



FIRST Robotics Team 31

**STANDARD
OPERATING PROCEDURE**

Jenks HS
Jenks, Oklahoma

2017 REVISION



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1. Yearly Outline

1.1 Membership Qualifications

For the Prime Movers to grow as a team in both quality and quantity, each member must fill out an application and fulfill the following requirements:

Membership Qualifications
1. Students must have a minimum of a 2.0 GPA to be a member
2. Sign a contract stating that they must keep all grades above a D to participate
3. Meet the volunteer requirements for the team (25 hours per student)
4. Submit a personal resume for the business plan
5. Fulfill all required build season hours (100 hours)

Failure to complete these will result in the inability to join the team. Any failure to maintain these during recruitment, training, or the competition season will result in the inability to join the team for the following semester. To rejoin the team, the student must demonstrate the ability to meet these requirements.

1.2 Off Season- May Through August

As the FRC Competition season ends in May, The Prime Movers use that opportunity shift their focus to expanding both the outreach and the financial sides of the team. The summer is used to:

- Display the robot and the FIRST program to kids interested in STEM fields
- Attend and plan as many outreach programs as possible
- Host STEM related summer camps
- Recruit more people into the FIRST program
- Recruit new sponsors to help grow the team budget
- Recruit mentors that are willing to support the team's FRC program
- Volunteer at various organizations around Tulsa and Oklahoma
- Design the curriculum for the new year

The entire purpose of meeting during the off season is to build the team and make sure it will be prepared during the school year to support and educate new members. This time is also very valuable for officers as they complete the first semester classes.



1.3 Recruiting Season- September Through December

During the beginning of the school year, the Prime Movers will use that time to organize the team, recruit new members to sustain the team, and train those members so they are educated during the build season.

- **Help start and mentor FLL and Jr. FLL teams**
- **Recruit new members**
- **Do training during the semester over the basic knowledge each member should have**
- **Make sure each member has practice in the different areas of the team**
- **Work on the next edition of the Business Plan and Safety Manual to help prepare for awards in January**

1.4 Competition Season- January Through April

The main goals of the Prime Movers during this period are to:

- **Finish the robotics challenge for that year**
- **Keep a cohesive team and make sure the team is a good representative of the FIRST values during competition**
- **Make sure the robot stays on the schedule set by the Chief Engineer to ensure the robot is done in 6 weeks**
- **Make sure that all award submissions are done thoroughly and on time**
- **Prepare the pit for competition**
- **Order any items necessary for a successful season and competition**
- **Ensure that the team exemplifies both of FIRST's values - Gracious Professionalism and Coopertition - while at competition**

This point of the year is the busiest time for the Prime Movers. Teams from all over the world are revealed the game theme for that season at the same time. This time is called kickoff and after that period ends, competition season begins.



2. Standard Meeting Procedure

Meetings are the time the Prime Movers meet and work on the robot and anything else that needs to be done. Times for meetings change each semester and can vary from year to year. For the Prime Movers to hold an official meeting, the following order of events must take place:

- I. A minimum of two mentors or teacher sponsors must be present to enter the robotics room**
- II. The President calls the meeting to order and announces the main points the meeting**
- III. The Head of Public Relations/VP then makes announcements and makes sure the whole team is up to date on the financial standings of the team as well as the current outreach programs for the team**
- IV. The head of each department then announces their goals for the meeting and delegates which members they will need to accomplish these goals**
- V. Each member then breaks off to work in the section they were assigned to and accomplishes goals that were set in opening meeting**
- VI. With 15 minutes left of the meeting, each member cleans up the work space**
- VII. As soon as the work space is organized, members meet back for the closing meeting**
- VIII. Each department goes over things that were accomplished during the meeting**
- IX. The Head of Public Relations/VP goes over any last-minute reminders**
- X. The President then calls the meeting to a close**

