2015 FIRST® Robotics Competition (FRC®)

Administrative Manual



200 Bedford Street
Manchester, NH 03101, USA
http://www.usfirst.org/frc

Introduction

1.0) Introduction		
		What Is The FIRST Robotics Competition (AKA FRC)?	2
	1.2	Gracious Professionalism, A FIRST Credo	2

FIRST®, the FIRST® logo, FIRST® Robotics Competition®, and Gracious Professionalism®, and Sport for the Mind™ are trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST®). © 2014-2015 FIRST. All rights reserved.

INTRODUCTION

1.1 What Is The FIRST Robotics Competition (AKA FRC)?

FRC pairs high school students with adult mentors (primarily engineers and teachers) to design and build robots that compete against one another in this high energy Varsity Sport for the Mind. Each January at the Kickoff, a new, challenging game is introduced. These exciting competitions combine the practical application of science and technology with the fun, intense energy and excitement of a championship-sporting event. Teams are encouraged to display Gracious Professionalism and to cooperate while competing – known as Coopertition.

In 2015, FRC will reach 71,000 high-school students representing approximately 3,000 teams. FRC teams come from nearly every state in the United States, as well as many other countries. FRC teams will participate in fifty-six Regional Competitions, about forty-eight FRC District Competitions, 5 District Championships, and over 500 deserving teams will qualify to go to the *FIRST* Championship in the Edward Jones Dome in St. Louis, MO.

This year's challenge will be presented at the 2015 FRC Kickoff on Saturday, January 3, 2015.

At the Kickoff, all teams will:

- see the 2015 game field for the first time;
- learn about the 2015 game rules and regulations; and
- receive their Kickoff Kit.

1.2 Gracious Professionalism, A FIRST Credo

FIRST uses the term Gracious Professionalism to describe the intent of FRC. This is one of the most important concepts that can be taught to a young person who is learning to get along in the working world. At FIRST, team members help other team members, and they also help other teams.

Gracious Professionalism is not clearly defined for a reason. It can and should mean different things to everyone.

Some possible meanings of Gracious Professionalism include:

- Gracious attitudes and behaviors are win-win.
- Gracious folks respect others and let that respect show in their actions.
- Professionals possess special knowledge and are trusted by society to use that knowledge responsibly.
- Gracious Professionals make a valued contribution in a manner pleasing to others and to themselves.

In the context of FIRST, this means that all Teams and participants should:

- Learn to be strong competitors, but also treat one another with respect and kindness in the process.
- Avoid leaving anyone feeling as if they are excluded or unappreciated.
- Comfortably and genuinely blend knowledge, pride and empathy.

In the end, Gracious Professionalism is part of pursuing a meaningful life. When professionals use knowledge in a gracious manner and individuals act with integrity and sensitivity, everyone wins, and society benefits.



"The *FIRST* spirit encourages doing high-quality, well-informed work in a manner that leaves everyone feeling valued. Gracious Professionalism seems to be a good descriptor for part of the ethos of *FIRST*. It is part of what makes *FIRST* different and wonderful."

– DR. WOODIE FLOWERS, NATIONAL ADVISOR FOR *FIRST*

It is a good idea to spend time going over this concept with the team and to reinforce it regularly. We recommend providing the team with real-life examples of Gracious Professionalism in practice, such as when a team loans valuable materials or expertise to another team that they will later face as an opponent in competition. Routinely highlight opportunities to display Gracious Professionalism at events, and encourage team members to suggest ways in which they can demonstrate this quality themselves and through outreach activities.



PLEASE take the time to read the sections of this manual. It was prepared with YOU in mind and is a great resource for important information you will need throughout the season.

Team Resources

2.	0 Te	eam Resources	3
		Overview	
		Team Support	
		Resources	
	2.3		
		2.3.1 FRC Q&A Forum	
		2.3.2 Email Blasts	
		2.3.3 FRC Blog	5
		2.3.4 FRC Social Media	5

 $\textit{FIRST}^{\$}, \text{ the } \textit{FIRST}^{\$} \text{logo, } \textit{FIRST}^{\$} \text{Robotics Competition}, \text{ Coopertition}^{\$}, \text{ and Gracious Professionalism}^{\$}, \text{ and Sport for the Mind}^{\texttt{m}} \text{ are trademarks}$ of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST*). © 2014-2015 FIRST. All rights reserved.

TEAM RESOURCES

2.1 Overview

The following section provides information on how to contact FIRST Headquarters and Suppliers throughout the season, in addition to the methods in which FIRST communicates important season information to teams. In this section, you will learn about the where to locate team resources relating to the competition, registration and more.

FIRST Headquarters Team Support—Contact Information

You can reach FIRST Team Support via email, fax, mail or phone. The office is open Monday through Friday from 8:30 AM to 5:00 PM, Eastern Time. Additionally, information about FRC is available on our website: www.usfirst.org/frc.

Email Address	FRCTeams@usfirst.org To facilitate a quick reply, please include your team number in the subject line
Fax Numbers	(603) 666-3907 (Main) (603) 647-5772 (Finance)
Mailing Address	200 Bedford Street, Manchester, NH 03101
Phone Number	(603) 666-3906 ext. 0 or Toll Free (800) 871-8326 ext. 0



2.2 Team Support

The Team Support (Operations) Group is eager to answer your FRC program and season related questions. Please call or email us with any questions you may have – we look forward to helping you!

2.2.1 Please Do Not Duplicate Efforts

Team Support is able to answer most inquiries within 48 hours. Being a small group, we must work efficiently to ensure that issues are resolved in a timely manner. For this reason, we ask that you kindly do not contact or copy multiple people about the same problem. If your question requires immediate assistance, please do not hesitate to contact us by phone.

2.3 Resources

Information on the 2015 New Control System, including software and hardware, as well as other technical resources, will be available after Kickoff. For more information, please use the <u>Technical Resources</u> homepage. The technical links are on the right side of the page.

Visit the FIRST Robotics Competition (FRC) area on www.usfirst.org/frc where you can find answers to administrative concerns and link to other areas of support.

- Check deadlines and dates for TIMS, entries, grants, registration and payments, robot transport exemptions, and awards submissions: FRC Season Calendar
- Find links to the "Competition Manual and Related Documents" page, the "Robot Control System" page, the "Robot Transport" page, the "Season News and Email Blasts" page, and other information at: FRC Game & Season Info

Getting Answers To Your Competition Questions

- Competition Manual: Sections relating to the game will be posted after Kickoff.
- Team Updates: After the 2015 FRC Kickoff, FIRST will post Team Updates online. Team Updates provide rules updates, important information about parts and administrative reminders/deadlines. Please note that some updates will result in FIRST publishing revisions to manual sections.



Please be sure to check these website locations often during the build season to ensure that you have the latest information!

2.3.1 FRC Q&A Forum

After Kickoff, FIRST provides an online forum for questions and answers (Q&A). Please click here to access the 2015 FRC Q&A System.

2.3.2 Email Blasts

Email blasts are important communications that *FIRST* sends to team contacts identified in TIMS. The email blasts remind teams of important deadlines, updates, and other timely FRC information.

FIRST archives the email blasts on the FIRST website at the News and Email Blasts page.

FIRST will typically send out one FRC email blast on the **Thursday** of each week throughout the FRC Season and on **Tuesdays** during competition event weeks.

In addition to the FRC Email Blast, Rookie Email Blasts will be sent to rookie teams periodically on Tuesdays during registration and throughout the FRC season.

2.3.3 FRC Blog

The FRC Blog should be read weekly for additional important updates from the Director of FRC, Frank Merrick.

2.3.4 FRC Social Media

If your team has access to **Twitter**, we encourage you to follow <u>@frcteams</u>, the official Twitter account for the FRC program.

We also encourage teams to "like" the official **FRC Facebook page**, https://www.facebook.com/FIRSTRoboticsCompetition. This is in an effort to connect our community to the online world and form relationships among teams, mentors, coaches, volunteers, educational entities and sponsors.

Additionally, FRC has an official **YouTube channel** which hosts a variety of videos and online content. The channel can be accessed here: https://www.youtube.com/user/FRCTeamsGlobal.

Team Organization

1e	am C	organization	6
.1	Overv	riew	7
.2	Youth	Protection Program	7
.3			
		·	
		·	
.4			
	3.4.4	School Contact Responsibilities	11
	3.4.5	Technical Contact Responsibilities	11
	3.4.6	Travel Contact Responsibilities	12
.5	Other	Important Team Positions	12
	3.5.1	Game Rules Monitor Responsibilities	12
	3.5.2	Safety Captain Responsibilities	13
	.2 .3	.2 Youth .3 Sugge 3.3.1 3.3.2 3.3.3 .4 Record 3.4.1 3.4.2 3.4.3 3.4.4 3.4.5 3.4.6 .5 Other 3.5.1	3.3.1 Main Contact Responsibilities 3.3.2 Alternate Contact Responsibilities 3.3.3 Shipping Contact Responsibilities 4 Recommended Additional Contacts 3.4.1 Corporate/University Contact Responsibilities 3.4.2 Public Relations Contact Responsibilities 3.4.3 Scholarship Contact Responsibilities 3.4.4 School Contact Responsibilities 3.4.5 Technical Contact Responsibilities 3.4.6 Travel Contact Responsibilities

FIRST®, the FIRST® logo, FIRST® Robotics Competition®, and Gracious Professionalism®, and Sport for the Mind™ are trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST*). © 2014-2015 FIRST. All rights reserved.

TEAM ORGANIZATION

Overview 3.1

This section provides teams with information regarding Team Organization. It is up to the individual teams to make decisions on how they would like to organize their team. This section is to here provide guidance on how to organize your team.

FIRST Youth Protection Program

FIRST requires all youth Team members to register in support of our enhanced Youth Protection Program.

FIRST understands that an important component of protecting children is knowing who the children are on our Teams. In addition, having parent/guardian contact information increases our ability to communicate important information, and also provides us with a better understanding of who our programs serve.

Coaches and Mentors are expected to read the Youth Protection Program Guide, available here: http://www.usfirst.org/aboutus/youth-protection-program

Forms are available here: http://www.usfirst.org/aboutus/youth-protection-program

Information on the US Screening process is available here:

http://www.usfirst.org/sites/default/files/uploadedFiles/About Us/US-Youth-Protection-Clearance-Process.pdf

Information on the Canadian Screening process is available here:

http://www.usfirst.org/sites/default/files/uploadedFiles/About_Us/Canadian-Youth-Protection-Clearance.pdf

You can find FAQ and additional information about the FIRST Youth Protection Program on the FIRST website at: http://www.usfirst.org/aboutus/youth-protection-program

Suggested Leadership Roles 3.3

Developing a team leadership structure that assigns clear roles and responsibilities is the first step to organizing your team. Once complete, it will be much easier to prepare for the season, unify and manage the team, keep current with important information and meet season deadlines. Your team is encouraged to align its leadership structure with the contact requirements of the Team Information Management System (TIMS—outlined in the tables on page 8). Although we encourage the following guidelines, team structure is the team's prerogative and the following are only suggestions.



is essential that team members and mentors share the workload!

Examine the roles and compare recommended qualities and abilities with your mentors from a FIRST perspective. Please remember it is essential that team members and mentors share the workload!

3.3.1 Main Contact Responsibilities

The Main Contact is the primary contact who provides team information to *FIRST* and undertakes key actions on behalf of the team via TIMS. It is recommended this role is filled by the lead mentor of the team. This person may choose to delegate some of the responsibilities listed below, but should still be up to date with their progress and ensure their completion. **This position must be held by an adult team member 18 years old or older.**



If team contacts are using school email addresses, please make sure the school's firewall allows emails from frcteams@usfirst.org.

Award Submissions:	Assign student awards submitters in TIMS. Ensure submissions of Woodie Flowers, Chairman's, and other Awards by the respective deadlines. Find details in the "Administrative Manual Section 6 - Awards".
FRC Blog:	Monitor the FRC blog for "behind the scenes" news and updates: http://www.usfirst.org/roboticsprograms/frc/blog
Calendar of Important Deadline Dates:	Monitor the FIRST website calendar for changes, additions at: http://www.usfirst.org/roboticsprograms/frc/calendar/
Communications	Read <i>FIRST</i> Communications, Team Updates, FRC Blog, etc. (see below). Ensures team is educated on important information. Contacts <i>FIRST</i> Team Support with any questions.
Consent and Release Forms:	Ensure all team Consent and Release Forms are submitted. Please refer to <i>FRC Administrative Manual Section 4.7.1 - Consent and Release Forms</i> for more information regarding the Consent and Release form. Review http://www.usfirst.org/roboticsprograms/frc/first-student-team-information-members-system-and-consent-form
Contact Information:	Keep all contact information up to date in the TIMS Team Profile Section. Provide his/her accurate email address, mailing address, and phone number to allow timely communication with <i>FIRST</i> , especially for use during vacations or team travel.
Email Blasts:	Receive, read and share with team email blasts. Email blast archive page located at http://www.usfirst.org/roboticsprograms/frc/emailblastarchive.aspx
Event Information:	Register team for events in the TIMS
Judges' Information:	Enter judges' information into the TIMS by deadline
Kit and Kickoff Information:	Submit selections in the TIMS by deadline
Robot Transportation:	Invite Shipping Contact to team, or assume role. Ensure the Shipping Contact is actively learning the rules and making plans to transport your team's robot. Also ensure that they are meeting all deadlines.
Safety:	Work with team's Safety Captain to ensure team member safety. Review FIRST Safety Policies/Procedures.
Scholarship Opportunities:	Invite team Scholarship Contact in TIMS.
Team Profile:	Maintain and update Team Profile Information in the TIMS to reflect correct team contacts, partner organization, team demographic information
Team Updates	Reads Team Updates
TIMS (Team Info System):	Maintain and update team information via the TIMS: https://my.usfirst.org/frc/tims/site.lasso
Track Twitter Feed/	Monitor the FRC Twitter Feed and Facebook Page for announcements about updates, news and important information.
FRC Facebook Page:	http://twitter.com/FRCTeams (Twitter)
	https://www.facebook.com/FIRSTRoboticsCompetition (Facebook)

3.3.2 Alternate Contact Responsibilities

The Alternate Contact is the Main Contact's "right hand" and shares in providing and maintaining accurate information in TIMS, as well as providing leadership to the team. The Alternate Contact should read and share in the responsibilities of the Main Contact as outlined above. Generally the Alternate Contact assumes the Main Contact role should the Main Contact not be able to fulfill his/her duties. **This position must be held by an adult team member 18 years or older.** Key duties of the Alternate Contact are outlined below:

Calendar of Important Deadline Dates:	Monitor the Calendar of Important Deadline dates for changes, additions at: http://www.usfirst.org/roboticsprograms/frc/calendar/
Communications:	Receive and distribute relevant FIRST communications to team members.
Chairman's Award	Collect information about, and document, the successes and accomplishments of the team. Organize the Chairman's Award (CA) submission for the team and help prepare the CA presentation to be given to the judges at the event. Please refer to the <i>FRC Administrative Manual Section 6 – Awards</i> , for more information about the Chairman's Award.
Contact Information:	Provide current contact information for the TIMS, including an alternate phone number and address in case <i>FIRST</i> has to make contact during vacation or while the team is traveling.
Public Relations:	Confer with Main Contact. Notify Public Relations (PR) Contact of any upcoming team fundraising or events.
Robot Transportation:	Be familiar with the robot transportation responsibilities in case the Shipping Contact needs help. Can also assume role of Shipping Contact.
Safety:	Work with team's Safety Captain to ensure safety while working and traveling.
Support:	Provide any support the Main Contact or team may need.
TIMS (Team Info System):	Assist Main Contact with maintaining and updating team's TIMS record at https://my.usfirst.org/frc/tims/site.lasso
Vacation Coverage:	Assist Main Contact with receiving communications and handling team issues during vacation periods.

