

ORGANIZATION TIPS FOR FIRST TEAMS

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1. **Have the plan laid out before build season.** Build season gets hectic to say the least. Having everyone know and be comfortable with the organization lay out before then will make things much easier during the build and competition times.
2. **Create a team handbook.** This should give information including the following (several examples can be found on the Chiefdelphi website at www.chiefdelphi.com):
 - i. Expectation of student commitment
 - ii. Team rules
 - iii. Grade requirements and methods of enforcing
 - iv. Travel rules and qualifications
 - v. Basic schedule
 - vi. What students can expect from mentors
 - vii. Organization structure
 - viii. Define mentor/school/teacher/sponsor responsibilities
 - ix. Team participation “contract” for student and parents to sign.
3. **Have an organizational structure.** This involves creating needed subteams as well as leadership positions for each of these subteams. These subteams can each have a student and/or adult leader. Some subteams can be split further to have several leaders as well (example: mechanical can have leaders for drive system and manipulator). Examples of possible teams and positions:
 - i. Fundraising – Team in charge of funding for the team as well as sponsor relations and recognition during, after, and before each season.
 - ii. Public Relations – This team would plan outreach activities, press releases, team public events, presentations, and newsletter updates. Also would develop team identity such as uniforms and theme.
 - iii. Media – They would document all the things the team does. This includes pictures, video, quotes, etc. This team can also be in charge of the team website and possibly putting together the awards submissions.
 - iv. Build team – This is the team that designs and builds the robot. Can be split into several subteams.
 1. Mechanical – Would include the drive train, manipulator, and base.
 2. Electrical – Includes wiring, controls, and programming.
 3. CAD – Take designs and create CAD models.
 4. Weight control – One person who keeps track of weight of all components.
 5. System integrator – One person who integrates the designs of all subteams.
 - v. Strategy – Develop scouting database and data collecting system.
 - vi. Animation – Create the team animations.
4. **Get travel plans early.** This saves money as well as reduces the stress level of the mentor in charge of making the arrangements.
5. **Set a method for ordering of parts.** Each team will have to deal with this differently based on their financial situation. To make it easier, have one person in charge of ordering for the team. Make a schedule for ordering (example: orders collected on Mondays and Fridays). Also, figure out payment methods and delivery options before build phase.
6. **Start fundraising early.** Getting as much of this done during the summer and fall will make it much easier to concentrate on build phase. Many fundraising ideas can be found on the Chiefdelphi forum.
7. **Train new students.** This is a great opportunity to give veteran students some presentation and teaching experience. Develop a training program for safe tool use, kit of parts, basic engineering design, software, programming, etc.
8. **Start work on awards early.** Awards such as the Woodie Flowers and Chairman’s take a lot of time to put together. Start putting info together even before the build phase starts.

9. **Develop an organization structure for competition.** This will make sure everyone has something to do and makes sure that things are done efficiently. Here are some recommended positions:
- i. Pit crew positions
 1. Safety officer - Person in charge of safety glasses, cleanliness of pit, keeping the aisles clear, keeping only needed personnel in pit
 2. Electrical – Representative of the electrical subsystem team, in charge of electrical pre and post match checklist as well as keeping batteries charged
 3. Mechanical – Representative(s) of mechanical subsystem(s), in charge of mechanical pre and post match checklist as well as needed repairs
 4. Programming – Programmer responsible for system checks and programming changes
 5. Runner – Person in charge of acquiring any items needed including tools, parts, help, etc.
 - ii. Field crew (Drivers, coach, human player)
 - iii. Awards
 1. Chairman’s – Representatives who will be giving the chairman’s presentation
 2. Pit rep – Awards representative who can talk to judges in the pits
 - iv. Scouting
 1. Strategy lead – Scouts report to this one person, this is the only person who should then talk to the field crew to give them the gathered information
 2. Data input – This position needed if data needs to get input into a database
 3. Collectors – Those who watch the matches and collect needed information
10. **Join NEMO.** NEMO is a group of mentors who work on the non-engineering tasks on their teams such as travel, organization, and fundraising. They communicate through a special NEMO forum on Chiefdelphi and give support and information to FIRST teams.