3. Chain of Command

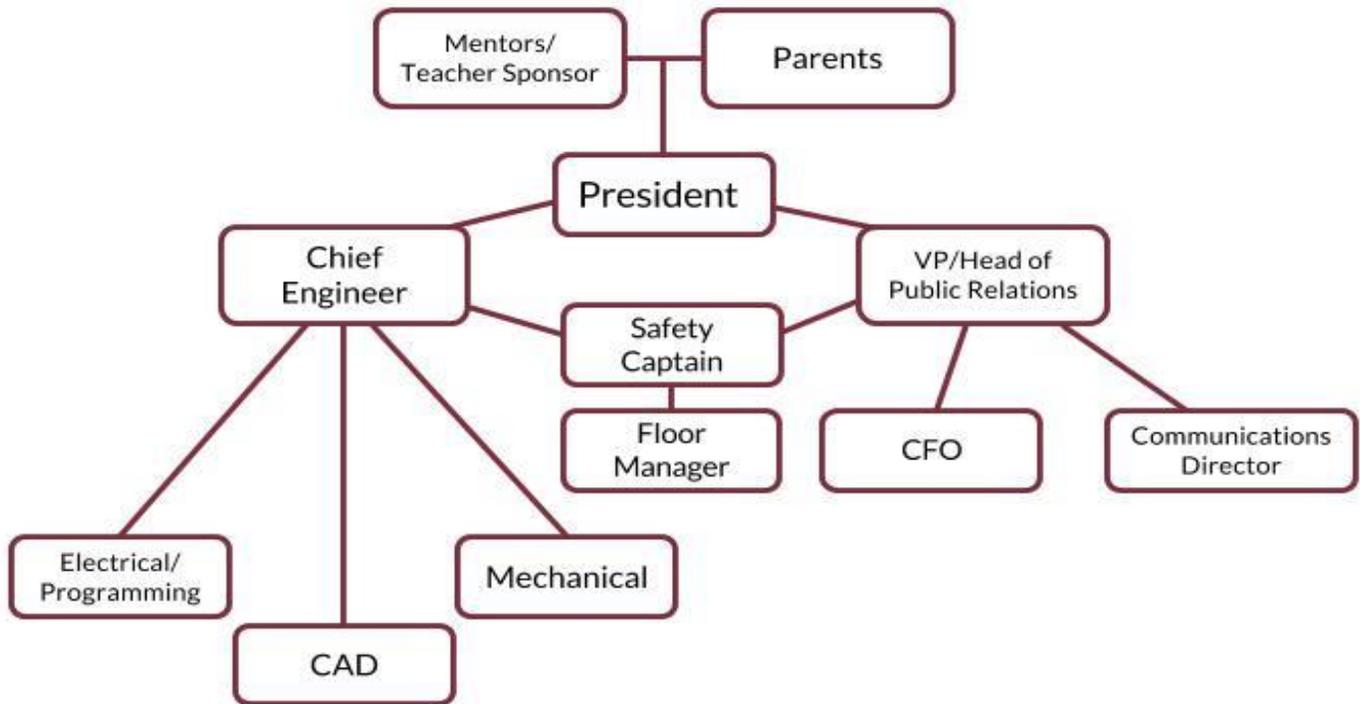


Figure A- Leadership Structure Chart

3.1 Teacher Sponsors

The teacher sponsors are the school representatives on the team. These members work as a liaison between Jenks Public School and the team. As teachers for the district they are available more often than standard mentors. They make sure that we have access to our rooms and that everything we do complies with the policy of Jenks Public Schools.

3.2 Mentors

Mentors are the foundation of our team. These volunteers help educate and guide our team during our meetings. They range anywhere from small business owners to professional engineers. Mentors give us professional insight to both our robot design and the business side of our team.



3.3 Student Officers

Three officers are elected into their positions; President, Head of Public Relations/Vice President, and Chief Engineer. These positions are outlined in **Section 4.1**. These students are representatives of the team. They schedule the meetings, make sure that plans are communicated with the mentors, and make sure every division within the team is running smoothly. Student Officers elect the Student Leadership and are involved with any change within the team. Any concern or problem that may arise, either with mentors or students, should be brought to a Student Officer to deal with (as outlined in **Section 5.1**) In the case a Student Officer is no longer able to fulfill their job then refer to the Change and Removal **Section 6** for more details.

