriate attire is required. Please check with a coach if there is any question.

Students are NOT allowed in the pool AREA unless a coach is present to supervise activities. Due to health restrictions and cautions the use of the Sauna is prohibited.

At no time are male students to enter the rooms of a female or the reverse. If students want to meet, there will be a designated chaperoned room or area for the students to play cards or socialize. At no time are students permitted to leave the hotel without a coaches permission. Sitting on the floor in the hallway is not appropriate for any reason.

All students are required to be dressed appropriately when in the hotel. Night clothing such as Pajamas and other night sleep clothing is prohibited outside your room. Clothing that is a distraction or inappropriate as deemed by the coaches is not allowed.

All students will be required to be in their room at a designated time. Usually this time is 11:00 pm unless altered for special reasons. Please have any drinks, ice or snacks in your room prior to this time. Students are not allowed to leave the room for any reason after the specified time without a coaches permission and attendance.

**Room procedure:**

In the room keep the TV at a low volume so it will not disturb other guests. Students may NOT order pay movies or rent game machines as it is charged to the room. Students are NOT to bring game systems for use in the hotel room as they are a negative distraction. Permission for any type of system must be granted in advance by the coaches.

Students will need their rest, so when lights out is 11:00 pm that means it is time to wind down. Each room will have two beds for 4 persons. It is up to the room to decide sleeping arrangements.

All rooms are expected to be clean and neat. Before leaving in the mornings please make the covers to the beds and the tables neat. Also students are expected to pick up all trash and put in trash container. As a matter of security, pack away any items of value – do not leave them in the open.

Each day the room will be made up while we are gone. Fresh towels will be delivered and a general cleaning will be done. It is important to organize your stuff.... A cluttered room often will not get service and no fresh towels. It is customary to leave a tip at the conclusion of your stay for the service that was given. In most cases there will be an envelope left by the hotel worker on the desk or TV. This is NOT a requirement.

Some hotels have restaurants, snack bars or small stores within them. Soda and snack machines as well as ice vendors are located near the elevators on each floor. At all time rules apply as relates to being in your room. If there is an area with tables or couches please make sure you are leaving space for the other guests. Please watch the volume of your conversations, as we do not want to disturb the hotel staff or guests.

Students are not allowed to sit in halls outside of rooms on the floor and play cards or other games. Running, roller-skating or game playing of any kind is not allowed at any time in the hotel halls.

#### **Telephone Usage:**

Phones in the rooms are usually shut off to outside long-distance calls. Do-Not use the phone to make local or long distance calls, even with a calling card. Please use your cell phone for calls home. When calling from room to room refer to the directory that the coaches will give to you after we have checked in. WARNING: Phones are not toys. Calling other students' rooms to play games and disturb them is strictly prohibited.

#### **Meals:**

Often we will have breakfast as a team in the hotel. Many times we will have "Breakfast Coupons" to use. These will be given the night before. If you lose them you will be paying for breakfast on your own. Have your room organized as it relates to getting ready in the morning. Confusion in the morning often means you will miss the breakfast times. If you have special dietary requirements or allergies to certain foods please inform the coaches prior to leaving for the event.

#### **Room Inspection:**

Keys will be collected by the coaches along with the inspection forms at the time your room is inspected prior to leaving the hotel. At this time you should double check all areas that you stored materials or clothes to make sure you have not left anything behind.

HINT: It is easier to pack your luggage the night before rather than the morning of departure. This saves time and you will not be so stressed in the morning.

## **26 - OCCRA**

Oakland County Competitive Robotics Association hosts an event where students build a robot from a kit of parts similar to FIRST. The difference is that these robots are 100% student designed and made. Coaches and engineers can only advise and are not allowed to physically assist or design in any manner.

We encourage all team members to become active in this competition. The competition starts in early September. There is a six week robot build and four events held at local high school gyms during the week and on Saturdays. The competitions start in Mid October and conclude late November.

This event will prepare you for the FIRST season. This is the event where new drivers and mechanics are allowed to develop their skills. The basic drive team will be selected from the OCCRA drivers if possible.

Students will provide their own transportation to these local events that are during the week after school.

All team members are required to attend all of the 5 OCCRA events. Additionally every FIRST Team/club member is required to participate in the after school activities unless another approved school activity is in conflict.

At the banquet several students will be selected for honors of the season. Two students will be selected as Honorable Mention to the All County Team. Selection will be at the discretion of the coaches based upon overall commitment, service and performance to the team during the OCCAR season. One student will be selected as the MVP and will receive a gold medal in honor of this award. This is often a very hard selection for the coaches due to the great commitment of our team members.

## **27 - Parent Responsibilities**

Parents are an integral part of our team and are very important to our continued success. Parents are also a key factor in the motivation and dedication of their student. Supporting their son/daughter in all aspects of their team involvement is key to them getting the most out of the program.

Parents have several responsibilities, they are:

- To provide timely transportation for the student. Making sure that they are at the required events on time and ready to participate. Often we will leave for a competition very early in the morning to facilitate transportation. Parents are expected to have the student at the designated location at the prescribed time. We will not delay transportation.
- Upon return from an event parents are expected to provide transportation at the designated time. Late transportation causes an inconvenience to all involved.
- Parents are expected to assist their student in all fundraising activities.
- Parents are expected to attend mandatory meetings.
- Parents are expected to provide transportation to local events, including the Breakfast Club, Saturday work sessions, after school sessions and local competitions.
- Parents are expected to provide accurate medical information and to keep coaches informed of all changes.
- Parents are also expected to provide spending money as is appropriate when we are at events or competitions.
- Parents are encouraged to participate in team activities whenever possible.
- Parents will participate in the "Breakfast Club" activities by forming teams that will provide breakfast and lunches on selected dates and selected activities.