3.3.3 Shipping Contact Responsibilities

The Shipping Contact is a critical position on the team, as this contact is responsible for handling robot transportation, Bag and Tag, and receiving any items shipped from *FIRST* to the team (e.g., a replacement part). The Main or Alternate Contact can be assigned to the role of Shipping Contact, or they may invite a separate Shipping Contact via the invitation process in TIMS.

Communications:	Receive and read <i>FIRST</i> email blasts, read the FRC Blog and the Team Updates. Communicate with <i>FIRST</i> on any robot transportation related questions.
Contact Information:	Provide the Main or Alternate Contact with current contact information for the TIMS, including a valid phone number to enable <i>FIRST</i> contact during vacation times or when the team is traveling.
FedEx Donation	Receive and safeguard any shipping paperwork the team is given because of travel to Championship or because you have been granted a Bag and Tag Exemption. The FedEx donation can save your team hundreds of dollars on shipping your robot. Carefully guard the shipping documents. Use the shipping paperwork as specified in the FRC Administrative Manual Section 5 – Robot Transportation.
	NEITHER FIRST NOR FEDEX WILL REPLACE LOST SHIPPING DOCUMENTS.
	If your team opted to pay for your Kit of Parts shipment (i.e., elected the "Team Pays" choice in the TIMS), confer with Main/Alternate Contact to ensure that the shipping address in the TIMS is correct.
	If your team wants to pick up the kit, make sure the Main Contact meets the deadline for this TIMS entry.
Kit of Parts (KoP):	Designate an adult mentor to pick up the kit at a Kickoff.
	If your team wants to designate another team to pick up the kit, make sure the appropriate Surrogate Kit Pickup paperwork is delivered to <i>FIRST</i> by the deadline as indicated on Calendar of Important Deadline Dates at http://www.usfirst.org/roboticsprograms/frc/calendar

	Read the <i>FRC Administrative Manual Section 5 – Robot Transportation</i> as well as review supplemental instructions as directed in that chapter.
Robot Transportation	 Be familiar with and conform to the following: Bag and Tag, requirements and procedures Deadlines and requirements for shipping your robot crate, if you are traveling to Championship or have been granted an Exemption Customs requirements if you travel over a border Other requirements that pertain to your particular team situation
TIMS Team's FedEx, UPS or USPS Account Number:	Provide the Main or Alternate Contact with a shipping account number for the TIMS. Incorrect Shipping Account numbers could directly impact the missing, defective, or broken parts replacement system for your team. Sponsor/school may let team use its shipping account, or obtain a number from the companies' websites.

Recommended Additional Contacts

3.4.1 Corporate/University Contact Responsibilities

This contact provides information about the team to the University or Corporation sponsoring the team. Keeping the sponsor/partner informed of team progress and achievements throughout the season is a great way to ensure their support.

Communications:	Receive related team emails. Provide information if necessary.
Contact Information:	Provide up to date contact information for the Main Contact for the TIMS. Provide an alternate phone number and address in case <i>FIRST</i> needs to make contact during vacation or while the team is traveling.
Public Relations:	Notify university/sponsor contacts of any upcoming team fundraising or events. Confer with Main Contact. Let supporters know about trials and successes regarding the robot design and build. Get them excited right through the process and continue providing information throughout the year. Invite them to an event.

3.4.2 Public Relations Contact Responsibilities

Advertising the team's goals and accomplishments is critical. The Public Relations Contact works with the team to ensure that the community and sponsors are apprised of the team's progress and accomplishments.

Communications:	Receive relevant FIRST communications and reply when necessary.
Contact Info.	Provide up to date contact information to the Main Contact for TIMS.
Fundraising:	The team would be wise to advise this person of any fundraising activity or team appearances at least two weeks before the date so that advance notification of the event can be prepared and sent to media contacts.
Public Relations Updates:	Responsible for receiving and disseminating any PR updates issued by <i>FIRST</i> , and using them to the team's advantage in local newspapers, as well as TV/radio stations.
Sponsors:	Send any PR information to current sponsors all during the year, and prepare "marketing" materials to attract potential new sponsors.

3.4.3 Scholarship Contact Responsibilities

This team contact is responsible for disseminating information about *FIRST* Scholarships to the student FRC team members and their parents. It is **HIGHLY RECOMMENDED** that a Scholarship Contact is assigned to the team and entered in TIMS!

Communications:	Receives key Scholarship Information from <i>FIRST</i> and share information with team students and parents. Contact <i>FIRST</i> about any scholarship related inquiries. Information on scholarships may be found on the following link: http://www.usfirst.org/aboutus/scholarships
Contact Info.	Provide up to date contact information for the TIMS. Provide an alternate phone number and address in case FIRST needs to make contact during vacation or while the team is traveling.

3.4.4 School Contact Responsibilities

This adult representative is responsible for knowing and enforcing all school rules regarding team participation. A teacher or principal may be best qualified for this role to facilitate the team's progress and meeting deadlines.

	Receive school related team emails. Provide information/reply if necessary.
Communications:	If no one is specified to work on the following projects, work with Main Contact to make sure students get them done. Refer to the web <i>Calendar of Important Deadlines</i> . http://www.usfirst.org/roboticsprograms/frc/calendar Monitor Award due dates. Please refer to the <i>FRC Administrative Manual Section 6 – Awards</i> .
Contact Info:	Provide up to date contact information for the Main Contact in the TIMS
Public Relations:	Notify Public Relations Contact of any upcoming team fundraising or events. Conferring with Main Contact.
Safety:	Stress safety whenever possible.
Scholarships:	Inform students early about scholarship opportunities and deadlines, and encourage and assist those interested in applying for them. Information on scholarships may be found on the following link http://www.usfirst.org/aboutus/scholarships

3.4.5 Technical Contact Responsibilities

This adult representative is responsible for knowing and enforcing all school rules regarding team participation. A teacher or principal may be best qualified for this role to facilitate the team's progress and meeting deadlines.

Communications:	Receive team emails. Reply with inquiries as necessary. Keep the rest of the team apprised on your technical successes/issues. Ask for help/ideas.
Contact Information:	Provide up to date contact information for the TIMS. Provide an alternate phone number and address in case <i>FIRST</i> needs to make contact during vacation or while the team is traveling.
Pre-Ship Inspection:	Work with the team members to perform a robot inspection before your robot is packed for transport or sealed in its bag. Use the Inspection Sheet that will be listed in the <i>FRC Game Manual Section 4 – The Robot</i> . This inspection will show where problems are so you can correct them before transporting your robot. It will also provide the students with information they will need to know during the on-site, precompetition inspection since the inspectors will be asking the students questions.
Public Relations:	Notify Public Relations Contact when your robot nears completion or when you have an opportunity to show off your robot. If the PR contact is not available, notify local media of any upcoming team fundraising or events. Plan these opportunities with your Main Contact.
Safety:	Stress safety and ensure safe working conditions, safety glasses use, etc.

3.4.6 Travel Contact Responsibilities

This person will make event(s) travel and hotel arrangements for the team members and mentors. Tackle this task early to ensure there is room on preferred flights and in preferred hotels.

Communications:	Receive relevant FIRST communications and communicate with FIRST and team as necessary.	
Contact Info:	Provide up to date contact information for the TIMS. Provide an alternate phone number and address in case FIRST needs to make contact during vacation or while the team is traveling.	
Hotel Reservations:	Regionals and Championship: Refer to the <i>FRC Administrative Manual Section 2 – Team Resources</i> for hints and good advice on choosing team hotels. Refer to the "Site Info" on the website for special travel/parking instructions. Bring the directions for the venue.	
Manual and Website:		
Stores/Supplies:	Refer to the <i>FRC Administrative Manual Section 4 – At the Events</i> to find links to various types of stores, such as printing, supplies, hardware. Find stores near your chosen event and print out the directions to them.	
Travel Pricing:	Obtain, consider, and compare travel costs prior to registering for an event(s). The web has many opportunities to compare airfares. Ask for group rates to see if that is a good option. Is bussing an option?	

3.5 Other Important Team Positions

Your team may want to consider appointing one or several Rules Monitors and Safety Captains. Students are welcome to fill these positions if the team members and mentors agree and find responsible candidates. *FIRST* does not need their contact information in the TIMS.

Please read below for some job-related roles these students or adults may want to fill.

3.5.1 Game Rules Monitor Responsibilities

Know Point System:	e sure the team understands the system; implement the best strategy.	
Know Penalties:	Be sure all mentors and operators know and understand all penalties.	
Learn Game Rules:	Read and understand the rules of the game and communicate them to the team members so they know the ins and outs of the game.	
Learn Web System:	Check the online Manual for rules, changes, and web-based question and answer system. Online manual is at http://www.usfirst.org/roboticsprograms/frc/game-q-and-a Q&A is at http://www.usfirst.org/roboticsprograms/frc/game-q-and-a	
Monitor Team Updates:	Communicate any changes, written in the updates, to the team. Team Updates are at: http://www.usfirst.org/frc/manual . News and Email Blasts are at: http://www.usfirst.org/roboticsprograms/frc/emailblastarchive.aspx .	

3.5.2 Safety Captain Responsibilities

Bring enough safety glasses for the team and all guests. Make sure persons unpacking or unbagging robot will have glasses to wear as they arrive at the Pit, and make sure all persons wear safety glasses/goggles properly.
Be sure your team transports and lifts the robot safely.
Know where the EMT area is, and report any injuries to the Pit Supervisor at the time of injury or treatment.
Discourage running in the Pit or Competition Arena, and work with the green-shirted Safety Advisors to keep things safe and the Pit aisles clear.
Bring any serious safety infractions, such as metal grinding or open flames to the attention of the Pit Supervisor, as well as any blatant discourtesies.
Obtain enough safety glasses for the team. Ensure all persons wear them when working on the robot or in the "work" vicinity. People who wear glasses must have regulation safety glasses with side shields or wear safety goggles over their glasses.
Make sure the work area is safe and the floor is clear at the team's workplace and at the events.
Read "Courtesies and Rules" section in the <i>FRC Administrative Manual Section 4 – At The Events</i> . Meet with team members and decide what the team deems important in the safety area. Diplomatically enforce their findings.
Print and read the "FIRST Robotics Competition Team Safety Manual", which can be found here: http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual . Meet with the team and go over the manual with everyone.
Review Safety Policies and Procedures in the "FIRST Robotics Competition Team Safety Manual" and inform the team of the mandates and suggestions. Encourage all team members and mentors to read the document, follow the suggestions, and become familiar with the safety awards.
Suggest that the team build a robot cart if it doesn't have one.
At all times, think and behave with a Graciously Professional attitude.
This position is one that makes teams aware of safety issues and inspires team members to improve safety conditions. <i>FIRST</i> uses to ensure a safe environment and encourages others to do so as well. Use common sense and good judgment when bringing an infraction to someone's attention. Please be kind and positive because the Safety Captain is an ambassador for your team.

At The Events

4.0 At	The Events	. 14
4.1	Overview	.16
4.2	FIRST Safety	.16
	4.2.1 Safety Recommendations	. 16
	4.2.2 Robot Carts	. 16
	4.2.3 Safety Recognition Program	. 16
4.3	Courtesies And Rules	. 17
4.4	Staff/Volunteer Badges	. 17
4.5	Competition Overview	. 17
	4.5.1 Practice Matches	. 17
	4.5.2 Competition Matches	. 17
	4.5.3 Competition Agendas	. 18
4.6	Load In Procedures	.18
	4.6.1 Bag And Tag	. 18
4.7	Event Check In	.18
	4.7.1 Consent And Release Forms	. 18
	4.7.2 Event Check In Envelope	. 18
4.8	The Pit	. 19
	4.8.1 Pit Admin Station	. 19
	4.8.2 Team Pits	. 19
	4.8.3 Spare Parts Station	. 19
	4.8.4 Inspection	
	4.8.5 Machine Shop	
	4.8.6 Team-Provided Mobile Machine Shops	
	4.8.7 Machine Tools At Events	.2
	4.8.8 Suggested Equipment	.2
	4.8.9 First Aid Station	.22
	4.8.10 Traffic Flow	
	4.8.11 Announcements	
	4.8.12 Queuing Your Team	.22
	4.8.13 Property Security	.22

CONTINUED ON PAGE 15

	4.8.14 Lost And Found	
4.9	Ceremonies	22
	4.9.1 All Teams Should Attend	
	4.9.2 Pit Manners/Rules During The Ceremonies	
4.10	Pit Closing Etiquette	23
	Team Socials	
4.12	Team Spirit And Team "Look"	23
	4.12.1 Team Giveaways	
	4.12.2 Mascots And Team Costumes	23
	4.12.3 Competition Spirit	
	4.12.4 Banners And Flags	24
	Bleacher Rules	
4.14	Site Restrictions	24
	Considerations	
4.16	Team Checklist	25

 $FIRST^{\circ}$, the $FIRST^{\circ}$ logo, $FIRST^{\circ}$ Robotics Competition, Coopertition, and Gracious Professionalism, and Sport for the Mind are trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology ($FIRST^{\circ}$). © 2014-2015 $FIRST^{\circ}$. All rights reserved.

4 AT THE EVENTS

4.1 Overview

This section provides a general summary regarding safety, mascots/uniforms, recommended items and equipment for teams to bring to competition events. You will also find information about Pit rules, generic event schedules, robot inspections, replacement parts, and competition manners. The following section provides a "feel" for competition schedules, event check in procedures, practice times, and matches. Please familiarize your team with this overview so all team members know what to expect at the events.

4.2 FIRST Safety

Participants and team mentors should review the FIRST safety policies and the FIRST Safety Manual. It provides sound safety practices for your workplace and FIRST events.

Every team must follow the safety rules found in the FIRST Safety Manual.

4.2.1 Safety Recommendations

At events, the pure anticipation and excitement can sometimes overshadow common sense and safety fundamentals. One safety area teams sometimes overlook is the need to wear appropriate clothing when working or being around the robots. In addition to the ANSIapproved, UL-listed, or CSA rated safety glasses required for eye protection, FIRST highly recommends that team members and mentors:

- Refrain from wearing dangling jewelry or loose, baggy clothing near the robots;
- Tie back long hair so that it will not get caught in the robot or other machinery; and
- Wear gloves to protect hands and fingers when handling the robot or the robot crate; finger injuries are one of the most common injuries at events!

See the FIRST Safety Manual for more information.

4.2.2. Robot Carts

To protect team members from muscle strains and other injuries as they transport the robot between the Pits and the competition area, we strongly recommend team members use a cart. Please keep the following in mind:

- Carts must remain in the team Pit area when not in use for robot transportation;
- All carts should fit through a standard 30-inch door;
- Wheels on the cart must not damage site flooring;
- Do not add music or other sound-generating devices to the cart, with the exception of devices of reasonable volume intended to be activated occasionally to make others in the direct vicinity aware that a robot is on the move for safety purposes; and
- Put your team number on your cart so it can be identified by field personnel.

Refer to the FIRST Safety Manual for robot lifting techniques. By practicing these safety techniques, your team members will also develop a quick, fluid routine.

4.2.3 Safety Recognition Program

Throughout the competition, the easily recognizable, green-shirted Safety Advisors will continuously tour in pairs to observe activities in the Pit, practice field, queue line, and playing fields to observe the safety habits of the teams. This includes observing the uncrating/unbagging of robots and transporting them between the Pit and playing fields. The Safety Advisors will rate safe performance in three key areas:

- 1. Safe Behavior;
- 2. Physical Conditions; and
- 3. The use of Safety Glasses as well as other Personal Protective Equipment (PPE) as appropriate.

See the FIRST Safety Manual for more information on the Safety Recognition Program.



Carts must be safe. They must be easy to control and maneuver, and pose no risk to bystanders. Carts identified as unsafe by Safety Advisors must be made safe before they will be allowed to be used..

4.3 Courtesies And Rules

Please help to make guests feel comfortable and welcome! Provide your team with the site restrictions and rules so everyone can work and compete in a safe, sportsmanlike and friendly environment.

