

**S.P.A.M. Robotics**

**FRC Team 180**



**2012 WORLD CHAMPIONS**

**2020 – 2021**

**Team Handbook**

[www.spamrobotics.com](http://www.spamrobotics.com)

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# Welcome to the 2020-2021 FIRST Robotics season.

## 1. Introduction

This handbook is supplied as a primary source of information for members of the S.P.A.M. Robotics team, their supporters and families. The contents of this handbook are current as of September 21, 2020. Details may change as the year progresses – in particular, meeting schedules. For the latest schedules and updates to the handbook, check the team website [www.spamrobotics.com](http://www.spamrobotics.com).

## 2. Team History

In 1997, engineers from Pratt & Whitney Corporation decided to participate in FIRST Robotics <http://www.USFIRST.org> along with students from Martin County and South Fork High Schools.

The first year we decided on our team name, colors and our first logo. The acronym S.P.A.M. was created using the name of each group: South Fork High School, Pratt & Whitney and Martin County High School. Yellow, blue and red were chosen as our team's colors. Since the 2004/2005 season, the team has expanded with the addition of students from the Clark Advanced Learning Center, Jensen Beach High School and our Home School Community. The S.P.A.M. logo we use today is an acronym for Speed, Power and Maneuverability.

Over the past 20+ years we have gained the confidence and skills we need to be able to design a robot, work together as a team and have fun learning about Science, Technology, Engineering and Math. During that time the team has won four Championship Awards, 17 Regional Team Awards including Regional Chairman's Awards, 20 Regional Design and Professional Team Awards and eight Individual Awards. **In 2012 S.P.A.M. won the FIRST Robotics Competition World Championship.** Many of our students have gone on to pursue careers in engineering, computer science, mathematics and various STEM-related positions because of the experience of participating in FIRST.

## 3. Team Partnerships

Without the support of our family of sponsors, the S.P.A.M. Robotics Team would not be able to compete in regional and championship events. While many sponsors contribute money, manpower and materials to the team, the key partners that sustain this team consist of the following organizations:

Martin County School District ● The Education Foundation of Martin County ● Pratt & Whitney ● United Technologies ● FPL ● Lockheed Martin ● UL ● UL PureSafety ● The Woman's Club of Stuart ● FedEx

These sponsors can be found on our website, robot, team jerseys and team board which is displayed at competitions.

#### 4. Team Leadership Positions

S.P.A.M. Robotics, also known as FRC Team 180, consists of students from South Fork High School, Martin County High School, Jensen Beach High School, Clark Advanced Learning Center and Home School students. Adult team members include teachers along with engineers and parents. In addition, some students upon high school graduation continue to volunteer their time as “tweeners” (between students and adult mentors).

This year’s Team Leadership was elected at the September 2020 meeting. The positions consist of:

Interim President	James Jones
Vice President - Technical	Kurt Durjan ( <i>S.P.A.M. Alumnus</i> )
Vice President - Sponsor Outreach	Susan O’Rourke
Vice President - Community Outreach	Chris Kerns ( <i>S.P.A.M. Alumnus</i> )
Treasurer	Karen Bartnik
Secretary	Sandra Volonino
Safety Advisor	TBD

We have established a student board that mirrors our adult board: Captain, Vice-Captain Technical, Vice-Captain Sponsor Outreach, Vice-Captain Community Outreach, Vice-Captain Communications, Safety Captain. These positions are elected by the students at either the end of Spring semester or the beginning of Fall semester.

#### 5. Team Membership Requirements

##### 5.1 Grades

Each student must maintain a 2.5 unweighted GPA in the current or previous nine week period (depending on travel dates) in order for that student to be eligible for team travel. Students will submit interim and nine week grade reports to verify grade status. This grade requirement is strict, is not trivial, and is included in the student contract (see section 7). Students should put their grades before any team needs. There are no exclusions or exceptions to this requirement.

##### 5.2 Fundraising

Fundraising is a requirement of all team members. These funds are needed to purchase the robot kit, parts and materials, competition registrations and travel expenses. In addition, students will have participation fees as well as travel fees for those who attend the competitions. Students who raise \$2000 in sponsorships will cover any travel fees and will only be required to pay the \$120 registration fee.

### 5.3 Meetings

1. **General Meetings** – The Team leader or a designated adult will run these meetings. Parents are encouraged to attend. Topics at these meetings will be:
  - a. Discuss administrative topics
  - b. Finalize decisions made during student meetings
  - c. Give financial updates
  - d. Plan team events (fundraising, kick-off, etc)
  
2. **Workshops** – The student board leader or a designated adult will run these workshops for any S.P.A.M. team members. These classes will be held to acquaint the new team members with the many varied aspects of Team S.P.A.M. and keep veteran team members renewed and engaged. Topics of discussion at these classes may include:
  - a. Design & Fabrication
  - b. Electrical & Controls
  - c. Strategy and scouting
  - d. FIRST Awards

### 5.4 Student Involvement

S.P.A.M. team members have many ways to be involved. The areas of opportunities for students are outlined on the organization chart in section 7. In the fall, they can participate in off-season events, fundraising and meetings.

