PITT COUNTY ROBOTICS

FIRST Robotics Teams 2642/2682

STUDENT HANDBOOK

Revision 4.0 – 9/1/17

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Acknowledgements:
This handbook was developed with significant input from handbooks posted by Team 1086 (Blue Cheese) and Team 2614 (Mountaineer Area RoboticS). Thanks to both teams for posting and creating such great examples.

1.0 Introduction

Let us introduce you to Pitt County Robotics teams 2642 (The Pitt Pirates) and 2682 (Boneyard Robotics). We hope you will find a place on these teams and your experience will be rewarding and enjoyable. This manual is provided to make sure everybody understands the program and responsibilities as a team member. In the following pages, you will find information on the team history, organization, member selection, rules, procedures, and many other topics. Review this information carefully. It is the responsibility of every team member to review and understand this information. **If you have any questions or something is missing, please contact a coach as soon as possible.** Please keep this manual handy and share this with your parents. This manual is stored on the team website. Be sure to check the website for the latest version and any updates.

1.1 What is FIRST

Pitt County Robotics is part of the FIRST Robotics Competition (FRC). FIRST is an acronym meaning: For Inspiration and Recognition of Science and Technology. This program was started in 1989 by Dean Kamen and Dr. Woodie Flowers. FIRST is an international program whose goal is to inspire young people to pursue careers in Science, Technology, Engineering and Mathematics (STEM). To quote Mr. Kamen, *"To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."* Each year, FRC teams build robots to compete against one another in an exciting sports-like competition. The robot is a focus for the team efforts but is not the entire program. This is best explained by the FIRST Mission Statement as listed on the web page.

> Our mission is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

All of this is guided by a concept coined by Dr. Woodie flowers as “Gracious Professionalism.” Dr. Flowers describes it this way.

> Dr. Woodie Flowers, *FIRST* National Advisor and Pappalardo Professor Emeritus of Mechanical Engineering, Massachusetts Institute of Technology, coined the term "Gracious Professionalism®." Gracious Professionalism is part of the ethos of *FIRST*. It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. With Gracious Professionalism, fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process. They avoid treating anyone like losers. No chest thumping tough talk, but no sticky-sweet platitudes either. Knowledge, competition, and empathy are comfortably blended. In the long run, Gracious Professionalism is part of pursuing a meaningful life. One can add to society and enjoy the satisfaction of knowing one has acted with integrity and sensitivity.

Please visit the FIRST website at www.firstinspires.org for more information.

1.2 About the Team and History

South Central High School started the original Pitt County FIRST Robotics team in the 2008 season. The team's original sponsor was Mr. James Harris. The inaugural team was called the "Falconators" after the South Central mascot, the Falcons. The Falconators were a small group of students and were mentored that first year by Team 435, the Robodogs out of Raleigh, NC.

After the first year, the team expanded and added members from other local high schools. Recognizing the need to expand membership, the team name was changed to the Pitt Pirates – as we were all from Pitt County and the Pirate mascot had universal appeal. Each year since the 2008 season, we have increased our membership and representation from the local high schools. Our team is still growing because we recruit from high schools across Pitt County.

By 2014, the Pitt Pirates had grown to over 50 students. Demand for FIRST was growing in the community. In 2014, Boneyard Robotics (Team 2682) was born to help FRC grow in Pitt County. Boneyard Robotics competed for the first time in 2015 and turned in fine performances at Raleigh and Chesapeake.

Our team members and our mentors enjoy spreading the word about science, technology, engineering, and math (STEM). Both teams have made many civic and community presentations displaying our robots and spreading the word about FIRST robotics. Each competition season, we like to compete in the NC Regional in Raleigh and at least one other regional event. A list of our events is below. We were proud to be part of the first NC regional held at Dorton Arena in 2010.

These teams have competed every year since 2008. A list of the Competitions and robots is listed below.

Year	Game	Competition Locations	Robot Name	Awards
2008	FIRST Overdrive	VCU – Richmond, VA	Fluffy	NA
2009	Lunacy	VCU – Richmond, VA Championship – Atlanta, GA	Virginia	NA
2010	Breakaway	VCU – Richmond, VA NC – Raleigh, NC (inaugural year)	Captain Hook	NA
2011	Logo Motion	DC – Washington, DC NC – Raleigh, NC	Dutch and Davey	NA
2012	Rebound Rumble	Palmetto – Charleston, NC NC – Raleigh, NC Championship – St Louis, MO	Naismith	Safety, Spirit, Raleigh regional winner, AutoCAD Design
2013	Ultimate Ascent	NC – Raleigh, NC DC – Washington, DC	Ashley Whippet	Safety, Design
2014	Aerial Assist	NC – Raleigh, NC DC – Washington, DC Championship – St Louis, MO	Jo-Jo	Safety, Regional Chairman's award (Raleigh), Gracious Professionalism (St Louis)
2015	Recycle Rush	NC – Raleigh, NC Maryland – College Park	The Pickup Line (2642) Bones (2682)	Woodie Flowers Award, UL Industrial Safety
2016	Stronghold	NC (district) – Guilford County NC (district) – Wake County NC (state) – Campbell Univ. Championship – St Louis, MO	Excalibot (2642) Mordu (2682)	Event Winner (Wake), Chairman's Award (Wake), UL Safety Award, Engineering Insp (Guilford), Dean's List Finalist (State), Spirit Award (State) Imagery Award (Guilford), Excellence in Engineering (Wake), UL Safety Award (Wake),
2017	Steamworks	NC (district) – Pitt County NC (district) – Raleigh NC (state) – Campbell Univ. Championship – Houston, TX	Gemini (2642) Gearitation (2682)	Event Winner (Pitt, Raleigh), Chairman's Award (Pitt, State), UL Safety Award (Pitt), Industrial Design (Raleigh), Woodie Flowers (State) Team Spirit Award (Pitt, Raleigh, State)