4.4 Staff/Volunteer Badges

At events, *FIRST* staff, event staff and volunteers will wear badges clearly marked with their title. Should your team members or mentors have questions or a problem, staff and volunteers will help you find the answer – <u>especially your friendly Pit Admin staff!</u>

4.5 Competition Overview

This section provides general competition information and necessary details regarding scheduling, robot inspection, practice times, safety, rules, regulations, and suggestions for teams.

4.5.1 Practice Matches

Your event check in envelope should contain the Practice Match schedule. If the Practice Match schedule is not in your envelope, check with Pit Admin. Practice Matches take place on the competition field on the first day of the event. The schedule will indicate the time you will practice and with what teams. Practice Matches are randomly assigned and each team is assigned an equal number of Practice Matches unless the number of teams multiplied by number of Practice Matches is not divisible by six. In this case, the Field Management System randomly selects some teams to play an extra Practice Match. Teams are unfortunately not able to switch practice times, however, teams who have passed Inspection may enter a Filler Line for open slots.

4.5.1.1 Practice Time Slots

All teams will receive a comprehensive list of practice times. Your team must be at the field and ready to practice at the designated times. If your team/robot cannot be ready for your practice time slot, don't forfeit your team's practice time entirely. Send in your human player (if a human player has a part in the current game) to practice alone. Your team members may want to scout other teams and their strategies during practice and the actual competition matches.

4.5.1.2 The Filler Line

Although teams may not switch practice times, there will be a designated filler fine at each competition. Teams whose robots are ready for practice may join the Filler Line, if they have passed full inspection. Teams from the Filler Line will be used on a first come, first served basis to fill empty spots in Practice Matches left by other teams that do not show up for their own Practice Match. Filler Lines will be limited to, at most, six robots, but the number is dependent upon space at venues. Criteria for joining the Filler Line are as follows:

- Robots in the Filler Line must have passed full inspection;
- Teams must join the Filler Line with their robot;
- Teams may not work on their robot while in the Filler Line;
- Teams may not occupy more than one spot in the Filler Line; and
- If a team is queued up for their Practice Match, they may not join the Filler Line.

4.5.1.3 Courtesy

In order to make the most of practice time, there will be specified teams on the field during an assigned practice slot. Each team must be respectful of the other teams sharing the field. Friendly interaction between machines is acceptable, if all teams are willing. Unsportsmanlike conduct on the part of a team during practice could result in loss of practice time or other unfavorable action.

4.5.2 Competition Matches

Once your team's robot passes Inspection and receives its official sticker, you are eligible to compete.

4.5.2.1 Qualification Match Schedules

Before the Pit opens on the morning when Qualification Matches begin, Pit Admin volunteers will place a copy of the Qualification Match schedule on each team's Pit table. This list provides information as to when teams will participate, with whom and against whom. The list is final and the schedule will not be altered.

4.5.2.2 Scouting

Teams often use the Qualification Schedule to scout other teams to watch their strategies and robot capabilities. This is especially helpful when choosing alliances, should your team advance to the Playoff Matches.

4.5.2.3 Early Matches

Make sure your team is on time and in place if you have an early match on competition days. If your team is scheduled for any of the first four matches on those days, you may be asked to queue before the opening ceremony. Matches begin immediately after the conclusion of the opening ceremony.

Please note that there will not be audible queuing at the Championship. As such, all teams must queue up a half hour prior to each designated match.

4.5.3 Competition Agendas

Print the event-specific agenda from the web site for each event you will attend. This information can be found at http://www.usfirst.org/roboticsprograms/frc/regional-events. Bring it with you so your team will have the event's agenda.

4.6 Load In Procedures

Please check your event's public agenda for robot drop-off times. During the early load-in time, no work on the robot or pit may be done (e.g. setting up shelving) with the exception of plugging in batteries. Robot or pit set up work must happen only after pits open for all teams at the start of the first day of the competition.

4.6.1 Bag and Tag

On 'Stop Build Day' (Tuesday, February 17th), all teams must stop work on the robot by midnight local time and seal it in a large bag (using a tag) that will be included in the 2015 Kickoff Kit. Teams must also record when the robot was sealed on a <u>Robot Lock-Up Form</u>. Teams then transport the robot to and from their events on their own. Please check your event's public agenda for robot drop-off times. The robot may not be unbagged and no work on the robot is allowed until the <u>Robot Lock-Up Form</u> from has been reviewed and signed off by an Inspector at your team's event.

See FRC Administrative Manual Section 5 - Robot Transportation for more information on Bag and Tag details.

4.7 Event Check In

Event check in takes place at the Pit Admin station the evening before and the first morning of the event at the Regional and District Events. At each event, an adult member of each team should check in no later than noon on the first competition day of the event.

4.7.1 Consent and Release Forms

We strongly encourage all FRC team members and mentors to submit their Consent and Release forms electronically. FRC Team Lead Mentors registered in TIMS may submit in TIMS: https://my.usfirst.org/frc/tims/site.lasso, and student team members may submit via the *FIRST* Youth Team Member Registration System (formerly known as STIMS) at: https://my.usfirst.org/stims/site.lasso.

Please note: If a team member decides to submit their Consent and Release form electronically, it will cover the team member's attendance for the entire season – from Kickoff through Championship. However, if a team member chooses to turn in a "hard copy" of the form (e.g. printed out from the website and signed) he/she will have to provide it at the Kickoff event (if attending) and at each competition event. Details on the Consent and Release form process are available here: http://www.usfirst.org/roboticsprograms/frc/first-student-team-information-members-system-and-consent-form.



Having your team members and mentors submit their Consent and Release forms electronically will make things much easier for you—no excess paperwork to collect and keep track of!

4.7.2 Event Check in Envelope

Upon receipt of your team's consent and release forms, each team will receive a registration envelope containing:

- Operator Badges
- Pit Map
- Practice Match Schedule;

- Safety Captain Badge; and
- Team List

Teams, volunteers, *FIRST* Staff, and guests spend a lot of time in the Pit area. Get to know other teams, help each other when you can, and keep the aisles clear. Time is short and help is very often right "next door" in the adjacent team Pits.

Children under 12 MUST be accompanied in the Pit by an Adult at all times!

4.8 The Pit

4.8.1 Pit Admin Station

The Pit Admin station is centrally located in the Pit area. *FIRST* staff members and/or volunteers run this area to check in teams and help teams and visitors. Come to the Pit Admin station to:

- Turn in a printed roster and team's hard copy Consent/Release Forms;
- Check in and receive your check in envelope, and badges. Review your event agenda for Pit opening/closing time for each event;
- Get answers to most questions, including machine shop access;
- Ask about lost and found articles; and
- Report an illness, injury, or other incident.

4.8.2 Team Pits

These are the areas where teams work on their robots. These numbered spaces help organize team placement and help team members, judges and visitors find teams easily. These areas are set up to be as equal as possible. Each team's Pit will have a table and power outlet.

4.8.2.1 Pit Rules

For safety and because of insurance regulations:

- Teams **cannot** build any structure that supports people, or items for storage, directly over the heads of team members in their team Pit, as with a loft;
- No team station structures, signs, flags, or displays can be higher than 10 feet above the floor;
- Team station signs, flags, and displays must be securely mounted to the structure

4.8.2.2 Pit Structure

FIRST personnel, event management, and/or local committee members will require teams to remove any Pit structure that is deemed unsafe or outside specifications.

4.8.2.3 Space Regulations

Each team is allotted approximately the same amount of workspace at an event, usually about 10' x 10' x 10'; however, the size will vary from event to event, and in many cases the space is smaller. Be sure your equipment will fit in a space smaller than those dimensions. In all cases, the height cannot exceed 10'. This includes the height of signs, flags, banners, etc.

Keep your equipment and team members within your assigned area and do not "grow" into the aisle or undesignated space. If your team is too large to fit into the allotted space, encourage your team to leave the area to scout other teams and/or to watch the matches. We ask that you please do not add to your space by setting up in another area.

4.8.3 Spare Parts Station

Spare parts will be available at the events; however, item availability varies from event to event. *FIRST* asks that teams bring any unused parts from their kits to events to assist and support each other. This kindness can expand your *FIRST* network of friends as you exchange parts.

Teams are responsible for all items required at events. If a team needs a replacement high-value item, "Loan Only" parts will be on hand based on availably and under certain restrictions that will be published after Kickoff.

4.8.4 Inspection

To ensure all robots are safely constructed and fall within the *FIRST* rules, there is an official robot inspection station at each event. Certified inspectors will be on site. Inspectors can help find problems and/or provide suggestions during an inspection. Go to the Inspection Station, shown on the Pit map. Read below for criteria and caveats:

- To ensure safety and readiness, pre-inspect your robot before you bag it. This will help to make your official inspection go smoothly and quickly;
- Inspectors will use an official inspection sheet for checking robots; a copy of the inspection checklist will be available to teams during the build season. Inspectors check off items on an inspection sheet as the team passes those portions of the process;
- Don't wait until the last moment to begin the process. Bring your robot to the Inspection Station early. Partial inspections, such as for height and weight compliance, help prevent an inspection clog at the end of the day;
- Student team members must accompany the robot and be prepared to answer Inspectors' questions;
- Correct items and return for inspection until your robot passes;
- Teams may practice on the first day of the event, during their scheduled practice times only, without completing the inspection process; however, if field personnel deem a robot unsafe, it will not be allowed to practice until the unsafe condition is fixed. See the *FRC Administrative Manual Section 4.5.1.2 The Filler Line* regarding requirements to participate in a practice session as a 'Filler'
- Robots must pass inspection before actually competing in Qualification Matches;
- Each time you alter the form, fit, or function of your robot, you must request and pass a robot re-inspection; and
- Inspectors may re-inspect randomly before or after matches to ensure continued safety and compliance.

4.8.5 Machine Shop

Some events have a machine shop to help teams with repair and fabrication, either sponsored by NASA or local organizations. While the machine shops vary, events strive to have welding and a variety of high-powered tools available at the shop.

The staff and volunteers in the Pit Admin station will be able to tell you how to make use of the machine shop.

In most cases the machine shop is on site and readily accessible to all teams. If a team attends an event where the machine shop is off-site, volunteers should be in place to help transport the robot to and from the machine shop. The team will fill out a Machine Shop Request Form that travels with the robot, so the machine shop staff and volunteers can follow their directions. The event should set up a method of communication between the venue and off-site machine shop, in case there are any questions.

Teams can travel to the off-site machine shop on their own, either by walking or using their own vehicle. Teams cannot be driven by the Machine Shop Shuttle Driver. All students must be accompanied by an Adult Mentor at all times. We recommend reviewing Youth Protection Program guidelines, which can be found at http://usfirst.org/aboutus/youth-protection-program.

Pit/Machine Shop Hours: Set hours are necessary to provide teams with equal work time. Please be aware of the opening and closing hours of the Pit/Machine Shop posted on the agenda event specific agenda which can be found on the *FIRST* website. Machine shops should operate during event hours when the Pit is open.

4.8.6 Team-Provided Mobile Machine Shops

FIRST welcomes team provided mobile machine shop facilities/trailers at events, but the proposed facility has to comply with FIRST and venue requirements. The mobile machine shop/trailer sponsor must adhere to the following sections.

4.8.6.1 Team-Provided Machine Shop Requirements

- The machine shop must be run by properly trained individuals.
- Neither *FIRST* nor the venue is liable for any loss or damage to team owned equipment that should occur at the event.
- Provide any security measure for your equipment (for example: bring a lock for a trailer). Neither FIRST nor the venue will provide these services for you.

4.8.6.2 Local Restrictions

If a team supported machine shop is used, please note there are local restrictions such as fire codes and venue approval that you must consider as part of the process. *FIRST* will do its best to convey any relevant needs and work on your behalf to gain venue approval through a professional, legal process.

4.8.6.3 Other Requirements

In addition to the above, the sponsoring team(s) must:

- 1. Include an electrical source for the mobile machine shop facility;
- 2. Ensure all teams have the ability to use the mobile machine shop and its tools/machines. (i.e. access cannot be restricted to certain teams); and
- 3. Handle job requests through the same counter/process as the *FIRST* provided shop services. We recommend using a standard Machine Shop Request Form. The sponsoring team's requests must be handled in the same manner as all other teams requests.

4.8.7 Machine Tools at Events

When using tools in the Pit, be sure to use them properly, in a safe and controlled manner. Unsafe operation, especially those that endanger others and your team, will be subject to scrutiny by the event staff and safety reviewers. Their findings may result in team warnings or event expulsion.

Please adhere to the following safety rules regarding Pit safety and tool use:

■ Tools that throw sparks are prohibited.

Examples: Electric welders, bench grinders and angle grinders.

Tools that produce open flames are prohibited.

Examples: Gas welders and propane/MAPP gas torches.

Floor standing power tools are prohibited.

Examples: Full-size drill presses, full-size band saws and full-size table saws.

- Grinding or painting in the Pit is prohibited. Designated grinding and painting areas are available to teams.
- Brazing/welding is prohibited at the team Pits. Use the machine shop.
- Soldering is permitted. Use electric iron/gun only.
- Small, bench-top machinery, with appropriate guards, is permitted in team Pits.
 - We consider 'small' machinery as machinery easily lifted by one person

Examples: Small band saws, drill presses, and sanders.

- Small, desktop machining centers are permitted as long as they are reasonably sized. They must be appropriately covered to prevent throwing of chips during operation.
 - We consider 'small' machining centers to be easily lifted by one person

Examples: Desktop CNC mill.

4.8.8 Suggested Equipment

We suggest you bring the following:

- Extension cord—heavy duty and at least 25 feet long;
- Power strip—to make best use of your power drop;
- Other items as suggested on the Team Checklist in this section of this manual; and
- A relatively small cart to transport your heavy robot from the Pit to the playing field. See the *FRC Administrative Manual Section* 4.2.2 Robot Carts for cart requirements.

4.8.9 First Aid Station

There will be a first aid station in the Pit to assist in the event of injury and illness. Mentors and the Safety Captain should refer to the Pit map for the location and alert team members. **Notify the Pit Admin Supervisor of any injuries or illness and fill out an incident report.** Bring a travel size first-aid kit for minor injuries.

4.8.10 Traffic Flow

At each event, there is a predetermined traffic flow pattern to maximize efficiency of the team/robot entrance and exit and to maintain safety to the competition area. Refer to the Pit map for the flow. The queuing team maintains this pattern at each event. Please obey the traffic rules to ensure an efficient lineup for practice and competition.

It is extremely important to keep aisles clear for safety, judging accessibility, robot mobility, courtesy, and for maintaining competition schedules. Please keep chairs and equipment out of the aisles. Please sit in the audience, not on the floor or in the aisles.

4.8.11 Announcements

We make every effort to keep noise down and announce only important items and scheduling, so please do not ask the Pit Announcer to make frivolous announcements.

4.8.12 Queuing Your Team

The Pit Announcer and queue volunteers must maintain the Practice and Qualification Match schedules. Your team should designate team members to be your queue captains and carefully watch the schedule and alert the team when its turn is near. The queue captain should:

- Look at the Pit map to find the pre-set traffic pattern for each event.
- Listen carefully for the queuing announcements and line up your four competing team members/mentor and robot when your team number is announced.
- Queue your team one-half hour prior to your matches at the Championship since there are no match announcements. Ensure you monitor play within your respective division and adjust your queuing time accordingly. Please check with the Lead Field Queuing personnel on your field, if you have questions.

NOTE: Check the schedule. If your team is in the first four matches of any day of competition, your team's robot and competition team must queue up prior to the Opening Ceremony, on or near the field.

4.8.13 Property Security

There have been occasions when items such as cameras and laptops have "disappeared" from the Pit or competition area. Use common sense and do not leave valuable items unattended. Neither the site nor *FIRST* is responsible for any theft. Take valuable items with you, or designate a team representative to remain with them in the team Pit or competition areas.

4.8.14 Lost and Found

If you find an article or lose one, come to the Pit Admin station to fill out a "Lost Item Report" or to turn in an article you find. We will make every reasonable attempt to return articles to owners.