Starting in January (Build season) the frequency of team meetings will increase. In order to qualify to travel with the team to competitions, students are not only required to meet the grade requirements (section 5.1), but they must also meet the minimum attendance requirements at 75% of the meetings and 50% of the fundraising and community service activities. Team members are expected to attend competitions. *In 2021, with an adjusted FIRST schedule, we will attend one Regional event in June, possibly on two separate days (still under review with FIRST). Our goal is to compete at the FIRST World Championship to be held in July.*

### 5.5 Parent Involvement

Parents are encouraged to help out in any way they can to assist the team. The efforts of these volunteers must be student-focused and within the spirit of FIRST. There are many opportunities to support S.P.A.M. students.

### 5.6 Mentors

Adults volunteer their time to act as coaches, mentors and non-engineering mentors (NEMO) by working with the students after work hours and on weekends.

## 6. Schedules/Forms

### 6.1 Team Schedules

Please refer to the team website ([www.spamrobotics.com](http://www.spamrobotics.com)) for the upcoming schedule of events including meetings, classes and competitions.

### 6.2 Forms

All forms will be posted on the team website ([www.spamrobotics.com](http://www.spamrobotics.com)). Students are required to go to the website, print and fill in the forms and turn the forms in prior to the deadlines associated with each form.

### 6.3 Team Registration

To facilitate the submission of a team roster at FIRST events:

**DIRECTIONS** – [www.firstinspires.org/resource-library/youth-team-member-consent-and-release-form](http://www.firstinspires.org/resource-library/youth-team-member-consent-and-release-form)

**Students** are encouraged to register online as a team member of FRC Team 180 and complete the electronic version of the FIRST Consent and Release form.

**Parents** will receive a confirmation email to complete the FIRST Consent and Release form electronic signature process.

Mentors are encouraged to complete an electronic version of the FIRST Consent and Release form at [www.firstinspires.org](http://www.firstinspires.org).

**The student contract, which is under the forms tab on our website, must be completed and turned in at your next meeting/class as a prerequisite to participating on the team. Page 6 of the handbook is a copy of the contract for you to retain and review.**

# 2020-2021 S.P.A.M. Robotics Team Student Contract

By signing below, I acknowledge and agree to all of the following rules and conditions:

1. I have read the S.P.A.M. Robotics Team Handbook.
2. I understand that there is a **\$120 participation fee** to be a member of S.P.A.M.
3. Team members are expected to attend competitions. I understand that I may be absent from school (excused absences) during travel to the Regional and Championship competitions. I am responsible for all make-up work while absent and will stay focused on my schoolwork.
4. I will attend at least 75% of all team activities, workshops and meetings involved with S.P.A.M. In addition, I will actively participate in at least 50% of all fundraising and community service activities. If I do not achieve the required level of participation, my status will be reviewed by team leadership and I may be dismissed from the team.
5. I am responsible for arranging my transportation to and from the S.P.A.M. Pit at South Fork High School and other meeting locations.
6. The cost to attend each competition is the same for all team members regardless of any alternative transportation or housing arrangements that are made.
7. Team members who arrive late or leave early from a competition must have made prior arrangements with the team president and must check in or out at the competition with either the team president or teacher in attendance.
8. If the number of team members traveling to a competition has to be limited (if there are more students wishing to travel than can be accommodated), the members selected to travel will be determined by their grades, number of hours of participation and years on the team. The Board reserves the right to make final decisions in the selection process.
9. I understand that I am responsible for my schoolwork. If my unweighted GPA is below a 2.5 during the grading period prior to a competition trip, then I will not travel to the team event. If I don't meet these grade requirements, then I can only attend the event as a spectator and only if accompanied by my parent or legal guardian.
10. I will pass the test covering the FIRST game rules, the safety rules and the S.P.A.M. Robot description.
11. I agree to safely use all tools/equipment while working on any project. I respect the severity of a possible accident and agree I may be dismissed from the team if I don't work safely. I also agree that I will not operate any tool or item of equipment unless I have been trained to use it safely.
12. I understand that when at the Pit and at competitions **closed toe shoes** and **safety glasses** are **mandatory** for everyone. When working on any machinery, long hair must be tied back and no jewelry is allowed.
13. No hand-held gaming devices will be brought to the Pit or competition arenas.
14. I will maintain an acceptable level of productivity while at all team activities.
15. **I WILL ABIDE BY THE MARTIN COUNTY SCHOOL BOARD STUDENT CODE OF CONDUCT AND WILL BE RESPECTFUL TO TEAMMATES, TEACHERS AND MENTORS.**
16. If I violate any of the above rules, I understand that I may be dismissed from the team.

Printed name of student \_\_\_\_\_

School / Grade \_\_\_\_\_

Student signature \_\_\_\_\_

Parent signature \_\_\_\_\_

Date \_\_\_\_\_