1.3 Mission Statement and Team Motto

Mission Statement: To put FIRST in the hearts and minds of students all over Pitt County and the World.
Pitt Pirates Motto: In Scientia Vires – In knowledge there is strength.
Boneyard Motto: Bringing Engineering and Robotics to Eastern NC One Student At a time.

2.0 Safety

The safety and well being of all FRC participants is paramount. It is imperative that all students, volunteers, and mentors make safety a priority in each activity. This section describes the culture, methods, and procedures that we will use to enforce and maintain a safe environment for all participants.

2.1 Safety Culture (Taken from the FRC Safety Manual)

Instilling a culture of safety is a value that every individual in the *FIRST®* community must embrace as we pursue *FIRST*'s mission and vision. *FIRST* Robotics Competition (FRC) has adopted safety as a core value and has established the framework for safety leadership in all aspects of the program.

FIRST believes that the teams that take the lead in developing safety programs and policies have a positive and lasting impact on each team member, Mentor, their communities, and their present and future work places. *FIRST* recognizes the teams that demonstrate safety throughout their programs and are truly committed to developing and nurturing a safety culture

2.2 Safety Rules

This section describes the basic rules governing activities in Pitt Pirates workshop. Every student must be familiar with these rules. They are posted in the shop. Failure to obey these rules can result in expulsion from the worksite or the program.

General Practices:

1. General Shop Access. General shop access is available to all participants. A schedule of meeting hours will be posted. Gracious Professionalism must be displayed at all times. This means treating people and the facilities with respect.
2. After Hours Access. Shop access is available for unscheduled or special meetings. Entry to the shop must be coordinated with a team mentor. An adult mentor must be present.
3. Personnel. There must be at least two persons in the shop at any time. During construction, there must be at least two adult mentors in the shop.
    a. Equipment. Equipment belonging to Team 2642 may be used in the shop area as long as rule three (above) is observed. No equipment belonging to Pitt County Schools is to be used without permission or training by personnel familiar with the equipment.
4. Safety and/or Rule Violations
    a. The use of the Shop is a privilege. VIOLATIONS OF THE SAFETY AND SHOP RULES WILL NOT BE TOLERATED
        i. First Violation – Verbal warning

ii. Second Violation – Student will be sent home

5. Housekeeping. Clean up machines and the work area when you are finished. A dirty shop is unsafe and hazardous to work in.

Safety Rules:

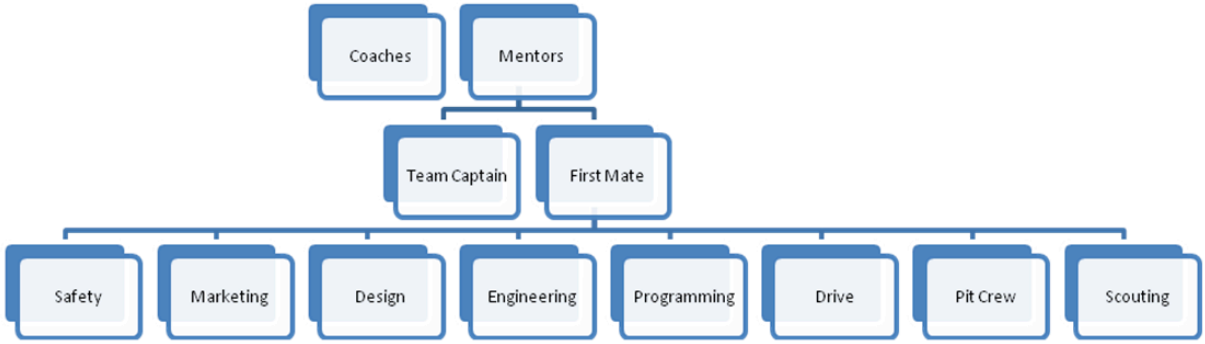
1. Everyone must wear safety glasses in the shop. You must wear safety glasses in the work areas even if you're not working. Safety glasses will be made available to all participants.
2. Never Work Alone. There must be two persons in the shop at all times. There must be an adult mentor present for any work activities.
3. Do not work in the shop if you're excessively tired or using medication that can make you drowsy or adversely affect your ability to concentrate.
4. Obey the shop rules at all time. Be aware of the rules, they are posted.
5. If you don't know how to do something, Ask!
6. There is Zero Tolerance for Horseplay. Fooling around in the shop can be very dangerous and is grounds for immediate dismissal from the shop.
7. Check your hair, clothes, and jewelry.
   Before you enter the shop, check the following:
   If you have long hair, tie it up.
   No loose or hanging clothing.
   Remove jewelry. It can get caught in equipment.
   No Gloves! Only use gloves for material handling.
8. Wear appropriate shoes. No open toe or open heel shoes. Wear shoes that give sure footing and protect your feet.
9. Prohibited electronic devices. Digital music devices, cell phones and other such devices shall not be used in the shop. Cell phones and portable music devices must be turned off or put away while working in the shop.
10. Be safe, use common sense and have fun!