4.9 Ceremonies

There are both Opening and Closing Awards Ceremonies. These ceremonies allow everyone to show honor and respect for their countries, sponsors, teams, mentors, volunteers and award winners and to provide everyone with the opportunity to applaud the successes of team members and mentors. They also give teams a chance to "meet" the judges, referees, MCs and other important persons and sponsors involved with the event.

At the Awards Ceremony, FIRST presents trophies and medallions to outstanding teams.

4.9.1 All Teams Should Attend

We encourage all team members to attend the ceremonies, on time, to show appreciation for the event and those people involved who are volunteering their time and efforts.

Should a team need to remain in their pit to continue work on their robot during the Opening or Closing Ceremonies, they are allowed to. However, the team must follow the rules below.

4.9.2 Pit Manners/Rules during the Ceremonies

- No more than five members in an individual pit
- Team members will not be allowed to use power tools, hammers, or other noisy tools during the ceremonies
- All persons in the Pit should observe the code of behavior for the presentation of all national anthems:
 - Maintain a respectful silence;
 - Stand, facing the flag. If there is no flag, look toward the video screen showing a flag; and
 - Hats off please.

4.10 Pit Closing Etiquette

For many reasons, it is necessary that teams adhere to the Pit closing time each day. Many people working in the Pit are volunteers and deserve to have a set closing time met. Assign team members and mentors to the cleanup/organization of your team Pit.

4.11 Team Socials

Team socials may be held after the awards ceremony on the evening of the second day, and may include food, fun and an opportunity to unwind and get to know each other in an informal, relaxed and entertaining setting. These are not *FIRST* sponsored.

4.12 Team Spirit And Team "Look"

When deciding on a team name or acronym, consider how you can work a theme around it to make your team more fun and recognizable. Part of the pleasure of being a team member or mentor is the way the team stylizes itself.

Team numbers provide unique identification for FRC teams. We strongly recommend that you include the team number on all team T-shirts, trading buttons, hats, cheers and costumes.

4.12.1 Team Giveaways

Often teams bring small items to give away to others at the event. This is completely optional, but is certainly a great way to promote your team's identity. The most popular item to give away is a button with your team logo and number.

4.12.2 Mascots and Team Costumes

Keep safety in mind. Awards acceptance often means descending and ascending stairs/bleachers. Please make sure that mascot and team costumes are safe for the wearer as to vision and movement and that they are comfortable and cool enough to prevent fainting and dehydration.

4.12.3 Competition Spirit

We ask that you bring attention to your team in ways that are in good taste and in the spirit of the competition. Please refrain from the following:

- Using noisemakers;
- Using objects that can damage bleachers or floors;
- Wearing inappropriate clothing; and/or
- Taping or affixing items or papers to walls, bleachers, floors or other site areas.

Please make sure your team Pit and surrounding area is clean when you leave the site.

4.12.4 Banners and Flags

We encourage teams to bring team flags and/or banners for display in their pits and/or the playing field area, under these rules:

- Do not cover or move other team banners or sponsor banners that are already in place
- Share the available space fairly with other teams
- Hang banners only where they will not obstruct the view of spectators
- Hang banners in a safe manner
- At the end of the event, safely remove all banners and anything used to hang the banners (tape, string, etc.)
- Do not use banners to block off or save seats (see Administrative Manual Section 4.13 Bleacher Rules below)
- Respect venue-specific rules regarding banner location and hanging method

4.13 Bleacher Rules

Sitting together in a group during competition matches makes the game more exciting and fun. It's where you can show support for your team. Since very often there is not enough seating to accommodate everyone, there has to be a policy regarding seating. **Teams are not permitted to save seats for team members that are not present.**

Please take turns sitting in the bleachers if seating is limited. If there is a crowding problem, we ask that you kindly leave after your team's match and return later if possible.

4.14 Site Restrictions

Please read the following common site restrictions and adhere to them in order to promote an orderly, safe, pleasant and exciting competition.

- **Do not use noisy devices**, such as floor stompers, whistles and/or air horns.
- **Do not arrange for Internet access or phone line**s from venue service providers or attempt to use venue internet connections reserved for event purposes (e.g., FMS or streaming).
- **Do not sell any products.** This includes food, hats, shirts or any promotional products.
- Do not distribute any food products, such as candy, water, soft drinks or fruit.
- Do not sell raffle tickets.
- **Do not** bring bottled gas tanks (e.g. helium). This is a safety concern.
- Do not use walkie-talkies.
- **Do not** invite or bring live bands to play in the audience. This dilutes the presentation on the playing field and is too loud and confusing for the audience.
- **Do not play loud music in the Pit** because it interferes with important announcements. If a team receives more than a warning or two, the power to the team Pit will be shut off and/or the music confiscated.
- **Do not form "tunnels"** during the Awards Ceremony. This can cause discomfort to those traveling through them and creates safety issues.
- Do not save seats.

4.15 Considerations

You will often hear the expression Gracious Professionalism throughout your involvement in *FIRST*. You can read Woodie Flowers' definition in the *FRC Administrative Manual Section 1 – Introduction*. One of our main goals is to encourage all team members and mentors to conduct themselves with kindness, sharing and consideration of others.

Gracious Professionalism is a central tenet of the *FIRST* experience. It is not acceptable to engage in hostile action, hostile/profane language or any other violent or antagonistic conduct. *FIRST* reserves the right, at its discretion, through the Event Manager or his/her designee, to arrange for any team, team member, event participant or other individual to be removed from participating or attending any *FIRST* event or program for engaging in such conduct. *FIRST* looks forward to everyone's cooperation in keeping our programs and events exciting, educational and full of Gracious Professionalism.

4.16 Team Checklist

SAFETY GLASSES are REQUIRED! Bring enough for your team and visitors.	Bring required completed CONSENT/RELEASE FORMS and TEAM ROSTERS for all team members and mentors!
Bring enough for your team and visitors. TOOL BOX ITEMS Ball driver set/nut driver set Batteries and Charger Broom (small, for team Pit cleanup) C-Clamp, large, medium, small Cutters Deburring tool Dremel tool/accessories Drill – cordless w/charger, Drill bit set Flashlight Glue, super and/or glue stick Hacksaw and blades Hammer (ball peen & brass) Heat gun Leatherman-type tool Level, small Lithium grease, spray can Magnet on a stick Paint brush Pliers – large, small, needle nose assort. Power outlet strip/extension cord (2) Power screwdriver Saber saw/wood & metal blades Sandpaper – various grits Screws – nuts – washers Screw driver assortment, flat and Phillips Shrink tubing Socket set – 1/4", 3/8" drive Soldering iron (electric), solder, wick, flux Spare parts Square – small, medium Tap & die set/assorted taps Tape: clear/electrical/masking Tape measure/ruler Tie wraps/connectors/rubber bands Tin snips Tweezers/scissors USB stick/drive	ADDITIONAL ITEMS Banners – Corporate signs & flags for team Pit Camera and film, disposable Cart for moving robot Drop light Epoxy File folder box for paperwork Hand truck Laptop/software/cables/discs Manual and updates Medical Release Forms Message board – dry erase marker set Notepads/spiral notebook/clipboard Paper/Sticky Notes Paper towels and paper cups Pens/pencils/sharpies/markers Portable printer Release form for each person, completed Seat(s) for team Pit (small, foldable) Schedule to set up and break down team Pit Spray cleaner Stapler/staples Storage box/bins – trinkets & trash (buttons) Team roster and contact information Trash can (small)/trash bags Plastic zip type bags PERSONAL ITEMS Alcohol Prep Pads /First Aid Tape Anti-Nausea or Diarrhea Medication Cough Drops/Sore Throat Medicine Eye Wash And Drops Facial Tissues/Cotton Balls /Wet Cloths Feminine Products First Aid Kit – Band-Aids/Blister Kit/Ice Pack Hand Sanitizer/Liquid Soap Insect Sting Medicine/Insect Repellent OTC Pain Medication; i.e., Aspirin, etc Safety Glasses
□ Tie wraps/connectors/rubber bands□ Tin snips□ Tweezers/scissors	☐ Hand Sanitizer/Liquid Soap☐ Insect Sting Medicine/Insect Repellent☐ OTC Pain Medication; i.e., Aspirin, etc
☐ Wrenches, Allen, crescent, open and box X-Acto type knife and blades	

Robot Packaging And Transporting

5.0 Rd	obot Packaging And Transporting	.26
5.1	Overview	.27
5.2	Stop Build Day	.27
5.3	Bag And Tag And Robot Transport	.27
5.4	Instructions For "Bag And Tag"	.27
	The Proper Bagging Procedure	.27
5.5	Robot Lock And Unlock Instructions	.28
	5.5.1 Completing The Robot Lock-Up Form	.28
	5.5.2 When The Robot Lock-Up Form Is Required To Be Available	.28
	5.5.3 Robot Displays	.28
5.6	"Robot Access Period" - For Teams Attending District Events	.29
	5.6.1 'Robot Access Period' – Permitted Actions	.29
	5.6.2 'Robot Access Period' - Schedule	.29
5.7	Requesting A Robot Transport Exemption	.29
5.8	Crate Shipping Instructions For Robot Transport Exemption Approved Teams	
	And Those Attending FIRST Championship	.30
	5.8.1 Shipping Instructions For Robot Transport Exemption Granted Teams	.31
	5.8.2 Shipping Your Robot To The Championship	.31
	5.8.3 Shipping Your Robot Using Your Own Funds	.32
5.9	Important Shipping Contacts	.33
	5.9.1 FIRST Is Your Primary Contact	.32
		00

FIRST®, the FIRST® logo, FIRST® Robotics Competition®, and Gracious Professionalism®, and Sport for the Mind™ are trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST*). © 2014-2015 FIRST. All rights reserved.

BOBOT PACKAGING & TRANSPORTING

5.1 Overview

The following guidelines will ensure that your robot is packaged and documented correctly and arrives where it needs to be on time so that your team can focus on the most important thing – participating in the event!

Stop Build Day 5.2

All teams must cease work on their robot on or before Stop Build Day. Any team that fails to comply may jeopardize their participation in the rest of the FRC season. Note that "Stop Build Day" is a specific date. You may work on your robot until midnight local time on Stop Build Day.

STOP BUILD DAY is TUESDAY, FEBRUARY 17, 2015

Bag And Tag And Robot Transport

All teams must "Bag and Tag" their robots. Teams are also required to transport their bagged and tagged robot to their competition event(s). For convenience, teams may disassemble their robots and use two bags to "Bag and Tag" them. However, no more than two bags may be used and each bag must have its own numbered tag and entry on the Robot Lock Up Form described below.

When transporting their robot, teams may use any transportation method they wish (at their own risk and expense), as long as the robot remains sealed in the bag.

You must bring your own bagged, tagged and sealed robot into the venue through the designated robot entrance. Teams will not have access to the loading docks or forklifts; we recommend bringing a rolling cart or dolly to facilitate the load in.

Instructions For "Bag And Tag"

Each team will receive a special "Bag and Tag" kit in January with their Kickoff Kit. The "Bag and Tag" kit will contain:

- two plastic bags large enough to contain your robot; and
- at least ten zip tie tags with individual serial numbers.

The Proper Bagging Procedure:

- Set the bag on the floor, leaving room for the robot in the center.
- Place the robot in the center of the bag and pull the bag up around the robot. Be careful not to catch the bag on any corners or sharp edges.
- Tightly seal the bag with your next numbered tag.
- Complete the Robot Lock-Up Form as required in FRC Administrative Manual Section 5.5 Robot Lock and Unlock Instructions, to verify the date and time that the bag was sealed.
- You may not open your bag until:
 - a. it has been checked, approved by an on-site robot inspector, AND
 - the pits have officially been opened for robot work. You must have your Robot Lock-Up Form ready for review at the event. Do not forget to bring it.
- After your Robot Lock-Up Form has been properly checked and approved, your team may open the bag and prepare to compete.
- After the event, if you are attending another event, such as the FIRST Championship or another Regional or District event, re-seal your robot in the bag with a new tag and enter the new tag number on the Robot Lock-Up Form. You may not access your robot again until the next event, unless you are attending a Two-day District event, as explained in the FRC Administrative Manual Section 5.6 - Robot Access Period.
- Remove your robot from the event through the designated exit.

5. If you are attending the *FIRST* Championship as your next event, or have been granted an Exemption to ship your robot to an additional event, follow the instructions listed in *FRC Administrative Manual Section 5.7 - Requesting a Robot Transport Exemption*.

5.5 Robot Lock And Unlock Instructions

5.5.1 Completing the Robot Lock-Up Form

The <u>Robot Lock-Up Form</u> is available on the home page of the <u>FRC Competition Manual</u>. Make sure that you complete every item on the form. **INCOMPLETE FORMS WILL BE REJECTED BY ROBOT INSPECTORS AT EVENTS.** The <u>Robot Lock-Up Form</u> must be completed by an adult, 18 years old or older, who is NOT a student on the team.

By signing this form the signatory attests to the fact that he/she is:

- 18 years old or older;
- not a student member of the team, and
- making certain all rules and regulations regarding access periods and lock/unlock are being followed. Cell phone numbers are required for verification in case robot inspectors at events have questions regarding the form.

Remember to bring your <u>Robot Lock-Up Form</u> to your event. A missing <u>Robot Lock-Up Form</u> is one of the top reasons teams are delayed in being allowed to unbag their robots on time at events.

5.5.2 When the Robot Lock-Up Form is required to be available

The Robot Lock-Up Form MUST be used:

- on "Stop Build Day";
- during any 'Robot Access Period' taken advantage of if you are attending a Two-day District event. See FRC Administrative Manual Section 5.6 Robot Access Period for details. The 'Robot Access Period' only applies to teams attending Two-day District events. Teams attending Three-day Regional events do not have a 'Robot Access Period'; and/or
- before you leave an event, if you expect you will/may be attending a later event.

The <u>Robot Lock-Up Form</u> does not need to be used:

- before "Stop Build Day";
- during the event; and/or
- after an event, UNLESS you are competing at any later events, including the FIRST Championship.

5.5.3 Robot Displays

To assist teams with their promotional and community relations activities, robots may be unbagged and operated briefly after "Stop Build Day" for display purposes only.

- The intent of this option is to allow teams to briefly show their robot to their community, sponsors, or potential sponsors after "Stop Build Day".
 - Unbagging a robot and putting it on display for many hours (i.e. more than four (4)) at a time would not be considered a "brief" display.
- The Robot Lock-Up Form must be used to track the unbagging and rebagging of the robot during this period. In the "Explanation" column of the form, enter "Robot Display".
- No activity that could be considered "work on" or "practice with" the robot is allowed.
- Brief displays of robot functions driving for example are allowed, but not to the extent that they could be considered practice.
 - A good way to avoid turning a robot display period in to a practice session is to have non-drive team members operate the robot, and only for as short a time as necessary to show the robot's capabilities.

• If you have any questions about this new Robot Display option, please email frcteams@usfirst.org.

5.6 "Robot Access Period" - For Teams Attending District Events

All District events for the 2015 season are two-day events with the exception of District Championship events for the Michigan, Mid-Atlantic Robotics, New England, and Pacific Northwest Districts (the Indiana District Championship is considered a two-day event). Teams attending two-day events will not have as much time to work on their robots at events as teams attending traditional Three-day Regional events. Due to this, teams are granted an additional "Robot Access Period" to unbag their robot between "Stop Build Day" and their Two-day District events.

Teams attending Traditional Regional Events are NOT granted a "Robot Access Period" after "Stop Build Day". This section only applies to teams attending District Events.

5.6.1 'Robot Access Period' - Permitted Actions

During the Robot Access Period, teams may perform any activity they would normally do during the build season, including practicing with the robot.

5.6.2 'Robot Access Period' - Schedule

Teams may unlock their robot for a total of 6 hours during the 7-day period preceding any Two-day event in which their team will be competing with their robot. The 6 hours may be broken up in any way the team wishes, with the exception that no single access period may be shorter than 2 hours. The robot must be locked up in between sessions and this must be documented on the <u>Robot Lock-Up</u> Form each time.