## **28 - Election of Captain and Co-Captain**

The captain is the student leader of the team. They must take on leadership responsibilities and assist the coaches and team members in making the team the best it can be. They are expected to go above and beyond in dedication to the team and its success. The Captain is also the Liaison between the students and the coaching staff and engineers. The Co-Captain is an alternate who will assist in all activities working with the Team Captain. If the captain is absent or unable to perform the specific task at a given time the co-captain will step in.

These two students are designated to receive awards for the team.

Qualifications include:

- Membership on the team
- Rank of junior or senior
- Minimum one full year of team experience
- High ethical standards
- Support of the coaches and students

Elections are held yearly in the fall of the school year as soon as the team is officially formed. A nomination process that will be followed by a speech will occur prior to a secret ballot vote. Each team member and coach is allowed to cast one vote. The student with the largest vote total will be selected. All ties will be decided by the coaching staff. All vote totals will be kept confidential.

## **29 - Cultural Experiences**

Our trips are more than just robotics competitions as we make efforts to provide educational and cultural experiences. The nature of these experiences depends upon availability and cost of the experience.

Students will be required to dress appropriately for the event. Every effort will be made to provide advance knowledge of the requirements. In some cases, students may be required to offset some of the costs for the event.

While at the event, students are expected to behave in a manner appropriate to our team. At all times you must remember that you represent the school, your team and sponsors. All eyes are on you at all times so be watchful of this.

### **30 - College**

The Pontiac FIRST robotics program is an excellent way to explore the career of engineering. During this program students will be exposed to many principles of engineering and the mentoring skill of the engineers. We recognize the possibility that not all students will go to careers in engineering. It is our goal however to expose all the students to technological careers including but not limited to engineering.

We highly encourage all students to discuss the career of engineering with the engineers from GM. The Breakfast Club is an excellent opportunity for this to occur.

#### **Scholarships:**

There are many scholarship opportunities associated with the FIRST program. The coaches will be providing information regarding these as soon as they are made available. There is also information listed on the FIRST web site at USFIRST.ORG.

During your junior year, it is important that you concentrate on the skill need to score high on the ACT test as many scholarships and college admittance is based upon this score, as well as high school transcripts. High test scores and high ACT scores often relate to larger amounts of scholarships. The higher the test scores and GPA generally the more funds that are available for your education.

#### **Colleges and Universities:**

There are many great colleges and universities from which to choose your educational path. Kettering University, Michigan Tech, Lawrence Tech are just a few of the great engineering schools in Michigan. If you are considering a trade school please give ITT Tech a close look as we have scholarship funds available from them.

If funding is an issue you should consider the Community College as it is a great value in education.

It is our hope that all of our team members go on to higher education program. We will lend whatever assistance we can to make this goal a reality.

All team members are required to create a portfolio to be used for college planning.

### **31 - Career Opportunities**

The time you are on the team is a great opportunity to explore many careers associated with the FIRST Team experience. You will meet many important people that may play a role in your future career choice. The term used is "Networking" as you meet and greet the many visitors and important people associated with FIRST activities.

Collect business cards whenever possible, making specific notes on the reverse side for future reference.

### **32 - E-Mail / Social Networking**

All students are encouraged to have an active e-mail address. This form of communication is by far the fastest and most efficient mode of communication. Please provide your address to the coaches for the data base records.

If you do not have internet access at home to participate in e-mail, you will be assigned an e-mail buddy. The e-mail buddy will pass on any important messages via the phone.

It is suggested that you monitor your e-mail twice a day. Early in the morning (before 7:00am) and late evening (after 9:00pm).

As you move to the professional world you may want to consider your e-mail address. Cute game related or nicknames are often looked at in a negative manner by employers. Consider a simple g mail account.

#### **Social Networking:**

This is a developing concern for you as you move towards college ad adulthood. Colleges and employers are using your facebook account as a measure of your character. For many students this is a place to vent frustrations and use inappropriate language. We recommend caution when using social networking sites.... They are public and reflect upon you and your associations.

### **33 - Other Competitions**

Our team is often invited to pre and post season competitions. Our involvement in these activities will depend upon timing and the availability of our team. Most of these competitions are local and will not involve organized travel to any great extent, as they are one day events.

This is the opportunity for our “Rookies” to get the feel of real competition before the season starts. Often this is also the opportunity for our drive team to get practice and rookie drivers to see what it is all about.

These events may include:

Kettering – usually late September  
IRI – Summer activity (student funded)

### **34 - Website**

The World Wide Web has become a powerful tool and influence in the world today. This concept was recognized by our team several years ago when we started the famous “forums” where teams from all over the FIRST organization meet and share information.

Chiefdelphi.com, our site, is recognized as a leader and one of the best sites in the FIRST community. Always innovative, and always serving the common good of FIRST our site is the site to gather information on a “state of the art” format.

There are many forums to our website:

Forums: Technical, Rumor Mill, Chitchat, General, Competition are but of a few topic areas teams may explore.

Contained on the site is the Team Home Website. This location is created by the Web Team and is a full presentation of our team. This site also competes for the Website Award each year.

All students are encouraged to monitor and become active in the site. Please be careful about your comments and responses as they reflect upon our team. You will need to be registered to post on the site. You do not have to be registered to explore and read threads.