2.3 Procedures

This section will contain links to standard procedures. These are activities and functions that have documented methods to enhance the safety of all participants.

3.0 Team Structure

Each team is composed of people performing many different duties. All the team members work together to accomplish common goals and to demonstrate the principle of gracious professionalism. In the fall, students will work on training, outreach, and projects. During the fall, students are encouraged to learn as much as possible about different roles and sub teams. In November, the team roster is finalized and students will be selected to work as members of different sub teams. Students will need to indicate the specialty areas where they wish to work and which team (2642 or 2682) they prefer to join. All team members should have multiple selections. It may not be possible to place a student in their first choice. Additionally, there are many sub teams and some students may need to be part of more than one group. Students may be moved to a sub team if that team needs additional support. Each of teams does not need to be large enough to staff every single sub team with different personnel. The Coaches and Mentors reserve the right to make changes to team arrangement as needed. A typical chart of team structure is shown below. This is subject to change.



3.1 Sub Teams, Leaders, and Responsibilities

Coaches

The Coaches are adult mentors charged with running the team. The coaches are the supreme authority on all facets of the team. Coaches are registered as Coaches on the FIRST TIMS database. Ann McClung and Bill McClung are the lead coaches for The Pitt Pirates. Kevin Daniels and Bill McClung are the lead coaches for Boneyard Robotics.

Mentors

Mentors are adult leaders typically involved in technical aspects of team operations. Mentors are there to assist in technical subjects or organizational subjects. Mentors carry the same authority as coaches. All mentors are approved by the team coaches and register in the FIRST TIMS system as mentors. Mentors must meet the requirements of the FIRST Youth Protection Program (YPP). Mentors may be added or removed at the Coaches discretion.

Student Leaders

All Student leaders must be team members in good standing. Any student meeting these criteria may apply for a student leader position. Students must contact a coach and register their intent. Coaches and mentors will interview students. Coaches and mentors will observe students during fall practice and note how those students work and interact with other team members. Leadership positions will be selected by the Coaches and Mentors and announced when the team roster is finalized. Not every role may be utilized or filled. The Coaches reserve the right to remove or change student leaders.

Team Captain (1 Student)

The Team Captain is the top student leader position. The Team Captain oversees all aspects of the team (outreach, fundraising, business plan, robot construction, scouting, etc). This is the toughest and most important job that any student can take. It is also one of the most rewarding and exciting positions on the team. Team Captain responsibilities include:

Work safely. Promote and demonstrate safe practices.
Provide leadership example to team members – Lead Student meetings.
Coordinate and supervise Team Identity based on goals and spirit of FIRST.
Work on Business plan with Marketing and Finance Mentors.
Coordinate, assemble and monitor schedules with mentors and coaches.
Track and monitor deadlines and deliverables on schedule.
Communicate to team members about upcoming events.
Communicate to mentors and coaches about progress, issues and team needs.

First Mate (1 Student)

The First Mate reports to the Team Captain and handles day to day efforts in the shop. This person is responsible for the construction schedule of the robot and preparation of designs and fabrications. The First Mate works closely with the Engineering Mentors to make sure all students are on task and working safely. First Mate responsibilities include:

Work safely. Promote and demonstrate safe practices.
Coordinate with Design Team leader in development and design of robot.
Assist team members to learn about and use tools properly.
Lead construction of robot and be familiar with all systems on robot.
Assign team members to subsystem for development.
Coordinate and assimilate robot subsystems in complete chassis.
Work with Drive Team to troubleshoot and test robot.
Check BOM with Design Team.
Maintain and monitor build schedule.
Coordinate with Marketing Team Leader to build and assemble pit area materials.
Communicate with Team Captain, Coaches and Mentors regarding status and needs.

Safety Captain and Safety Team (2-3 Students)

The Safety Team works to promote safe practices and habits in all phases of the FRC season. This team is focused on developing safety culture and practices, not just enforcing the rules. Safety Captain responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Work with team members to promote safe practice at shop and home.
- Promote a culture of safety on the team.
- Spearhead and assist with the Safety Animation project.
- Develop marketing materials to promote safety and coordinate with marketing team.
- Develop and document safety practices.
- Maintain and monitor build schedule.
- Communicate with Team Captain, Coaches and Mentors about team status and needs.