5.7 Requesting A Robot Transport Exemption

Not all FRC teams have the ability to transport their robots to events. While it is our goal to assist as many teams as possible that have demonstrated hardships, due to the increasing number of FRC teams, we will be taking a much closer look at robot transport exemption requests. Starting this season, to be eligible for a robot transport exemption an FRC team must provide detailed information to establish that a substantial hardship exists:

- 1. The team is unable to physically transport the robot to the event themselves
 - Your team's home location is a great distance from the event you will attend and you do not have the means to transport your robot

And

- 2. The team is unable to pay to transport the robot to the event themselves
 - Your team faces significant challenges that prevent you from paying to transport the robot to the event you will attend

How to Request a Robot Transport Exemption:

- 1. To request a Robot Transport Exemption, you must fill out the "Robot Transport Exemption" form, located here: <u>Robot Transport Exemption Request Form</u> and email it to <u>frclogistics@usFIRST.org</u>.
- 2. Use the subject line: "Robot Transport Exemption Request, Team XXXX", with your team number in place of 'XXXX'
- 3. FIRST HQ will review your request and respond with either "approved" or "denied"
 - a. Teams will be denied a Robot Transport Exemption if it does not appear that your team will experience a substantial hardship from transporting the robot to a Regional Event.
- 4. If your team has been approved, you will receive the electronic shipping documents and instructions on shipping your robot to the Regional Event a few weeks before your event.

Basic Exemption Information:

- Only teams that have requested and been granted a Robot Transport Exemption will be able to make use of the FedEx shipping donation.
- Robot Transport Exemptions are for Regional Events only. Robot Transport Exemptions to District Events will not be permitted. 2.
- Robot Transport Exemption requests will be handled on a case-by-case basis. Not every request will be granted. **Exemptions** must be submitted by Friday, December 19, 2014.
- If you request an Exemption, but then do not have a need for it, you must notify FIRST HQ that you no longer require an Exemption. This can be done by emailing frclogistics@usFIRST.org.
- Team's requests for Exemptions to consecutive weekly events will not be granted.
- If an Exemption is approved, FIRST HQ will establish a robot storage/drayage location near the event site.
- Robot transportation services under the FedEx donation will be provided for that event and FIRST HQ will provide shipping instructions for approved teams.
- Your team may request a Robot Transport Exemption to the Regional in Australia, however your team will not be able to participate in Regional events on the following weeks: 1, 2, 4, or 5.

Do not ship robots directly to the site! All Robot Transport Exemptions must use the Drayage service that is provided by FIRST.

If you have been granted a Robot Transport Exemption, you can find shipping instructions under FRC Administrative Manual Section 5.7 -Requesting a Robot Transport Exemption.

NOTE: Robots with exemptions and those attending the FIRST Championship must be bagged and tagged with the robot shipped in a shipping crate. Teams may not open the bag until an onsite robot inspector has approved your team to do so.

Crate Shipping Instructions For Robot Transport Exemption Approved Teams And Those Attending FIRST Championship

Important Information:

- All Robot Transport Exemption granted teams and ALL teams attending the FIRST Championship must build a crate to ship their
 - Robot shipments in crates must abide by standard freight shipping processes. This applies to any team moving their robot within a crate.
 - b. FedEx will not pick up a robot that is not in a crate.
- See the "Shipping Crate Construction" document posted on the Robot Shipping website for more details. As a reminder these minimum guidelines must be followed:
 - Keep your FILLED crate weight below 400 pounds. Teams are expected to use their crate to ship their robot and to minimize any additional components or tools included, in order to keep the crate weight below 400 pounds.
 - Do not include any tools, luggage or additional materials that will cause your crate to exceed the maximum weight. Any teams exceeding 400 pounds will be charged overage fees accordingly.
- Affix sheets of plexi-glass, plastic, or a sheet protector securely to the outside of your crate for a place to put the shipping documents before shipment. Failure to do this may result in lost or delayed robots, due to missing or ripped shipping documents.
 - a. We recommend purchasing a Job Ticket Holder, model number S-2761, from ULINE. You can see this product here.
- FedEx Freight requires prior notice for pickups, especially if your location does not have a loading dock.

- a. If you have been granted an Exemption and/or are attending the *FIRST* Championship, you must call after you have secured your spot for Championship to schedule your pickup and indicate if there are any special instructions for pickup, i.e., lift gate needed or shipment is located at a school.
- 5. Please keep in mind that there could be a delay in FedEx's availability to pick up your robot, due to a proper truck being available.

 Therefore, don't wait until the last minute.
 - a. Please make sure you contact the appropriate division of FedEx based upon the instructions provided on your waybill; i.e., Air, International Express or Freight.
 - b. For more information see the "Quoting and Booking a Robot Crate" document posted with the FRC Administrative Manual for more details.
- 6. If you find that your robot crate has been damaged on the journey to your event, you must notify the Pit Admin at your event on the FIRST day of the event.

Tool Crate Information:

Teams granted an Exemption or attending *FIRST* Championship may ship or bring a tool crate. Some teams choose to ship or bring a second crate to the event(s) to have additional tools available.

Shipping a second crate is allowed, but only if the team meets the following requirements:

- 1. The team is solely responsible for all shipping and drayage costs for their second crate;
- 2. The second crate may not be shipped using the FedEx donation. Abuse of the FedEx donation may result in a loss of this option for teams in the future;
- 3. Paint or stencil "**TOOL CRATE**" in letters at least 6 inches tall on each side of the crate. Failure to properly label which crate contains tools may delay arrival of your robot at the event.

5.8.1 Shipping Instructions for Robot Transport Exemption Granted Teams

If you are approved for an exemption, *FIRST* HQ will provide you with two FedEx vouchers for transportation to/from the official drayage location with specific instructions as to which type of FedEx service you are eligible for based upon geography.

- 1. Your robot will be shipped to a drayage location identified by *FIRST* depending upon the location where it will be stored and then transported in time for your event.
- 2. Once at the venue, you will uncrate the robot and return it to the crate at the conclusion of the event for re-shipment.
- 3. Once the robot is re-crated, attach the appropriate shipping documentation to the crate inside the plastic document cover, to facilitate shipping from the drayage facility to its next destination (Regional, home, or *FIRST* Championship).
- 4. After your robot has been picked up by FedEx, please provide *FIRST* HQ (frclogistics@usFIRST.org) with a copy of your shipping documentation. This will allow *FIRST* to assist with any logistical complications.
- 5. The drayage company will pick it up at the event, bring it back to the drayage location and ship the robot to its next destination using instructions you provide which are attached to your crate.
- 6. International teams:
 - a. Please make sure you have also included the necessary customs documents; i.e., commercial invoice and certificate of origin, etc... so that your shipment is not delayed.
 - b. Due to import and export laws, *FIRST* has created a secondary document for International Teams. For more information see the "International Shipment Guide" document posted with the *FRC Administrative Manual* for more details.

If your *FIRST* event is the one to which you have been granted a Robot Transport Exemption, you must still bag and tag your robot on "Stop Build Day". You may be able to delay shipping your robot until after "Stop Build Day", and robot inspectors will need evidence that the robot has not been worked on between "Stop Build Day" and shipment. Follow the Robot Lock and Unlock Instructions in *FRC Administrative Manual Section 5.5 – Robot Lock and Unlock Instructions* to lock up your robot. DO NOT open your bag at the event until it has been checked, approved by a robot inspector, AND the pits have officially opened for robot work. Remember you will need to re-bag the robot again at the conclusion of the event if you are going to a later competition.

If the event to which you have been granted a Robot Transport Exemption is not your *FIRST* event you must bag and tag your robot at the conclusion of the earlier event, bring it back to your build site or other location away from the event venue, crate the robot and prepare for shipment. Follow the Robot Lock and Unlock Instructions in *FRC Administrative Manual Section 5.5 – Robot Lock and Unlock Instructions* to lock up your robot at the earlier event. DO NOT open your bag at the next event until it has been checked, approved by a

robot inspector AND the pits have officially opened for robot work. Remember you will need to bag the robot again at the conclusion of the next event if you are going to a later competition.

LIMITATIONS OF THE FEDEX VOUCHER FOR ROBOT TRANSPORT EXEMPTION APPROVED TEAMS:

- If you are attending multiple events and have requested a Robot Transport Exemption, you will still ONLY receive two (2) FedEx vouchers. Multiple events do not increase the number of FedEx vouchers a team will receive. The maximum number of FedEx vouchers any team will receive during the season is two (2).
- After you have used your two FedEx vouchers, you will be responsible for the robot shipping costs to/from the additional events in which your team is competing, including the FIRST Championship.
- When teams qualify for the FIRST Championship, they will receive one (1) FedEx electronic shipping document by email to ship their robot to St. Louis. However, teams with a Robot Transport Exemption will NOT receive this voucher, as the two (2) initial vouchers received are the maximum allowance of shipping vouchers for teams per above.
- Teams with Robot Transport Exemptions have the option of using their second voucher to get to a second Regional, or FIRST Championship, or home. (ALL teams will receive a voucher to get their robot home from FIRST Championship at the FIRST Championship event during Check Out).

5.8.2 Shipping your Robot to the Championship

- If your team qualifies for FIRST Championship, you will be emailed one (1) FedEx electronic shipping document after the qualifying event to ship your robot to the FIRST Championship.
- Your team's Main and Alternate Contact will receive an email advising them to complete a document with the shipping information to ship your robot to Championship. They will then need to promptly reply back with this information. Failure to provide this information in a timely fashion could result in your robot not making it to Championship in time.
- Robots going to FIRST Championship must be shipped as soon as you have secured your spot and completed payment, and no later than the Thursday after the final event that the team participated.
 - a. Non-Exemption Granted Teams:
 - After you have competed at another event, you must ensure your robot is bagged and tagged at the conclusion of that event per the instructions in FRC Administrative Manual Section 5.3 - Bag and Tag and Robot Transport. Bring your robot back to your build site or other location away from the event venue, crate the robot and prepare for shipment to FIRST Championship. Follow the instructions as outlined in FRC Administrative Manual Section 5.7 – Requesting a Robot *Transport Exemption* regarding crating requirements.
 - Exemption Granted Teams:
 - If you are shipping to FIRST Championship from an earlier event in which you were given an Exemption, your robot will be sent from that earlier event to its drayage location. From there, your robot will be shipped directly to the FIRST Championship drayage location.
- All teams attending the FIRST Championship will receive (1) one shipment home for their robot under the FedEx donation. The FedEx shipping document for this shipment will be distributed at FIRST Championship at Check Out.
 - a. This shipping document will be pre-printed with the shipping information that you provided before Championship.
- If the team would like to take their robot home as they leave FIRST Championship, they must email frclogistics@usFIRST.org to have their request approved.

5.8.3 Shipping your Robot using your own Funds

Teams may ship their robot to any event, with the exception of the FIRST Championship, at their own cost without receiving an approved Robot Transport Exemption from FIRST. DO NOT ship directly to the venue. However, unless a team has received an exemption approval, the final leg of the robot's journey, arrival at the venue and delivery to the team pit, must be done by hand by the team.

5.9 Important Shipping Contacts

5.9.1 *FIRST* is Your Primary Contact

If you have any questions about robot shipping rules or processes, call FIRST! Rules in this chapter are written and administered by FIRST, not FedEx. FIRST is not responsible for information given by representatives of outside vendors.

Additional instructions:	http://www.usfirst.org/frc/manual
Download shipping labels and Robot Lock-Up Form:	http://www.usfirst.org/frc/manual
Phone:	(800) 871-8326 x0 OR (603) 666-3906 x0 – 8:30 AM to 5:00 PM ET
E-mail:	frclogistics@usfirst.org Subject line: FIRST Team [your #] Shipping Question
Fax:	(603) 666-3907
Address:	Team Support/Operations 200 Bedford Street Manchester, NH 03101

5.9.2 FedEx

Call FedEx to schedule your pickup and with any FedEx tracking questions. Have your Bill of Lading and/or Pro Number available when you call.

Website:	www.fedex.com
Phone – FedEx Freight:	1-866-393-4585
Phone – FedEx Express:	1-800-GO-FedEx (1-800-463-3339)

Awards

6.0 Av	wards	S	34	
6.1	FIRS1	FIRST Robotics Competition Awards		
6.2	Comp	Complete Awards List		
6.3	Awar	ds Submission Process	38	
	6.3.1	Submission Dates	39	
6.4	Chair	man's Award	39	
	6.4.1	Overview	39	
	6.4.2	First-Year (Rookie) and NASA Grant Teams	39	
	6.4.3	Submission Information	39	
	6.4.4	The Chairman's Award Championship Award Process	43	
	6.4.5	The Allaire Medal—Leadership Exemplified	43	
6.5	FIRS1	T [®] Future Innovator Award (FFIA) <i>Sponsored by the Abbott Fund</i>	43	
6.6	FIRS1	Robotics Competition Dean's List Awards	43	
	6.6.1	Submissions	44	
	6.6.2	Criteria	44	
	6.6.3	FRC Judging	44	
6.7	Media	a And Technology Innovation Award Sponsored by Comcast NBCUniversal	46	
	6.7.1	Overview	46	
	6.7.2	Award Criteria	46	
	6.7.3	Judging Criteria	46	
	6.7.4	Submission Process	47	
	6.7.5	Submission Dates	47	
6.8	Wood	die Flowers Award	48	
	6.8.1	Eligibility	48	
	6.8.2	Spirit of the Award	48	
	6.8.3	Award Eligibility Requirements	48	
	6.8.4	Judging Criteria	48	
	6.8.5	Entry Requirements	49	
	6.8.6	Submission Deadline	49	
	6.8.7	Entry Process	49	
	6.8.8	Prior Year Regional WFFA Recipient Re-Submission	50	
6.9	Entre	preneurship Award Sponsored by Kleiner, Perkins, Caufield & Byers	50	
		CONTINUED ON PAGE 35		

	6.9.1	Business Plan Submission	50
	6.9.2	Guidelines	50
	6.9.3	Eligibility	51
6.10	FIRST	Safety Animation Award	51
	6.10.1	Award Overview	51
	6.10.2	Theme	51
	6.10.3	Criteria	52
	6.10.4	Submission	52
	6.10.5	Judging	52

6.1 FIRST Robotics Competition Awards

The FIRST Robotics Competition (FRC) is about much more than the mechanics of building a robot or winning a competitive event. It is about the partnership among people who are part of the FIRST community and the impact on those who participate in FIRST programs with a united goal of achieving The FIRST mission. The FIRST mission is to change the way young people regard science and technology and to inspire an appreciation for the real-life rewards and career opportunities in these fields.

This chapter contains descriptions of the FIRST Robotics Competition Awards. Unless otherwise noted, all awards are earned at Regional events, District events, District Championships and the FIRST Championship.

If a team has a question during the event about the awards process, a pre-college student should go to Pit Admin to request a discussion with the Judge Advisor. Pit Admin will then get in touch with the Judge Advisor and a mutually convenient time will be arranged to meet. As with the rule regarding questions for the Head Referee in the Tournament Section of the Game Manual, T14, the expectation is the discussion will take place between a pre-college student on the team and the Judge Advisor, though mentors and other adults associated with the team may listen in. Please note that while the Judge Advisor will address questions related to the awards process in general, he or she will not address questions related to why certain teams were or were not selected for specific awards, as that would breach the confidentiality of the selection process.

For the purpose of awards at the FIRST Championship, all awards are given out at the Division level except the Finalist and Winner, which are given at the Subdivision level. Two Subdivisions are combined to create one Division.

