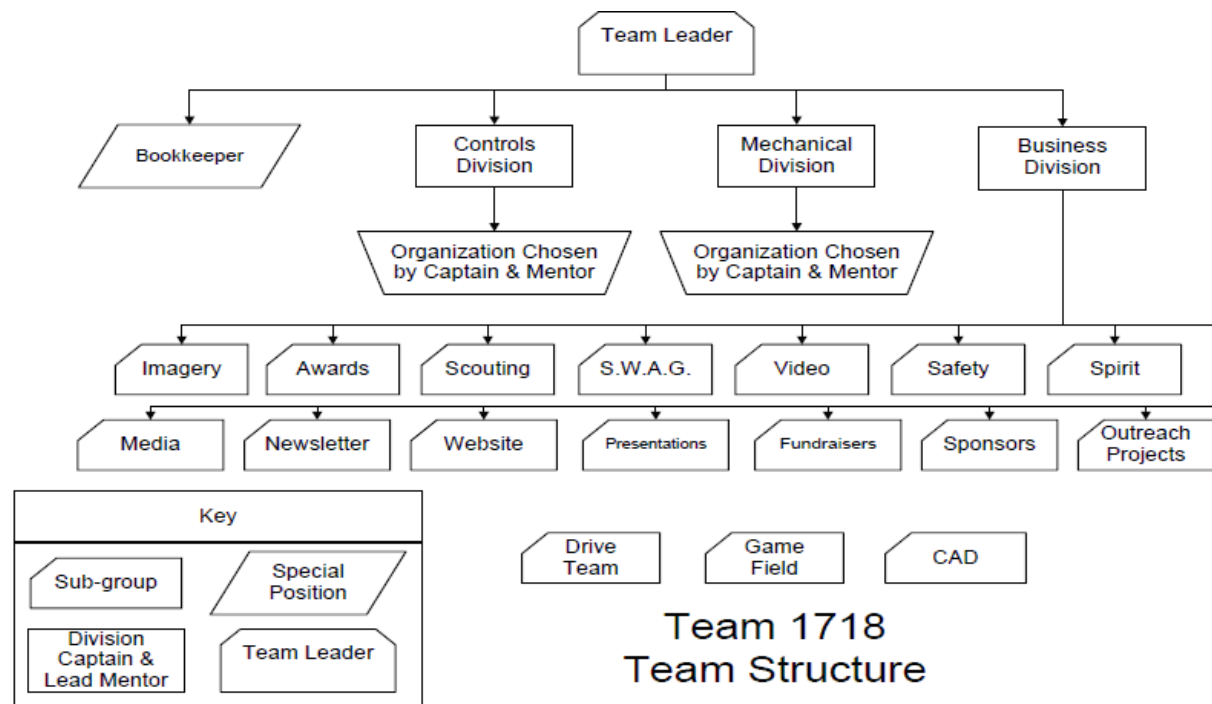


Section 3: Team Structure

By Team 1718 – The Fighting Pi
www.fightingpi.org

A solidly structured team will save the mentors precious time and effort. A chain of command will result in team member questions being answered at the lowest level, allowing the mentors to spend more time focusing on resolving other issues.

An easy way to format your team structure is to match it with the basic disciplines involved in FIRST: mechanical, electrical, and business.



Small groups are always easier to manage than large teams. In addition, they tend to accomplish more: there is less disagreement and more action. The drawback is that they may not have a wide array of talents represented. In order to keep each small team or sub-team moving mentors should carefully select their make up so each team has at least one self-driven member to act as a lead.

A brief description of some of the groups may help in recruiting members who aren't necessarily interested in just the robot:

Electrical – handles the wiring, controls, sensors and pneumatics

Mechanical – manages all the mechanical aspects of the robot

Media - photography, videography, website, multimedia, public relations

Public relations – community volunteering, outreach, presentations and demonstrations

Business – budget, bylaws, chairman’s award, sponsor drives, fundraising, community outreach, community service, newsletters, thank you notes, scouting, and competition swag.

Perhaps the easiest way to describe a team structure is to delve more specifically into 1718’s. The team is organized into three departments; Mechanical, Controls, and Business. There are also three outlying groups (Game Field, Drive Team and CAD group are treated separately). Each department is headed by a Lead Mentor and a Team Captain. A single Team Leader which we call the Head Mentor presides over the entire team.

THE HEAD MENTOR

The Head Mentor is the manager of the team. He or she determines who acts as mentors initially. He also registers the team in the TIMS information system, which includes assigning a main contact and alternate contact.

The Head Mentor generally sets up the pre-season meetings, including meetings to help determine a kickoff location (assuming there are more than one locally). He has the final say on all major budgetary matters as well. When the team is first forming, the leader also can recruit sponsors, apply for local and non-local grants, insure the team has a build location, obtain tools, and establish a team structure.

The Head Mentor may delegate many of these activities. In fact, it’s suggested they do, so that other members can begin taking responsibility for the team as early in the season as possible.

During the season, Head Mentor acts as the team ‘rememberer’. There are many small tasks that can be overlooked at great cost to the team, and it’s Head Mentor’s job to keep these in front of the group. These items include complying with game rules, monitoring the budget, monitoring the team updates from FIRST, as well as the email blasts they send out and verifying that the team is keeping on task and on schedule.



Finally, the Head Mentor always needs to insure that the team is communicating as a whole. The business team may not need to know every detail of the mechanical team, but it will certainly help cohesiveness if they are at least kept abreast of developments and progress.

LEAD MENTOR

Team 1718 utilizes Lead Mentors as the heads of specific departments. They are chosen and agreed upon by the other mentors. Their job is to oversee their

department, help settle disputes, and assist student Team Captains in distributing jobs. They can be in charge of only one department and have no power over any other departments and can only make suggestions.

TEAM CAPTAINS

Team Captains are students who lead various groups. It's important that mentors work through team captains and not circumvent them. Circumventing a captain or even a Lead Mentor results in the reduction of their authority and confusion.

Team Captains are appointed through a vote by the student members of the team. All students running for the position of captain are nominated by the members. The voting and appointment should be handled before the season begins. There are only three team captains; and their job is to preside over others in their department by handing out jobs, keeping people busy, etc. They are also responsible for communicating with mentors, maintaining good morale and reporting habitual poor performance.

TEAM REQUIREMENTS

Every team needs a set of performance metrics, goals, or requirements for the members. Some easy metrics include:

- School GPA
- School Attendance
- Team Attendance
- Recommendation from at least 1 teacher
- Interview to join team
- Community Service Hours

Table 1

*Requirements for Teams
Versus Leadership Teams*

Requirements for a team	Requirements for a leadership team
Complementary skills	Complementary and diverse skills
Common purpose	Shared vision and values
Shared performance goals	Shared goals beyond financial results that include organization and people development goals
Mutual accountability	Mutual and individual accountabilities

Determine expectations and let potential team members know them. Many teams have the members sign contracts at the start of the season detailing what they believe they can contribute to the team, along with the team rules and requirements. Our team also has parents read and sign the team by-laws so that they are aware of what their student is signing up for and the conduct that is required.