Marketing Team Leader and Marketing Team (4-5 Students)

The Marketing Team is involved in the business and communication aspects of the team. This includes outreach, fundraising, logistics and PR efforts for the team. The Marketing Team must be familiar with the technical aspects of the competition and the goals associated with the Chairman's award. The Marketing Team spearheads the assembly and presentation of the Chairman's award. Marketing Team Leader responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Coordinate and supervise Team Identity based on goals and spirit of FIRST.
- Maintain outreach and communication with team, other teams, and sponsors.
- Develop marketing materials and documents.
- Develop look and image plan for competition.
- Assign Marketing Team members to support outreach events.
- Assign Marketing Team members to support competition events.
- Coordinate with Engineering and Design Teams to develop pit area materials.
- Maintain and monitor marketing schedule.
- Communicate with Team Captain, Coaches and Mentors about project status and needs.

Social Media Coordinator (1 Student)

The Social Media Coordinator reports to the Marketing Team Leader. This person is tasked with maintaining and supporting the electronic communication. This includes web sites, Facebook pages, twitter feeds and photo sharing sites. The Social Media Coordinator responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Coordinate and supervise Team Identity based on goals and spirit of FIRST.
- Maintain outreach and communication methods with PPR, other teams and sponsors.
- Develop marketing materials and documents for use on electronic media.
- Keep electronic communication methods functional, current, and up to date.
- Communicate with Team Captain, Coaches and Mentors about project status and needs.

Lead Ambassador (1 Student)

The Lead Ambassador leads outreach and ambassador programs at all competitions. More than one student may be involved in ambassador activities. The Lead Ambassador will approach the Leaders of each competition to seek ambassador roles for our team. The Lead ambassador reports to the Marketing Team Leader to make sure outreach activities are coordinated.

Design Team Leader and Design Team (4-5 Students)

The Design Team spearheads the electronic development of the robot design. This group works closely with the Engineering team to develop designs and document them in CAD. Design Team Leader responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Coordinate with Engineering Team Leader to design robot.
- Coordinate and assemble documents and materials for Design Awards.
- Coordinate top level CAD model of robot with all subsystems.
- Assign team members to develop sub systems.
- Assist team members to develop improved CAD and Design skills.
- Coordinate with Marketing Team Leader to design pit materials.
- Assemble and check BOM with engineering team.
- Store and maintain designs for future reference.
- Maintain and monitor build schedule.
- Communicate with Team Captain, Coaches and Mentors about project status and needs.

Engineering Team Leader and Engineering Team (5-6 Students)

The engineering team is the hands-on group that leads the design, fabrication, and assembly of the robot for competition. This leader works on the robot, but also must coordinate to make sure that all the students in the engineering group are on task and work is correct and on schedule. Engineering Team Leader responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Coordinate with Design Team Leader in development and design of robot.
- Assist team members to learn about and use tools properly.
- Lead construction of robot and be familiar with all systems on robot.
- Assign team members to subsystem development and construction.
- Coordinate and assimilate robot subsystems into complete chassis.
- Work with Drive Team to troubleshoot and test robot.
- Check BOM with design team.
- Maintain and monitor build schedule.
- Coordinate with Marketing Team Leader to build and assemble pit area materials.
- Communicate with Team Captain, Coaches and Mentors about project status and needs.

Programming Team Leader and Programming Team (4-5 Students)

The Programming Team is responsible to develop and maintain all the software need to operate the robot. The programming team will also assist Marketing and other groups with IT support as needed. The Programming Team Leader responsibilities include:

- Work safely. Promote and demonstrate safe practices.
- Lead programming effort for robot – Assemble top level robot control program.
- Assign programming team members to sub system programming tasks.
- Store and maintain programs for future reference.
- Coordinate with Engineering and Design teams to develop programs.
- Support Web site, Scouting crews, and Pit crew for IT needs.
- Assign team members to support and create web site content.
- Maintain and monitor build schedule.
- Communicate with Team Captain, Coaches and Mentors about project status and needs.

Drive Coach

The Drive Coach is part of the Drive Team. This is an adult position and may act as drive coach on the field or may delegate that role to a student. On the field, a Drive Coach helps to coordinate and direct the activities of the drive team and coordinate with the alliance partners. The Drive Coach coordinates game strategy and utilizes data from the scouting team to plan strategy. Off the field and off season, a Drive Coach helps prepare the drive team for competition by coordinating practices and helping the drivers to hone their skills.