Complete Awards List

Award	Description	Selected By	Regional	District	District CMP	FIRST CMP Division	FIRST CMP
Chairman's Award	The most prestigious award at <i>FIRST</i> , it honors the team that best represents a model for other teams to emulate and best embodies the purpose and goals of <i>FIRST</i> .	Chairman's Judge Panel (application and interview process)	•	~	~		~
Creativity Award Sponsored by Xerox	Celebrates creativity in design, use of component, or strategy of play.	Judges	~	•	•	•	
Engineering Inspiration Award	Celebrates outstanding success in advancing respect and appreciation for engineering within a team's school and community.	Judges	* *	~	~*	~ *	
Entrepreneurship Award Sponsored by Kleiner Perkins Caufield & Byers	Celebrates the entrepreneurial spirit by recognizing a team that has developed the framework for a comprehensive business plan to scope, manage, and achieve team objectives.	Judges	•	~	~	•	
Excellence in Engineering Sponsored by Delphi	Celebrates an elegant and advantageous machine feature.	Judges	~	•	•	•	
FIRST Dean's List Award	Celebrates outstanding student leaders whose passion for and effectiveness at attaining <i>FIRST</i> ideals is exemplary.	Dean's List Judge Panel (nomination & interview process)	•		•		~

Award	Description		Regional	District	District CMP	FIRST CMP Division	FIRST CMP
FIRST Future Innovator Award Sponsored by the Abbott Fund	Celebrates innovation and intellectual property creation inspired by the <i>FIRST</i> season experience.	FIRST Future Innovator Award Judge Panel					
Founder's Award	Recognizes the organization or individual that has contributed significantly to the growth of <i>FIRST</i> .	FIRST					•
Gracious Professionalism Award Sponsored by Johnson & Johnson	Celebrates the team that exemplifies the core values of <i>FIRST</i> in their relationships with other teams and by their demonstrated Gracious Professionalism®	Judges	•	•	•	•	
Highest Rookie Seed Award	Celebrates the highest-seeded rookie team at the conclusion of the qualifying rounds.	Robot Performance	•	•	•	~	
Imagery Award In honor of Jack Kamen	I This award calabrates attractiveness t		•	•	~	•	
Industrial Design Award Sponsored by General Motors	Celebrates form and function in an efficiently designed machine that effectively addresses the game challenge.	Judges	•	•	•	•	
Industrial Safety Award Sponsored by Underwriters Laboratories	Celebrates the team that progresses beyond safety fundamentals by using innovative ways to eliminate or protect against hazards.	Safety Advisors	•	•	•	•	
Innovation in Control Award Sponsored by Rockwell Automation	Celebrates an innovative control system or application of control components—electrical, mechanical or software—to provide unique machine functions.	Judges	•	•	•	•	
Judges' Award During the course of the competition, the judging panel may decide a team's unique efforts, performance, or dynamics merit recognition.		Judges	•	•	•	*	
Media & Technology Innovation Award Sponsored by Comcast NBCUniversal	on Award marketing strategy, and rationale for digital channels to disseminate						•

Award	Description	Selected By	Regional	District	District CMP	FIRST CMP Division	FIRST CMP
Quality Award Sponsored by Motorola	Celebrates machine robustness in concept and fabrication.	Judges	~	•	~	•	
Rookie All Star Award	Celebrates the rookie team exemplifying a young but strong partnership effort, as well as implementing the mission of <i>FIRST</i> to inspire students to learn more about science and technology.	Judges	~	~	•	•	
Rookie Inspiration Award	Celebrates a rookie team's outstanding success in advancing respect and appreciation for engineering and engineers, both within their school, as well as in their community.	Celebrates a rookie team's utstanding success in advancing espect and appreciation for ngineering and engineers, both vithin their school, as well as in their		•	•	~	
Safety Animation Award (This is a pre-season award)	Recognizes the team that submits a short animated film that best promotes the current season's team safety focus.	UL					
Team Spirit Award Sponsored by Chrysler Celebrates extraordinary enthusiasm and spirit through exceptional partnership and teamwork furthering the objectives of FIRST.		Judges	~	~	•	~	
Volunteer of the Year Award	Presented to an individual, business, or organization that consistently excels in their efforts with proven results in the areas of Impact, Leadership, Personal Commitment, Community and Historical Contributions.	Regional/ District Planning Committee	~		•		~
Woodie Flowers Award Sponsored by Dr. William Murphy	Is presented to an outstanding Mentor in the robotics competition who best leads, inspires, and empowers their team using excellent communication skills.	Prior WFA Winners	•		•		~
Finalist	Celebrates the alliance that makes it to the final match of the competition	Robot Performance	~	~	~	**	~
Winner	Celebrates the alliance that wins the final match of the competition Robot Performance		~	~	•	**	~

^{*}NASA is generously sponsoring the registration fees to the 2015 *FIRST* Championship for teams earning the Engineering Inspiration Award at District Championships and Regionals that occur within the United States. They are also sponsoring the 2016 *FIRST* Championship registration fees for the four teams that earn the Engineering Inspiration Award at the 2015 *FIRST* Championship.

6.3 Awards Submission Process

The Main or Alternate contact for your team must assign at least one (1) and up to four (4) student award submitters in FRC TIMS. Those students will be notified of their status via email and may then log into Youth Team Member Registration System (formerly known as STIMS) and be able to view the awards submission section on their main page.

^{**}These awards are given at the Subdivision level instead of the Division Level. All other awards marked "FIRST CMP Division" are given at the Division level.

Chairman's Award, Entrepreneurship Award, Media and Technology Innovation Award, Media and Technology Innovation Award, Safety Animation Award, and Woodie Flowers Award must be submitted through the Youth Team Member Registration System (formerly known as STIMS) https://my.usfirst.org/stims/site.lasso. The *FIRST* Dean's List Award must be submitted by the team's main or alternate contact through TIMS, https://my.usfirst.org/frc/tims/site.lasso.

By making a submission the Submitter irrevocably grants to *FIRST* and the *FIRST* designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting *FIRST* and *FIRST* programs.

6.3.1 Submission Dates

Submission open and close dates will be as follows (All award submissions will **open and close at Noon Eastern Time** unless otherwise stated.):

Award	Open Date	Close Date
Safety Animation	Thursday, October 9, 2014	Thursday, December 11, 2014
Chairman's Award	Thursday, November 13, 2014	Thursday, February 19, 2015
Entrepreneurship Award	Thursday, November 13, 2014	Thursday, February 12, 2015
Media & Technology Innovation Award	Saturday, February 1, 2015, Midnight EST	Saturday, February 28, 2015, 11:59 pm EST
Woodie Flowers Award	Thursday, November 13, 2014	Tuesday, February 12, 2015
Dean's List	Thursday, November 13, 2014	Thursday, February 19, 2015
FIRST Future Innovator Award	To Be Announced	

6.4 Chairman's Award

The Chairman's Award is the most prestigious award at *FIRST*, it honors the team that best represents a model for other teams to emulate and best embodies the purpose and goals of *FIRST*.

It was created to keep the central focus of FRC on the ultimate goal of transforming the culture in ways that will inspire greater levels of respect and honor for science and technology, as well as encouraging more of today's youth to become scientists, engineers, and technologists.

6.4.1 Overview

The concept of the Chairman's Award includes Regional and District Championship Chairman's Awards, which enable *FIRST* to recognize more teams for their exemplary efforts in spreading the *FIRST* message, as well as their talents in organizing materials for their presentations.

The teams who have earned the Regional and District Championship Chairman's Award can travel to the *FIRST* Championship to be considered for the Chairman's Award.

6.4.2 First-Year (Rookie) and NASA Grant Teams

Because the Chairman's Award recognizes sustained excellence and impact, not just a one (1) year team effort, it is not possible for a first year (rookie) team to receive the Chairman's Award. Rookie teams will not be interviewed at events for the Chairman's Award, and should not request an interview, as Chairman's Award judging resources are limited.

However, all teams that received a NASA Grant, including rookie recipients, must prepare a Chairman's Award submission on line through the *FIRST* Youth Team Member Registration System (formerly known as STIMS) https://my.usfirst.org/stims/site.lasso as part of the grant requirement (even though Rookie NASA Grant Teams will not be considered for the award, are not required to provide a Chairman's Award video, and will not be interviewed).

All teams are encouraged to print a copy of their final submission for their records and to confirm for themselves that the submission was accepted.

6.4.3 Submission Information

The criterion for the Chairman's Award has special emphasis on recent accomplishments in both the current season and the preceding two to five years. The judges focus on teams' activities over a sustained period, as distinguished from just the six (6) week design and build period.

Teams are eligible for the Chairman's Award at each Regional or eligible District event at which they are competing. Teams will be restricted to earning this award only once at each level of competition. In other words, once a team has earned a Chairman's Award at a Regional or District event, they may not earn it again that season at a later regional or district event. Note that this applies to District teams who travel to Regionals as well. A District team earning a Chairman's Award at a District event may not earn it again at a later Regional. Districts teams who participate in inter-district play are not eligible for the Chairman's Award at those events.

FIRST will present a Chairman's Award at each Regional and District event. Chairman's Award recipients from District events will go forward to be considered at the District Championship.

The recipients from the Regional events and the District Championships will be eligible for the Chairman's Award presented at the *FIRST* Championship.

Hall of Fame

Hall of Fame members; i.e., teams that have already earned the Championship Chairman's Award, are ineligible to resubmit for consideration for five (5) years.

6.4.3.1 Submission Content

The Chairman's Award is presented to the team judged to have created the best partnership effort among team participants and which best exemplified the true meaning of *FIRST* through measurable impact on its participants, school, and community at large.

The *FIRST* Robotics Competition is not about machines; it is about the experience of people working together toward a shared goal. Documenting and preserving your team's *FIRST* experience becomes an important component of the over-all *FIRST* experience.

6.4.3.2 Submission Format

The submission, excluding the Executive Summary, will be limited to 10,000 characters, including spaces and punctuation, and may include up to four (4) photographs totaling no more than 1.0Mb of memory.

6.4.3.3 Submission Process

Students must submit their team's Chairman's Award submission through the *FIRST* Youth Team Member Registration System (formerly known as STIMS) (https://my.usfirst.org/stims/site.lasso). Follow the directions shown on the site to submit your team's entry. Submission dates are listed in *FRC Administrative Manual Section 6.3.1 – Submission Dates*.

Submitters must enter information, save it, and return to the site to edit the Chairman's Award submission until they are ready to finalize it for final judging. All entries must be finalized by the deadline listed in *FRC Administrative Manual Section 6.3.1 – Submission Dates*. No entries will be accepted or altered after this deadline.

Chairman's Award submitters will go into Youth Team Member Registration System (formerly known as STIMS) (https://my.usfirst.org/stims/site.lasso) and enter the following required information:

- Team Number
- Team Name/Nickname
- Describe the impact of the FIRST program on team participants with special emphasis on the current season and the preceding two to five years
- Describe the impact of the FIRST program on your community with special emphasis on the current season and the preceding two to five years
- Describe the team's innovative or creative method to spread the FIRST message
- Describe examples of how your team members act as role models and inspire other FIRST team members to emulate
- Describe the team's initiatives to help start or form other FRC teams
- Describe the team's initiatives to help start or form other FIRST teams (including Jr. FLL, FLL, & FTC)
- Describe the team's initiatives on assisting other *FIRST* teams (including Jr. FLL, FLL, FTC & FRC) with progressing through the *FIRST* program
- Describe how your team works with other FIRST teams to serve as mentors to younger or less experienced FIRST teams
 (includes Jr. FLL, FLL, FTC & FRC teams)

- Describe your Corporate/University Sponsors
- Describe the strength of your partnership with your sponsors with special emphasis on the 2013/2014 year and the preceding two to five years
- Describe how your team would explain what FIRST is to someone who has never heard of it
- Briefly describe other matters of interest to the *FIRST* Judges, if any
- Upload up to four (4) pictures (optional)
- Essay (10,000 characters allowed, including spaces and punctuation, or approximately 1500 words): Judges encourage creativity of expression but the essay must clearly deliver information and facts describing what the team is all about. The essay should draw attention to the strengths of the team. This essay, along with the other information, will serve as the basis for the judges to make the decision on which team earns the Chairman's Award.
- Enter in a link through YouTube for your official Chairman's Video. This link does not need to be entered by the February 19th submission deadline. FIRST requests that the Team submit their video before the Team attends the first event at which it is eligible to compete for the Chairman's Award. Failure to submit this link will not preclude a Team from earning the Chairman's Award. (You will still be required to bring a copy to each event you are eligible at).

Chairman's Award submissions are posted on a private, password-protected site where only the judges and authorized FIRST staff can read the entries. Please note: By making a submission the Submitter irrevocably grants to FIRST and FIRST designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting FIRST and FIRST programs.

Judges at each regional and district event will be interviewing the candidates who successfully completed the submission process. Teams should always print and bring a hard copy of their submission to the event.

In preparing this document, bear in mind that students, engineers, teachers, community, school, sponsors, families, and other supporters, as well as the machine itself are all integral parts of your team experience. Your submission needs to clearly convey the factors outlined above.



Chairman's Award Judges also review the information entered in the Judges Information Page as part of the Chairman's Award submission. This information is entered as part of the Team Information Management System (TIMS) at https:// my.usfirst.org/frc/tims/site.lasso.

6.4.3.4 Interview Process and VIDEO Requirement

All teams submitting for the Chairman's Award will need to sign up at pit admin in order to be interviewed by the Judges at the event. If a team does not sign up for an interview slot, they will be considered ineligible to earn the award at that event. Chairman's Award interviews are limited to ten (10) minutes total; up to seven (7) minutes for a presentation by the team (which includes set-up) and up to five (5) minutes of question and answer led by the Judges. Not more than three (3) student team members, plus one (1) adult mentor, are allowed to attend the interview. Only student (non-mentor) team members are allowed to present information or answer questions from the Judges. The one (1) adult mentor from the team who may attend may observe and later provide feedback to the team, but the mentor is not allowed to provide any assistance during the interview itself. If the mentor provides any assistance during the interview, the team will be downgraded. Exception: If necessary, the adult mentor may provide translation services for students needing foreign language or sign language translation so the students and Judges may communicate. This adult mentor may provide no assistance to the team other than translation service.

Teams submitting for the Chairman's Award must provide a VIDEO to the judges at the start of their Chairman's Award interview. The content of the video should explain what the team has done to earn the Chairman's Award. The video content may be in the team's native language, but if that language is not English, the team must add English subtitles to be eligible for the Chairman's Award at any event in the US or Canada, or at any non-US or Canadian event at which their native language is not generally spoken. The video may be shown to the judges during the team's seven (7) minute presentation time or the team can choose to not show the video during the presentation time. Even if the video is NOT shown during the interview, a VIDEO must still be provided to the Judges in order for the team to be considered for the Chairman's Award. In addition, the team must provide the equipment for viewing (i.e. laptop/speakers etc.) the video. Teams who do not submit a VIDEO to the judges will not be considered eligible for the Chairman's Award and will not be interviewed by the judges. This is applicable at all events including the FIRST Championship.

The VIDEO format should be as follows:

- A 16:9 ("widescreen aspect ratio")
- Not more than 3 minutes long, no shorter than 1 minute long.



Any team that submitted for the Chairman's Award and wants their VIDEO back at the end of the event will need to collect their VIDEO, after the awards ceremony, from Pit Administration. In addition, the team earning Chairman's Award will also be required to bring a copy of their VIDEO to the FIRST Championship.

2015 FIRST Robotics Competition Administrative Manual Section 6 – Awards Page 41

- Include a clean audio track
- Free of copyright restrictions, including music.

VIDEO may consist of:

- Video footage
- Voice over/music over still photographs
- Animated presentation
- PowerPoint converted to VIDEO format

Copyright

- If using copyrighted music must have written permission
- If using Creative Commons Music (CCM) on line, the music must be used in accordance with the appropriate license and properly attributed.
- Music may not contain offensive or suggestive language

Content Guidelines

- Please show us what you are doing to earn the Chairman's Award
- Please do not identify non-team minors by name or specific location. Use only first names, **no** locations.

Other required information to be given to the judges

Permission for FIRST to use your video in marketing & promotional material and/or live at FIRST events & competitions (CA Video Use Consent Form)

DVD Requirements

- Ensure that your DVD is actually a DVD file, playable with a standard DVD player. If we cannot view your DVD, you may be ineligible for the award.
- DVD itself must be labeled with your team number and team name
- DVD case or envelope must also be labeled with your team number and team name
- A completed Chairman's Award Video Consent Form (see above) must be folded and included in the DVD case or envelope.