3.4 Student Leaders

The Student Officers elect the Student Leadership. This group of students can be seen in **Figure A** of this section. The Head of Public Relations nominates the Communications Director and the Chief Financial Officer. The Chief Engineer nominates the head of each department: CAD, Programming, Electrical and Mechanical. These nominations should be based on the ability of the person to do that specific task and not favoritism. The President must approve all nominations before they can go into effect. Together, the Vice President and President elect a Floor Manager and Safety Captain. This will help improve not only the team's ability to achieve goals, but also the quality of work that is seen by the community. If at any moment, a Student Leader is unfit for their job, the same leadership majority removal protocol is used. See **Section 6** for more details.

3.5 Parents

Although the major decisions are passed down between the Teachers and Mentors to the Officers, if there is ever any concern from the parents because of a decision made; the issue will be talked about again with the chain of command and the parent(s) concerned.



4. Leadership Positions

4.1 Student Officer Positions

The positions listed below are the Prime Movers officer positions. These include the:

President

- Liaison between mentor and students
- Defines and assures the team accomplishes long term goals
- Opens and closes every meeting
- Communicates between sub teams
- This position is elected at the end of the season

Head of Public Relations/ Vice President

- Plans meetings
- Organizes the schedule and day to day activities
- Oversees use of team social media
- Oversees award submissions, business plan, community events and safety
- This position is elected at the end of the season

Chief Engineer

- Oversees the 3 sections of the mechanical team
- Ensures that the team is staying on task with day to day activities
- Makes sure that the robot is on schedule during the build season
- Streamlines the brainstorming ideas to optimize robot design
- This position is elected at the end of the season

Chief Financial Officer

- Ensures the team has a balanced budget
- Documents all team purchases and sponsorships
- Oversees all sponsor acquisition efforts, including grant writing
- The Head of Public Relations appoints this position

Communications Director

- Sends team updates and reminders
- Responds to the team email account
- Handles outside correspondence
- The Head of Public Relations appoints this position



4.2 Qualifications for Student Officers to Run

For a student to run for a leadership position, **all the following requirements must be met:**

Qualifications to Run
1. Had to have completed 1 full build season as a member on the team
2. Completed the 100 hours required in that build season
3. Have had no behavioral issues reported
4. Candidate must prepare list of goals and qualifications for elections
5. Candidate must have not failed any classes the previous year

Any failure to meet these qualifications will result in an ineligibility to run

4.3 Election Procedure

The positions eligible for election are outlined in **Section 4.1**. After a candidate, has proven that they have met all the requirements they will be able to submit their name for the ballot. Ballots will be created by an officer leaving the team. If no senior officers are available, then the job will go to any senior leadership figure able to correctly create a ballot. The senior officer or leadership figure creating the ballot must make sure that all candidates have met the qualifications outlined in **Section 4.2**.

Elections will take place after each annual FRC worlds competition but before the end of the school year. This date may be moved at the discretion of the current officers. Elections must have at least 75% of the eligible student members participate in voting. All voting student members must have made the hour requirement set by the current officers. Failure to meet the hour requirement means that the member is ineligible to vote.

A candidate can only be elected into office if they have won by more than a 50% majority. In a case where more than two candidates are running and none of the candidates receive the majority, then the top two candidates will compete in a runoff election. In a case where there is a tie, the mentors will be allowed to vote to elect the candidate. The new officers will be sworn into office after the election, relieving the immediate past officers.

Any officer deemed no longer fit to fill their position, can be replaced by a leadership majority. Look at **Section 2.3** more info



4.4 Student Leader Positions

Each of these positions are decided on the current year's officers. Listed in **Section 3.4**, is a section on which officers assign which leadership positions. Below are the current leadership positions offered by the Prime Movers:

Floor Manager

- Creates goal sheets with each leadership position
- Meets with each section leader on a week by week basis to insure the goals are being met
- Keeps track of any major issues

Safety Captain

- Creates a safety manual
- Makes a safety kit for robotics room and competition
- Keeps track of stock of safety materials
- Writes incident reports for accidents
- Writes up students with behavioral issues
- Presents presentations on safety

Head of Mechanical

- Makes goal sheet for mechanical with floor manager and chief engineer
- Keeps the mechanical sub team on task