Lead Driver/Student Drive Coach – Drive Team (3-4 Students)

The drive team is the students selected to operate the robot at competition. We use a dedicated drive team and only select individuals will be chosen to operate the robot or act as a human player during the matches. Drivers may be selected by tryout or directly by the coaches during the build season. Typically, there are two drivers and a human player. Other students may practice with the drive team to act as alternates. The Drivers and Lead Driver have the following responsibilities:

- Work Safely. Promote and demonstrate safe practices.
- Drive or direct the robot during match play.
- Coordinate with alliance members to develop strategy and promote goodwill.
- Communicate with Scouting Team regarding competitor information.
- Communicate with Pit Crew regarding robot operation and issues.
- Communicate with Team Captain, Coaches and Mentors regarding competition status.

Pit Crew Chief and Pit Crew (3-4 Students)

The Pit Crew Chief is the lead mechanic in the pits area during competition. The Pit Crew is responsible to maintain the robot and repair the robot as needed. The Pit Crew maintains the pit area and makes sure that the pit is tour ready always. The Pit Crew Chief directs activities in the pit and his responsibilities include:

- Work safely. Promote and demonstrate safe practices
- Coordinate and direct robot repair and maintenance at competition.

Assign team members to perform repairs.
Manage pit area activities: repair, fabrication, and housekeeping.
Assemble and break down pit at competitions.
Work with Drive Team to assess and resolve robot problems.
Communicate with Team Captain, Coaches and Mentors about robot status and needs.

Scout Leader and Scouting Team (6-8 Students)

The Scouting Team oversees the collection of competitive data at the competitions. The scout leader and the scouts are important ambassadors for the Pitt Pirates. Their efforts are crucial to develop good working relationships with other teams at competition. The scouting team learns about the other teams and fosters open and robust communication. The scout leader must assemble and present data to help the drive teams during match play and alliance selection. The Scout Leader responsibilities include:

Work safely. Promote and demonstrate safe practices.
Coordinate with programming team to collect and record competitor information.
Assign team members to scout competitors.
Provide competitive information to Drive Team during competition.
Prepare assessment of competitors for Friday night alliance selection.
Communicate with Team Captain, Coaches and Mentors regarding competition status.

4.0 Team Members

The Pitt Pirates and Boneyard Robotics operate as teams. All team members must work together to meet the goals and objectives the team. There are requirements that all students must meet to be part of these teams. There are standards of conduct that all students must meet to remain on these teams.

4.1 Qualifications

To be a member in good standing, a student must meet these criteria. Complete all applications and documents. Students must have a working email address and check it regularly. Dues must be paid in full. Maintain good academic credentials. Students must hold a "C" average or better in all classes. A student leader may not have more than two classes with a "C" average. A student who does not meet this requirement will be placed on probation. Students have 30 days to improve their grade point average or they will be suspended. Any student needing assistance in their class work is encouraged to contact the coaches for assistance.

4.2 Selection Process

Coaches select who will be on the team with input from the adult mentors. Selecting team members is a very difficult task for the coaches. Every year, we receive more applications than we can accommodate. The selection process occurs during the fall before kickoff and build season. During the fall, any student is eligible to apply for membership status. Activities between September and November constitute a tryout period for all students. Summer events also contribute to tryout credentials. The following items are used to guide the selection process. Team members will be notified in late November by email.

Forms and Dues

All students must complete the application, contract and medical form as directed by the coaches.

All the data must be complete and accurate.

All dues must be paid in full. Due dates TBA.

Estimated dues typically include the following:

Membership	$50 (payable at the beginning of season)
Travel	$150 x 2 (Two District) Competitions

Attendance

Attendance at all meetings and events is recorded. Students do not have to attend every meeting but are strongly encouraged to do so. If a student must miss a meeting, they need to contact a coach. Students only receive credit for meetings they have attended.

Homework

Students will be assigned some small tasks to be completed outside the meeting time. Some robotics activities extend outside normal shop time. Homework must be completed correctly and submitted by the due date to receive credit. Homework assignments will be listed on the web page. There are no extensions for the deadlines.

Participation

All students will be observed and assessed during the try out period. Coaches will rate students on how they participate. Students who are engaged and actively participating in the activities using gracious professionalism will receive high marks.

Prior Performance

Veteran students are held to a higher standard. Coaches consider veteran students' growth and participation in prior seasons. Students who have participated in previous seasons will be expected to show growth and leadership. The team looks to our veteran members to provide training, guidance, and support to new and junior members.

4.3 Student Participation

FIRST Robotics is an extracurricular activity that requires many hours beyond the normal school day. **It is a significant time commitment**. Every team member is expected to participate in team work sessions, meetings, events, and activities. Conflicts must be communicated to the coaches. Intermittent conflicts can be handled by communicating **beforehand** with the coaches. If other activities routinely conflict with robotics activities, the student will need to make the hard choice about which activities he or she wishes to pursue. It is the students' responsibility to coordinate and schedule activities and commitments to meet their obligations. Most of the routine activities are described below.

Team meetings

Meeting schedules will vary depending on the time of year. In the fall, the team will have 3-4 regular meetings per month. During the build season, the team will meet every day during the 6 week build season. In the spring and summer, meetings will be infrequent. Meeting schedules

are posted on the web site calendar and reminders sent by newsfeed and email. It is each member's responsibility to keep up with the meeting schedule.