USB Flash Drive Requirements

- USB Flash Drive must contain only the Chairman's Award video file
- Video file must be in the QuickTime (.mov) or Windows Media (.wmv) file format compressed with the H.264/MPEG-4 codec
- USB Flash Drive itself must be labeled with your team number, at a minimum. If you have room, please add your team name as well. Consider using a label maker or a piece of tape and permanent marker. Ensure the label is secure and the team number is easily read.
- To reduce the chance of the USB Flash Drive being misplaced, the Drive must be placed in a clear, sealable plastic bag before it is given to the Judges. Label the bag with team number and name. This label may be a piece of paper, printed with the required information, inserted in the bag and oriented so it may be read without opening the bag
- A completed Chairman's Award Video Consent Form (see above) must be folded and included in the plastic bag.

Tips, Timelines & Tools

■ Guidelines and Tips video by Paul Lazarus of White Dwarf Productions



The Chairman's Award is our highest honor and teams who receive the Chairman's Award represent the highest standards of FIRST. When the Chairman's judges have narrowed the selection to two or three teams, these contenders for the Chairman's Award at all events will have their VIDEO viewed by the Judge Advisor for appropriate content and to ensure that the above guidelines have been met. Although the Chairman's judges will not be judging your video as part of your submission, a VIDEO with inappropriate content will disqualify a team for the award.

- Chairman's Award Video Helpful Tips and Guidelines
- Chairman's Award Video Suggested Shot List
- Chairman's Award Video Tape Log (example)
- Chairman's Award Video Tape Log (blank)
- Chairman's Award Video Consent and Release Form

NEW Regional/District CMP Chairman's Award

Team's that have earned the Chairman's Award at a Regional or District Championship will be requested to submit a copy of their official Chairman's Award Video and a video of their presentation to be posted along with their online submission. These will be used as resources for current and future Chairman's Award submitting teams. We want other teams to be able to see what it takes to be selected for this most prestigious award.

6.4.4 The Chairman's Award Championship Award Process

At the FIRST Championship, a panel of judges will interview teams and review the submissions from all the Regional and District Championship Chairman's Award recipients and will select one winning Chairman's Award recipient. This team has the additional honor of choosing one of its junior or senior student members to receive the Allaire Medal.

6.4.5 The Allaire Medal — Leadership Exemplified

The Allaire Medal recognizes leadership exemplified and is awarded to an individual student on the team selected as the Chairman's Award team.

Named in honor of Paul A. Allaire, a long-serving FIRST Chairman of the Board, the Allaire Medal is given to the student who has demonstrated outstanding leadership on his/her FIRST team, within his/her school and community and whose personal character best embodies the spirit of FIRST.

The team earning The Chairman's Award at the Championship will select the Allaire Medal recipient. The adult and student team members of the Chairman's Award team determine the recipient. The recipient must be a high school junior or senior who has been accepted into a four (4) year degree program at a college or university. The Allaire Medalist receives the Allaire medallion and up to \$10,000 in total scholarship support for undergraduate tuition, room/board and fees/books at his or her intended university or college.

FIRST® Future Innovator Award (FFIA) Sponsored by the Abbott Fund

This award criteria and submission is currently being reviewed – More details to come.

FIRST® Robotics Competition Dean's List Awards 6.6

In an effort to recognize the leadership and dedication of FIRST's most outstanding secondary school students, the Kamen family sponsors awards for selected 10th or 11th grade* students known as the FRC® FIRST Dean's List and the FTC® FIRST Dean's List.

Similar to the very prestigious National Merit Scholarship Award, there are three (3) levels of FIRST Dean's List Award students.

- FRC & FTC FIRST Dean's List Semi-finalists, the group of two(2) students in their 10th or 11th school year nominated by each FRC or FTC team as applicable.
- FRC & FTC FIRST Dean's List Finalists comprised of the two (2) students selected at each FTC Championship Tournament, FRC Regional or FRC District Championship (the Qualifying Events). At FRC District Championships, more than two (2) students may be selected, depending on the size of the district.
- FRC & FTC FIRST Dean's List Winners for both FRC and FTC are the students selected from the applicable FIRST Dean's List Finalists at the FIRST Championship.

The students who earn FRC or FTC FIRST Dean's List status as either a Semi-finalist, Finalist or Winner, will not only be great examples of current student leaders who have led their FRC or FTC teams and communities to increased awareness for FIRST and its mission while achieving personal technical expertise and accomplishment, but it is FIRST's goal that all Dean's List Semi-Finalists, Finalists and Winners will continue on, post award, as great leaders of FIRST's ever growing student alumni.

Since its introduction in 2010, the FIRST Dean's List Award has attracted the attention of prestigious colleges and universities who desire to have FIRST Dean's List students apply for admissions. As FIRST believes such interest is beneficial to our students, those students selected as Finalists and Winners will be asked to provide written consent for the release and use of certain personal information, including image, to interested colleges/universities for the sole purpose of allowing



For regions of the world that do not use this grades such as this to identify years of schooling: This award is intended for students who are two (2) to three Hadrens away from entering college or university. Students that would be attending college or university in the next academic year are not eligible.

those institutions to contact the students if they wish. Colleges/universities have expressed interest in meeting FIRST Dean's List Award Winners and FIRST hopes that each team will take advantage of the opportunity to nominate two of their best students as FIRST Dean's list Semi-finalists.

6.6.1 Submissions

After careful review of the criteria for the Dean's List Award (see the FRC Administrative Manual Section 6.6.2 - Criteria) each FRC and FTC team is invited to nominate two student members as Semi-finalists who are 10th or 11th grade students. It's important that teams nominate only those students they believe are truly deserving of this honor. A mentor, who is not related to either of the students chosen as the team's Dean's List Semi-finalists, shall complete and submit the application to compete for the FIRST Dean's List Finalist designation at one (1) qualifying event. Students previously selected as FIRST Dean's List Semi-finalists or Finalists in a prior year are eligible for nomination again this year provided they meet all of the criteria.



By making a submission, the Submitter irrevocably grants FIRST and FIRST designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the award, and/or otherwise promoting FIRST and FIRST programs.

6.6.2 Criteria

Criteria for selection of the FRC and FTC FIRST Dean's List Award shall include, but not be limited to a student's:

- Demonstrated leadership and commitment to the ideals of FIRST
- Effectiveness at increasing awareness of FIRST in the school and community
- Interest in and passion for a long-term commitment to FIRST
- Overall individual contribution to their team
- Technical expertise and passion
- Entrepreneurship and creativity
- Ability to motivate and lead fellow team members

Although a single mentor must submit the nomination, the team as a whole must verify the accuracy of the submission. FIRST is relying upon the team for the veracity and accuracy of the submission data.

Each entry shall include the following identifying information:

- The student's cumulative GPA; although the Dean's List Award is not a strictly academic award, the GPA will be considered when determining the outstanding students.
- Name & location of student's high school
- Number of years the student has participated in FIRST
- Number of years student has participated on the team
- An essay of not more than 4,000 characters attesting to why the student has been nominated. Essays must be submitted between the dates noted in FRC Administrative Manual Section 6.3.1 - Submission Dates.
- Applications for the FRC Dean's List are submitted via this website. https://my.usfirst.org/frc/tims/site.lasso

A photograph of the FIRST Dean's List Semi-finalist is strongly encouraged, but optional, and the essay submission and such photos may be used in the promotion of the recipient and/or the award, at the discretion of FIRST. Finalists & Winners will be required to sign a FIRST media release to allow use of their likeness to sponsors contributing to the FIRST Dean's List recognition program and will be responsible for any taxes associated with federal/state prize requirements.

If a team is attending more than one qualifying event, the mentor must select one event at which the team's selections are to be considered. FRC district teams must submit their Semi-finalists at the local FRC District Championship.

6.6.3 FRC Judging

Judges will review the submissions and each Semi-finalist will be interviewed at or prior to one (1) event where their team is competing. Judges will select two (2) students at each qualifying event as FRC FIRST Dean's List Finalists. FRC district submissions will be reviewed and Semi-finalists interviewed at or prior to their local FRC District Championship with the allocated number of Dean's List Finalists chosen at each FRC District Championship.

All Semi-finalists will participate in a brief, 5-7 minute, live and interactive interview with a minimum of two judges. This interview does not need to be in-person at the event, though that is the preferred method. Interviews may, if necessary, be conducted by phone or video conference, as long as no less than two adults are participating in discussions with the student. Also, this interview does not need to take place concurrently with the event, it may happen beforehand, as long as every Semi-finalist is interviewed and has a fair opportunity for selection.

Students may invite a mentor to sit in the interview room for observation only. The mentor may not contribute to the interview or provide any supplemental information to judges. This mentor will be the one to provide the student feedback, in regards to their interview skills, after the interview is over. Judges will not provide feedback to the students. Exception: If necessary, an adult mentor/assistant may provide translation services for students needing foreign language or sign language translation so the students and Judges may communicate.

The FRC FIRST Dean's List Finalists will be honored at the award ceremonies at the applicable qualifying event.

At the *FIRST* Championship all FRC and FTC *FIRST* Dean's List Finalists will be considered for the FRC and FTC *FIRST* Dean's List Award as applicable. No interviews will take place at *FIRST* Championship. Judges will use the essays provided and any interview feedback available. Finalists need not be present at the *FIRST* Championship in order to be considered. Ten (10) FRC students will be selected as *FIRST* Robotics Competition Dean's List Award Winners and ten (10) FTC students will be selected as *FIRST* Tech Challenge Dean's List Award Winners for the 2015 season.

The ten 2015 FRC FIRST Dean's List Award winners and ten 2015 FTC FIRST Dean's List Award winners will each receive the following:

- An unique trophy and public recognition at *FIRST* Championship
- A written recommendation from *FIRST* leadership to the college(s) or employers of their choice
- A credit towards the winning students team next season registration fee
- A commemorative plaque for the student's school
- An invitation for them and a chaperon to attend an expense paid *FIRST* Dean's List Award Summit at *FIRST* headquarters in Manchester, NH; and
- An opportunity to work with all members of the FIRST Dean's list and FIRST leaders to advance the Alumni mission of FIRST.

6.7 Media And Technology Innovation Award sponsored by Comcast NBCUniversal

This Award recognizes the team that develops and implements the most outstanding digital experience, marketing strategy, and rationale for digital channels to disseminate content to its audience and further the *FIRST* mission.

6.7.1 Overview

The Media and Technology Innovation Award sponsored by Comcast NBCUniversal, previously called the Website Award, originated in 2003 to recognize excellence in student designed, built and managed websites. Given the new digital possibilities to spread the *FIRST* message, FRC expanded the website award to include other digital media and Comcast Corporation began sponsoring and judging this award during the 2013 season. Students are encouraged to look beyond just building a team website, taking into account the numerous ways people search for and consume content and build a digital experience to both help their team in its fundraising efforts, but also share the *FIRST* experience with anyone who visits their website. Students should think broadly, considering channels (traditional sites, video applications, mobile, apps), devices (smart phones, tablets), and content (social, rich, and viral* media). We are looking for excellence in expressing the *FIRST* mission on the Internet and telling a story of who and what your team is all about. **Be Imaginative and creative!**

6.7.2 Award Criteria

Teams are asked to develop a marketing strategy complete with rationale for digital channels/devices to disseminate content. Digital media still includes websites, but can and should be augmented with digital media for disseminating content including social, viral* and rich media.

*Viral media defined as low/zero budget and homemade content. Professionally produced content will be disqualified. Viral content is something that premiers and is spread person-to-person on the Internet.

6.7.3 Judging Criteria

Submissions will be reviewed and evaluated by a Comcast executive judging panel. This award is independent of current *FIRST* Program competition season judged awards.

The winner of the Media and Technology Innovation Award will be announced at the 2015 FIRST Championship.

Submissions will be judged on the following criteria, with the following weighted scale (out of a possible 100 total points):

- Strategy (15 points)
 - Targeting the right audience with a message that aligns with the *FIRST* mission.
 - Developing a clear strategy and choice of distribution channels and content creation.
 - Teams must use at least two channels. More channels are not necessarily better, but will be considered if appropriate.
 - Setting and meeting clear objectives.
 - Communicating a clear strategy on your website and on your written submission.
- Overall Experience (15 points)
 - Do content and channels fit together in look and feel?
 - Are you promoting a positive impression of *FIRST* and its mission?
 - Do your website and other digital media have a cohesive look? What is the overall digital user experience?
 - How does your overall story come together online? Do you share a unified message and mission?
 - Is the website intuitive and easy to navigate?
- Does the digital experience tell a story about the team and its FIRST experience?
 - Visual Design (10 points)
 - How appealing is your design?
 - Is content easy to read?
 - Do you use videos and or graphics in a visually appealing way?
 - Visual fit with FIRST Even though the team has its own identity, is it clear that this team is a part of FIRST?
- Navigation (10 points)
 - Content organization and prioritization is being judged in this category
 - Is your website simple to follow?
 - Is it intuitive?
 - Does is have a structure that makes sense?
- Content (20 points)
 - We are looking for whether the information shared is compelling and optimized for consumption.
 - This should be a robust digital experience, so think about including text, sound, video, photos and social media.
 - Good content should be engaging, relevant and appropriate.
 - Was original content created?
 - Is content kept up-to-date and refreshed regularly?
 - Is content action-oriented?
 - Does your site use live links?
 - Do your site or digital media appropriately cite sources and not infringe on others' trademarks or copyrights?
 - Does your website/channel adhere to the FIRST Branding and Design Standards?
- Functionality (15 points)
 - Does content load quickly?
 - Does your site work with multiple/major browsers and mobile devices?
 - Is the site easy to use?

- We will also consider the efficiency and utility of the site.
- Engagement (15 points)
 - Did your digital media engage an audience to find out more about your team or about *FIRST* and *FIRST* Progression of Programs?
 - How did you track the results?
 - Did you leverage your site or digital media for fundraising and/or other purposes outside of the normal scope?

6.7.4 Submission Process

Teams should upload their PDF-formatted submission through the Comcast Media and Technology Award website at http://FIRSTrobotics.comcast.net. Submission will be accepted during the dates listed in Section 6.3.1.

Submissions are not to exceed two pages including graphics. The maximum allowable size for the PDF document submission is 50MB. Submissions should include and address all judging criteria addressed above. We encourage teams to clearly communicate both strategy and any results that have been tracked (include web site traffic, # of friends and/or followers, likes, etc.). This document must include applicable links, urls and hashtags that provide access to the digital properties you created. This includes, but is not limited to, web and video sites, Facebook pages, Twitter feeds, Pinterest boards, mobile apps, etc.

By making a submission, the Submitter irrevocably grants to *FIRST* and *FIRST* designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting *FIRST* and *FIRST* programs.

6.7.5 Submission Dates

Submissions will be accepted during the dates listed in Section 6.3.1.

You may submit your PDF more than once if you need to make revisions. The last version submitted prior to the deadline will be considered your final submission.

6.8 Woodie Flowers Award

The Woodie Flowers Award celebrates effective communication in the art and science of engineering and design. Dr. William Murphy founded this prestigious award in 1996 to recognize mentors who lead, inspire and empower using excellent communication skills.

Two subcategories are awarded:

- The Woodie Flowers Finalist Award (WFFA) is presented to one adult mentor at each Regional Competition or District Championship.
- The Woodie Flowers Award (WFA) is presented to one WFFA winner at the FIRST Championship

6.8.1 Eligibility

Each year, students may submit an essay nominating one mentor from their team to be considered for this award. *FIRST* will recognize one adult mentor at each Regional or District Championship to receive the WFFA. If a team already has a mentor who has received the WFFA in a prior year, then that team may re-submit that mentor in the current year in addition to nominating a mentor for the WFFA if they wish. The current year WFFA recipients, along with those mentors who received a WFFA in a prior year and have been re-nominated, will be judged to receive the WFA at the *FIRST* Championship.