Head of CAD

- Makes goal sheet for CAD with floor manager and chief engineer
- Keeps the CAD sub team on task
- Works directly with mentors and students for all 3D printing needs

Head of Electrical/Programming

- Makes goal sheet for Programming/Electrical with floor manager and chief engineer
- Teaches the programming team how to program tasks
- Insures the electrical team is on task



5. Team Management

5.1 Conflict Resolution

The Prime Movers pride themselves on being close. However, problems do occasionally arise. In the case of a problem the people involved should follow this chart until the problem is solved:

Conflict Resolution Strategy
1. The problem should be worked out with the parties involved
2. If the problem continues, this problem should be brought up to the officers
3. The officer then decides if this problem must be turned over to the mentors or teacher sponsors to be resolved
4. If this problem is still an issue, school officials may be contacted and this would result in disciplinary actions
5. The fourth step may result in one or both parties being asked to leave the team

5.2 Dress Code

All students, mentors and teacher sponsors should be following both the Jenks Public School's dress code as well as the FIRST safety guidelines for dressing in a work space.

If a mentor or teacher sponsor deems an outfit inappropriate, they must have another adult in agreement with them before notifying the person. Someone the same gender as the person out of dress code should notify them. This should be done politely and personally.

If the person is wearing something offensive or dangerous, they will be given the opportunity to go home and change as well as given a notification not to wear that item of clothing again.

Second offenders of violating the dress code with dangerous clothing will be asked to leave the robotics room for the duration of the meeting and either work on homework in the hall or go home. Students will not receive hours for that meeting and points will be deducted from their final grade.



6. Leadership Majority

The Leadership Majority is made up of all student leaders, mentors, and teacher sponsors. That means any of the student leader or student officer positions outlined in **Sections 2.3 and 2.4** as well as the mentors and teacher sponsors. This committee will be able to establish any changes on the team.

For a motion to be brought to a vote, one member of the Leadership Majority must propose the vote. One member of a different branch of the Leadership Majority must second the motion so that both a student and adult support the vote. There will then be a time for commentary and questions. This is an opportunity the members to hear the situation and come to a personal decision. The moment for discussion should not be biased or swayed in any way possible. After this time, the President or a teacher sponsor will call the group to a vote.

80% of the Leadership Majority must participate in the vote and 75% agreement is needed to pass a vote. If a motion is not seconded or it does not pass the vote, then it will be tabled and cannot be brought up until the next vote or there is a pressing issue that calls for the motion to be voted on again. If the issue cannot be resolved, please refer to **Section 5.1** on Conflict Resolution.

In the case that the Leadership Majority is voting to remove a student officer from office, they will be able to appoint a replacement until the annual election. This replacement must have 50% approval from the Leadership Majority with at least one member from each group in approval.

6.1 Emergency Voting Procedure

For the Emergency Voting Procedure, one mentor as well as all the teacher sponsors and student officers can vote on a subject. This is in the case that there is not 80% of the Leadership Majority in attendance or the matter demands immediate attention. Any motion made in this group must be seconded and must pass with at least a 50% consensus with at least one member from each group in approval. If it does not pass, then there can be a discussion period and a revote. In the account of a tie, an unbiased member must be brought in and asked to vote. They are not allowed to be swayed in any way. Any vote made during the Emergency Voting Procedure is just as final as a Leadership Majority decision and cannot be changed.



7. Changing the SOP

All changes to the Standard Operating Procedure must be agreed on based on the rules of the Leadership Majority and must be documented by the Public Relations team. These changes should be made with equality in mind. The Leadership Majority was created to make sure that an equal number of students and adults were represented so that all changes could be made with the betterment of the team in mind. The exact process for a major or minor change are different. A major change would be adding rules whereas a minor change could be adding a banned clothing item. Each change must go through the following process:

Major Changes to the SOP

- Must be presented to the student officers
- 3/5 student officers must agree on the matter
- The matter will then be given to the head mentor or teacher sponsors
- If agreed on by one, the change will be added

Minor Changes to the SOP

- Must be presented to the student officers
- 3/5 student officers must agree on the matter
- If 3/5 student officers agree, the change will be added