Events/Outreach

Students will be asked to participate in demonstrations, fundraisers, EON (East of Ninety-Five) events and FLL Competitions. All team members are expected to participate in outreach efforts. Outreach efforts are one of the most important things that we do as a team. This helps us to spread the word about FIRST, recruit new members, assist other teams, and develop new and important contacts in the community. Some outreach events include:

- Robot Demonstrations
- Presentations to schools and Civic Groups
- East Of Ninety-five Events (EON)
- Robox Sumo Contests
- FLL Tournament Support

Events and Outreach will be broadcast by web site and email. In many cases an event may only require a small group of students. Students will need to sign up in advance for these events. Be sure to contact the coaches if you want to participate in a specific event. It is the student's responsibility to contact the coaches to participate in specific events.

Fundraising

Fundraising is a critical part of the FIRST program. All team members are expected to participate and take part in fund raising activities. Fundraising is described in more detail in section 6.0.

4.4 Conduct

FIRST Robotics brings together a unique team of students and adults. We rely on each other for the success of the group. Everyone is expected to bring the very best of their abilities to the group. FRC competition is expensive and time consuming. Many people work very hard to make this competition a success both as participants and sponsors. It is expected that all involved will act as motivated participants with the highest regard for the safety and well being of others. All participants are expected to demonstrate honesty and integrity in thought and deed.

Demonstrate Good Judgment and Behavior

Each team member is an ambassador for our team. Each team member should be a role model for others to emulate and respect. It only takes one bad decision to make the whole team look bad. Team members are expected to make good behavior choices at all times.

Willingness 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 get side tracked or discouraged. Your word is very important. Don't take responsibility you can't perform and ask for help if you are having

problems with a project. All assignments (tasks and projects) are important. Timeliness, quality, and integrity are essential because every future task builds on the current ones.

Ability to work independently and as a Team member
Being a team player, doing what is needed for the team, is an asset to all. However, some activities require one to work independently with little or no direction. Students need to be prepared to work in both arenas.

Interest in Science, Technology, Robotics and Related Fields
Many team members will have genuine interest and an overall educational goal related to these fields of study. However, the Pitt County Robotics needs students with a broad range of interests and skills. Thus, the most important characteristic is a willingness to learn new skills and then to apply those skills in a dedicated fashion to key areas of the team.

Pitt County Robotics Rules for Success
To be successful, one must have a plan. Here are some rules for planning success.

1. Have a plan. It doesn't have to be great, but know what you want to do and how.
2. Execute your plan. It's great to have a plan, but if you never use it, it is of no value.
3. Do your homework. Be prepared. Do your research and learning in advance so you can be ready to execute your strategy or act on rule four.

There **is** a rule four, just in case.

4. Be flexible. If you've done your homework you should be prepared and ready. If things don't work like you thought, that's ok. Be prepared to adjust the plan to best suit the needs of the team.

Couples
If a romantic relationship within the team develops or is ongoing, there are certain guidelines that must be observed always. When these students are engaged in team activities at home or away, displays of affection are strictly prohibited. All couples should not appear as a couple but as normal team members. Ignoring this guideline may result in immediate dismissal from the team.

4.5 Discipline

FIRST Robotics Competition is a voluntary activity for students and it should not be necessary to discipline students. In most cases, mentors will caution or warn a student if their behavior is inappropriate. However, in some cases, students will be disciplined. If a student must be taken aside or redirected for serious infractions, the student will be counseled. The event will be documented in a short description that includes the infraction and the action items. A coach will assign action items. A mentor, a coach and the student will sign this document. A copy will be kept with the team records and one will be sent to the student's parent. Any student that receives two disciplinary actions will be dismissed from the team.

5.0 Parent Expectations

The parents of our student members are an important part of the team. We could not exist without their help. There are some expectations for the parents of student participants.

Complete and submit applications, documents, and dues on time.
Transport team members to and from designated location on time**.**
Join and Support the Pitt Pirates Boosters
Assist students in fundraising activities.
Attend parent meetings.
Provide support in all aspects of team involvement.
Provide snacks, meals, and drinks for the team.
Parents may be called to pick up their student at an event or meeting if that student's behavior does not meet conduct guidelines as described in section 4.4.

6.0 Fundraising

Fundraising is vital to fund Pitt County Robotics. Students are expected to help raise funds for the team. Pitt County Robotics is supported by student fees, corporate and civic sponsors and sales or other fundraising activities (carwash, bake sale, auction, etc.) These funds are used to cover registration fees, outreach expenses and robot parts. Participation in fundraising includes presentations to corporate or civic organizations, assisting in fundraising programs for charities, and direct sales of products to benefit the team. The leaders are always looking for new ways to raise money. Please contact a mentor or coach if you have new ideas on fundraising.

7.0 Travel

Both teams will travel a great deal to attend competitions, outreach events, fundraisers, training, and other activities. To be eligible to travel on team activities a student must be a member in good standing as described in section 4.1. Safety is always a major concern. Except for short, local trips, students will ride with Coaches, Mentors, and Parents. Students must wear seatbelts and stay with their assigned groups. All drivers for long trips (outside Pitt County) must be approved by the Coaches and must fill out Pitt County Schools Drivers forms. At the destination, Students need to use all the positive behaviors described in section 4.4.

North Carolina currently uses a district system We will attend two district competition and (hopefully) the state competition. We always hope for a slot at the World Championship. Schedules at each of these events may vary based on travel distance and hotel arrangements. The Coaches and Mentors will provide schedules and information before the travel. At each of these events, there are some basic expectations for students at competition.

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. 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, playing video games, carrying on personal conversations while others are cheering is not good for the team image.

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

Litter/Housekeeping
If you see a mess (paper or trash) you should try to pick it up. That goes for the area you are sitting as well as any other location in the arena. Make sure your area is cleaned up before you leave.

Things We Do Not Do at An Event:
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.

Hotels
When we travel we often stay at hotels. Students will be organized into room groups of either three or four students, depending on quantity of students and room availability. Students may be allowed to select roommates. There are no co-ed rooms; rooms are either male or female. Each room will have a mentor assigned to monitor and coordinate activities. This includes room inspections. Often there is free time in the hotel to get snacks, relax or swim. Students **may not** congregate in the hotel rooms. Students are not permitted into a hotel room unless they are assigned to that room. Students may meet in common areas of the hotel. If there is a pool or hot tub, a coach or mentor must be present. Appropriate attire is required. Please check with a coach if there is any question.

8.0 Competitions
We try to attend competitions that are close to home. Most of our typical destinations are a 3-5-hour drive. 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 always. This is a typical schedule for a regional competition and will change for district competitions.

Wednesday: Wednesday night, a small group of students and mentors will go to the competition site and check in to the hotel. This is the Advance Team. The Advance Team typically consists of the drive team, pit crew members and a couple of mentors. This group is there to deliver the robot, the pit and be ready to set up in the morning.

Thursday: The Advance Team arrives at the event early to set up the pits, unpack the robot and start the robot inspection process. The rest of the team will leave early in the morning to arrive at the competition site as early as practical. When the team arrives, it starts the competitive assessment process, locates a place in the stands, and get to know the other teams. Usually our robot will practice several times during the afternoon. While waiting for our robot, the photo/scouting team is gathering competitive assessments of the other robots. Usually the day ends at 5:00pm. The drive team and pit crew may be required to stay and work on the robot until the pit closes. The remainder of the team will

go to the hotel to check in and get dinner. Dinner will be held as a group if possible. When dinner is done, the team will return to the hotel depending on time. A meeting is usually held within the hotel in a meeting room at about 9:00 pm.

Friday: In the morning, the team will have breakfast together. The entire team will arrive at the competition as soon as the venue is open, typically 8:00am. The main team will locate a place in the stands, while the Marketing and Scout teams work on their assignments. We may have as many as four or five seeding matches on Friday. The competition generally closes with a ceremony. Very often, there will be a team social. If possible, we want to attend social functions as a team to make good contacts with the other teams. Dinner arrangements will vary. There is typically a team meeting at 9:00 pm to review scouting data and prepare for Saturday.

Saturday: Saturday morning the pits open at 8:00am. Our team would have had breakfast earlier that morning. Students normally need to pack and be ready to leave. Mentors and coaches will perform room inspections. Upon arriving at the venue, our team again locates a place in the stands. Opening ceremonies start at 9:00am with the final seeding matches following. Depending on the format of the competition the finals occur in the early afternoon. The format of these finals varies from year to year. After the competition, there is an award ceremony where the remaining trophies are passed out. When this is complete the pit crew and drivers pack up the robot for shipping. This is usually around 5:00pm. The team normally pauses to take a team photo. Then students need to meet with their assigned drivers for the trip home. Dinner will be coordinated on the trip home.

9.0 Resources

The Pitt Pirates use several forms of communication to keep up with students and activities. The most common means the website newsfeed and email. Occasionally, coaches will use text messaging to contact students. Students **MUST** have a functional E-Mail address and check it regularly. E-Mail is the PRIMARY means by which information will get passed to students and parents.

This section also lists most of the standard FIRST websites for additional information about these programs.

9.1 Contact information

Team Websites	-	www.pittpiratesrobotics.com
		www.boneyardrobotics.com
FaceBook	-	www.facebook.com/FIRSTPittPirates2642
Twitter	-	@pittpirates2642

Coach Ann McClung	-	McCluna@pitt.k12.nc.us
		Cell - 252-258-3974
Coach Bill McClung	-	juhling@suddenlink.net
		Cell - 252-347-3498
Coach Kevin Daniels	-	kdaniels30@suddenlink.net

Cell – 252-413-9458

9.2 Organizational Resources

FIRST Main Organization	-	www.firstinspires.org
FIRST NC - State Organization	-	www.firstnorthcarolina.org
Chief Delphi – Really great blog	-	www.chiefdelphi.com

10.0 Student Forms

These are the standard forms that all students will be asked to complete and submit. Other forms may be used instead. Coaches and mentors will inform the students which forms are required.

1. Student Application Form (attached)
2. Student and Parent Contract (attached)
3. Medical Information/Consent Form (attached)
4. Travel Forms – To be provided before trips

Pitt Pirates Robotics – FRC Team 2642 – Student Application Form

Please fill in all the blanks.

Name _____
High School _____
Grade_____
Birth Date _____
T-Shirt Size _____
E-Mail Address _____
Cell Phone _____
Home Phone _____
Home Address _____
_____
Parent/Guardian Name _____
Parent/Guardian E-Mail _____
Parent/Guardian Phone _____
Participated on FRC Team Before? _____

Questions

1. Why do you want to participate in FIRST Robotics Competition?

2. What do you hope to achieve as a member of the Pitt Pirates?

FRC STUDENT/PARENT CONTRACT

PITT PIRATES ROBOTICS – FRC Team 2642

To ensure that parents and students understand the responsibility and commitment needed by each FRC member, please take the time to read over and sign this contract with your child.

STUDENT CONTRACT

Please initial each item to which you can honestly agree.

____I realize that FRC is designed for me to have fun learning science, math, engineering, technology, and teamwork skills.

____I agree to work my hardest to learn and help my team at every meeting.

____I agree to treat myself, my teammates, all materials, my coach, other teams and their coaches, and any mentors with the utmost respect.

____ I realize that no FRC problem has only one solution and that a successful team is one which cooperates by considering EVERYONE'S solutions and ideas.

____ I agree that my behavior at all meetings and tournaments will be constructive and respectful.

____ I agree that each FRC team meeting is valuable, and I will be on time to each meeting. If a conflict arises, I will notify my coach in advance.

____I recognize that electronic devices can be a major distraction and will turn mine off and leave them stowed during team meetings.

____ I agree to cooperate on whatever solution the team chooses, even if it is not my first choice.

____ I agree that all solutions, including props, costumes, signs, etc. will be made completely by me or a member of my team.

____ I understand that the FRC program recognizes all teams that bring a solution to the tournaments are considered competitors. I agree to show other teams the utmost respect and good sportsmanship.

____ I agree that the goal of my team is to do our best to solve a challenging problem.

____ I agree that if my behavior is not helpful during a team meeting, the coach can ask me to leave. If this happens repeatedly, I may be asked to leave the team.

____ I have read and understand the Pitt Pirates Student Manual.

Signature of team member _____ Date _____

PARENT CONTRACT

____ I understand that in FRC, the kids come first. FRC is about kids having fun and getting hands-on experience in learning teamwork, science, mathematics, engineering, and technology skills. Everything the team does starts and ends with that principle.

____ I understand that the kids do the work. This is their opportunity to learn and grow. The kids on the team do all the programming, research, problem solving, and building. Adults can help them find answers, but cannot give them the answers or make the decisions.

____ I will encourage team members and team supporters to develop and practice a set of FRC Values that reflects FIRST's goal to change culture in a positive way by inspiring others through their team's actions and words.

____ I agree, in the proper spirit of FRC, not to interfere with the team's solutions. All creations, inventions, ideas, and work must come from the team members.

____ I agree to make every effort to have my child arrive and depart on time for every meeting. If there is a conflict, either my child or I will notify the coach as soon as possible. I understand my child has a commitment to his/her team.

____ I realize that my child's coach will be contributing a significant amount of time and effort to provide a rewarding experience for the team. I will play an active role in supporting the team.

____ I agree to discuss all items listed above with my child.

Signature of parent _____ _____Date _____

Signature of parent _____ _____Date _____

Medical Information/ Consent Form

Date _____

Student Name _____

Team # 2642 – Pitt Pirates Robotics

Parent/Guardian Name: _____

Parent/Guardian Phone numbers:

Home: _____

Cell: _____

Work: _____

Email: _____

Secondary contact for an emergency if parent/guardian cannot be reached:

Name: _____ Relationship: _____

Phone Numbers:

Home: _____

Cell: _____

Work: _____

Family Doctor: _____ Phone: _____

Other doctors/specialists: _____

Medications which my child takes on a regular basis:

_____

Allergies (note if life-threatening):

_____

My child has a prescription for an "Epi-Pen": _____ Yes _____ No

My child carries an "Epi-Pen" with them at all times: _____ Yes _____ No

Other Medical Conditions/information:

_____

While traveling with the team, I give permission for my child to take:

__ Tylenol

__ Ibuprofen

__ Benadryl

__ Tums and/or Pepto Bismol

Other: _____

In case of an emergency, if neither I nor my other emergency contact cannot be reached. I give permission for Team 2642 coaches to grant permission to medical personnel to treat my child: _____

Parent/Guardian Name- PRINTED _____

Parent/Guardian SIGNATURE _____

DATE _____