6.8.2 Spirit of the Award

High school students on a *FIRST* Robotics Competition team may nominate one (1) adult team member as their Woodie Flowers Finalist Award (WFFA) candidate. The students will describe how this mentor has given them the best understanding of the challenges, opportunities and satisfaction involved in the discipline of engineering and design. Professor Flowers will lead the past Championship Woodie Flowers Award (WFA) recipients as they judge and select the Finalists and the Championship recipient based on student essays.

This award recognizes an individual who has done an outstanding job of motivation through communication while also challenging the students to be clear and succinct in recognizing the value of communication. As such, it is very important that this be a student-led effort and a student decision. Team mentors should direct their students to the online entry site and let the high school students decide whom to nominate. Adults can help edit, but this must be a student-led effort, since any team mentor is eligible. Authors must be **clearly** identified as high school students in the online submission.

6.8.3 Award Eligibility Requirements

Regional WFFA (except District Event Teams) – Each team may nominate one adult member from their team to be judged at one Regional Event they are attending. The adult mentor must be on the same team as the student. Previous year WFFA recipients are not eligible to receive the current year WFFA.

District Championship WFFA (applies only to teams participating in District Events) - Each District team may nominate one adult member from their team at one District Event to be judged at the District Championship. The adult mentor must be on the same team as the student. Previous WFFA recipients are not eligible to receive the current year WFFA. One Regional WFFA recipient will be selected at each District Championship.

FIRST Championship WFA – All prior year Regional WFFA recipients are eligible to be re-nominated for the current FIRST Championship Woodie Flowers Award. However, if a team has multiple prior Regional WFFA recipients, then the team may only re-nominate one of those previous recipients. The re-nomination can be made as soon as the online submission process begins. All of the Regional WFFA recipients from the current year are automatically eligible to receive the current FIRST Championship Woodie Flowers Award. Teams that have submitted a previous year WFFA recipient for the current FIRST Championship WFA and have a current Regional WFFA recipient will be asked by the WFA committee which Regional WFFA recipient from their team will be their FIRST Championship WFA candidate. A person may not receive the WFA more than one time.

6.8.4 Judging Criteria

Two aspects of this award are important: (1) the accomplishments in communication by the mentor and (2) the student's ability to communicate clearly and concisely through their nomination.

A specific judging criterion is based upon the team's description of how the mentor inspired each member of the team in some or all of the following ways:

- Level of student participation;
- Creativity of effort;

- Clear explanation of mathematical, scientific, and engineering concepts;
- Demonstration of enthusiasm for Science and Engineering;
- Encouragement to work on projects as a team effort;
- Inspiration to use problem-solving skills;
- Inspiration to become an effective communicator; and
- Motivation through communication.

Each FIRST team completes a product development cycle as it designs a concept, develops a prototype, and builds and debugs a unique machine. This requires teamwork, attention to detail, scheduling and hard work. The award-winning essay should answer this question; "How did the candidate inspire your team throughout this process?" If the essay best describes how this individual excels above all others as he or she inspires the team, then that mentor truly deserves to be recognized with the award that honors Professor Woodie Flowers and his contribution to engineering, education, and communication.

6.8.5 Entry Requirements

The students enter team and candidate information, reference information, and a maximum three thousand (3,000) character essay written in English. Teams may also add up to six (6) pictures, totaling no more than 1.0 MB of memory. This essay should be a team effort and will stand alone as the team's entry to award their candidate the deserved recognition.

For students to re-nominate a past WFFA winner for the Championship WFA, they must write and submit a new 3,000 character essay.

Teams may only submit their WFFA candidate at one Regional or District competition for judging.

6.8.6 Submission Deadline

The Woodie Flowers Award entries are due by the closing dated listed in the FRC Administrative Manual Chapter 6.3.1 - Submission Dates.

6.8.7 Entry Process

Students enter their candidate through the FIRST Students enter their candidate through the Youth Team Member Registration System (formerly known as STIMS) https://my.usfirst.org/stims/site.lasso.

Student nominators must follow the directions listed on the screen. As the student nominator fills out the required information, he/she will also choose their selected regional/district.

Student nominators can easily enter information, save it, and return to the site to edit their entry information until they are ready to submit it for judging. All entries must be submitted between the dates listed in the FRC Administrative Manual Section 6.3.1 -Submission Dates. No entries will be accepted or altered after this date.

Students will go to the website to enter information in the following fields:

- Team Number
- Candidate Information:
 - a. First Name, Middle Initial, Last Name
 - b. Address, City, State, zip code
 - Employer C.
 - Occupation
 - Position on team
- High School Student Nominator's information: (Student recommending candidate)
 - a. First Name, Last Name
 - Phone Number b.
 - High School
 - E-mail Address d.
 - Position on Team
 - Year in school (9th, 10th, 11th, 12th)

- Adult Reference (On the same team)
 - First Name, Last Name
 - Phone Number
 - E-mail Address C.
 - Position on Team
- Adult Reference (Any FIRST affiliation)
 - First Name, Last Name
 - h. Phone Number
 - E-mail Address

Regional/District Selection (Team must attend this Regional/District)

Upload Pictures (Up to 6, no more than 1.0 MB total)

Essay (Character max: 3,000)—The students will see a quote from Dr. Murphy and/or Woodie about the value of concise and clear writing. Once candidates' information and essays are submitted, they are sorted and posted on a private, password-protected site where only the Judges can read the entries.

NOTE

By making a submission the Submitter irrevocably grants to FIRST and FIRST designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting FIRST and FIRST programs.

6.8.8 Prior Year Regional WFFA Recipient Re-Submission

Student nominators must submit a new 3,000 character (maximum) essay in order to re-nominate their previous year Regional WFFA recipient to be eligible for the current Championship WFA. Student nominators will not be able to edit the original submission. Past winners without a new essay will not be eligible for the WFA. While the judges can review past essays, the new essay must be able to stand alone as a complete submission.

Each FIRST team may nominate/re-nominate a maximum of one (1) candidate for the FIRST Championship WFA.

6.9 Entrepreneurship Award sponsored by Kleiner, Perkins, Caufield & Byers

This award celebrates the entrepreneurial spirit and recognizes a team which has developed a comprehensive business plan in order to define, manage and achieve the team's objectives. This team displays entrepreneurial enthusiasm and the vital business skills to ensure a selfsustaining program.

6.9.1 Business Plan Submission

Submissions will be accepted between the dates listed in FRC Administrative Manual Section 6.3.1 - Submission Dates.

A formal business plan must be completed and entered through the FIRST Student Team Information Members System (STIMS) https://my.usfirst.org/stims/site.lasso.

In addition to submitting their business plans through STIMS, teams may create more comprehensive plans in their own style. They may then provide hard copies of these plans to judges at events to supplement the information they provide in STIMS.

6.9.2 Guidelines

- A formal business plan is submitted through STIMS at (https://my.usfirst.org/stims/site.lasso).
- The team has a clear concept or approach to building their team and functions as a complete unit.
- They assumed risks and were successful in managing that risk, dealing appropriately with adversity and unexpected events.
- They had a plan and executed it successfully.
- They understood the goals of the competition and the goals of FIRST.
- They demonstrated sustainability through, for example, succession and contingency planning.

Business Plan Template

Teams must complete the following fields in order to be considered for this award.

Executive Summary

- **TEAM MISSION STATEMENT**: Please briefly indicate what you believe to be the "driving engine" of your team. Your mission should be clear and concise. It should represent to any reader exactly what your business plan strives to accomplish. (1600 characters allowed, including spaces and punctuation)
- **TEAM ORIGIN**: Please provide the date that your team formed, the location of your team, the current number of team members (highlighting any growth over past years) and describe the challenges the team had to overcome in order to participate in *FIRST* events. (1600 characters allowed, including spaces and punctuation)
- ORGANIZATIONAL STRUCTURE: Please detail how the team is structured to 1) Raise funds; 2) Ensure funds are properly spent; 3) Find and engage sponsors; 4) Recruit team members/mentors for current & future seasons; 5) Ensure FIRST principles remain core to the team's efforts. Uploading an image of your team organizational chart below, will also satisfy this requirement. (1600 characters allowed, including spaces and punctuation. Graphic image allowed in addition to or as an alternative to text upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF)
- **RELATIONSHIPS**: Please detail team efforts to specifically engage, inspire, educate and retain 1) Team members; 2) Mentors; 3) Sponsors/Community. (1600 characters allowed, including spaces and punctuation)
- **DEPLOYMENT OF RESOURCES**: Please detail how the resources of your team (Financial or otherwise) have been deployed to 1) Engage the community to spread the message of *FIRST*; 2) Inspire others to get involved so that *FIRST* continues to grow; 3) Ensure all team members get the most out of their *FIRST* experience. (1600 characters allowed, including spaces and punctuation)
- **FUTURE PLANS**: Please indicate specific plans the team has for the next 3 years in regards to sponsorship, team and community outreach (including helping *FIRST* grow) and detail how you expect to be able to accomplish these goals. (1600 characters allowed, including spaces and punctuation)
- FINANCIAL STATEMENT: Please include information on team finances (include financial statement detailing income and expenditures). Uploading an image of your team financial plan below, will also satisfy this requirement. (1600 characters allowed, including spaces and punctuation. Graphic image allowed in addition to or as an alternative to text upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF)
- RISK ANALYSIS: Please describe the team's risk mitigation plan. Present a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis or narrative that describes the team plan to identify and respond to sustainability threats. (1600 characters allowed, including spaces and punctuation)

■ PICTURES:

- a. Picture 1: Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- b. Picture 2: Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- c. Picture 3: Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- d. Picture 4: Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- Team Captain/Student representative that has double-checked this submission.
- First Name/Last Name
- Entrepreneurship Award submissions are posted on a private, password-protected site where only the judges and authorized FIRST staff can read the entries. By making a submission the Submitter irrevocably grants to FIRST and FIRST designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting FIRST and FIRST programs.

6.9.3 Eligibility

Teams are eligible to win the Entrepreneurship Award at any event they participate in.

6.10 FIRST Safety Animation Award

Every year, FIRST and Underwriter's Laboratories (UL) invites teams to submit a short animated film to promote team safety.

6.10.1 Award Overview

Your team is invited to participate in the 11th annual FIRST Safety Animation Contest for FRC student team members.

6.10.2 Theme

The theme for 2015 is: "Safety Superheroes"

Safety Superheroes can be found in many contexts. Your 2015 Safety Animation should showcase the *FIRST* inspired Superheroes that you've come into contact with or who you imagine would be a great addition to your team. Keep in mind that you can be a superhero in safety throughout the year, not just during the competition season.

Ideas for consideration include:

- There are many different areas of safety, which are addressed in FRC's Safety Manual use these topics as inspiration to design a Safety Superhero.
- Identify a safety concern that your Team has and create a Safety Superhero that would help you find a solution.
- Safety Superheroes don't need super powers they can save the day by taking steps each day to make sure the environment is safe. Show us what this looks like on your team.
- Your Safety Superhero should be unique, don't use any trademarked superheroes in your animation.

For more information on FRC Safety programs or to access the FRC Safety Manual, please visit http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual

6.10.3 Criteria

Animations should be:

- No more than 40 seconds long including opening and credits
- Submitted electronically as a AVI, .MPEG, .MP4, or .WMV file

Please note that all submissions should be in English.

Music & Copyright

- If using copyrighted music, you must have written permission
- If using Creative Commons Music (CCM) on line, the music must be used in accordance with the appropriate license and properly attributed.
- Music may not contain offensive or suggestive language

Any submission made that is not within the above criteria will automatically be disqualified. FIRST strongly suggests you double check your submission after it is made before the deadline to ensure it plays properly.

6.10.4 Submission

Animations must be submitted by your team's student award submitter in STIMS, https://my.usfirst.org/stims/site.lasso between **Thursday, October 9th, 2014** at 12:00 PM, Noon (ET).

By making a submission the Submitter irrevocably grants to *FIRST* and *FIRST* designees the right to use any or all of the submission in any and all media for the purpose of describing the submission, describing the Award, and/or otherwise promoting *FIRST* and *FIRST* programs.

6.10.5 Judging

Submissions will be reviewed and evaluated by UL designated judge panel. This is independent of current FIRST Program competition season judged awards.

The winning submission will be announced through an FRC Email Blast and the FRC Blog. The winning team will receive a trophy and their video will be played at FIRST events.

Team Advancement

7.0 Te	eam Advancement	53			
7.1.	Overview	54			
7.2	Pre-Qualifying Teams	54			
7.3	Teams Competing at Regional Events	54			
	7.3.1 Qualifying Awards at Regional Events	54			
	7.3.2 Winning Alliance at Regional Events	54			
	7.3.3 Wild Cart Slots at Regional Events	54			
7.4	Teams Competing at District Events	55			
	7.4.1 District Ranking	55			
	7.4.2 Additional Notes	57			
	7.4.3 District Championship	57			
	7.4.4 FIRST Championship Teams from Districts	57			
7.5	Championship Waitlist	58			

FIRST®, the FIRST®logo, FIRST®Robotics Competition®, and Gracious Professionalism®, Sport for the Mind,™ and RECYCLE RUSH™ are trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST*). © 2015 FIRST. All rights reserved.

TEAM ADVANCEMENT

Overview 7.1

Teams advance through the season in different ways depending on the events at which they compete: Regional or District Events. This section details how teams advance from Regional events to the FIRST Championship, and how teams advance from District Qualifying Events, to the District Championship, then to the FIRST Championship.

After a team is selected to attend a District Championship or FIRST Championship, the team's Main and Alternate Contact will receive an email from FRC Team Support with additional information and details about next steps needed to secure their registration for the event.

Pre-Qualifying Teams 7.2

Some FRC Teams have "pre-qualified" for the FIRST Championship in one of four ways:

- By being a member of the FIRST Hall of Fame,
- By being an original and sustaining team since 1992,
- By being one of the 2014 FIRST Championship Aerial Assist™ winners, or
- By being one of the 2014 FIRST Championship Engineering Inspiration Award winners.

A list of these teams can be found on the Championship Eligibility Criteria website.

7.3 Teams Competing at Regional Events

There are three ways that teams can qualify for the FIRST Championship while competing at a Regional Event. District teams competing at Regional events are eligible for these methods of qualification, along with all other teams present.

Qualifying Awards at Regional Events 7.3.1

Teams may qualify for the FIRST Championship by being selected for one of three awards: the Regional Chairman's Award, the Engineering Inspiration Award, or the Rookie All-Star Award. Details on these awards can be found in the *Administrative Manual Section 6 – Awards*.

7.3.2 Winning Alliance at Regional Events

Teams may also qualify for the Championship Event by being on the Winning Alliance at their Regional Events. This qualification extends to all teams on the Alliance, including Back-Up Teams that were called up to play on the Alliance. More details on this method of qualification are available in the Game Manual Section 5 - The Tournament.

7.3.3 Wild Card Slots at Regional Events

Finally, a team can earn a Wild Card slot at their Regional Event. Any team at a Regional who has already earned a FIRST Championship spot prior to the Regional and earns an additional spot at the Regional (by being on the Winning Alliance or being selected for one of the three qualifying awards) will generate a Wild Card slot. Additionally, any team earning two qualifying spots at a single Regional (e.g. by being on the Winning Alliance and earning the Chairman's Award) will generate a Wild Card slot.

A team who has already earned a spot at FIRST Championship prior to the Regional and earns two qualifying spots at the Regional will generate two Wild Card slots.

A team is considered to have already earned a FIRST Championship spot prior to the Regional if they are a pre-qualified team per Section 7.2, earned a spot at an earlier Regional by being selected for one of the three qualifying awards per Section 7.3.1, are on the Winning Alliance per Section 7.3.2, or earned a Wild Card slot per this section. Teams who have been selected from the Waitlist to participate in the FIRST Championship do not generate Wild Cards.

The Wild Card slots are distributed to the Finalist Alliance, in the order of team selection (Alliance Captain, 1st Pick, 2nd Pick, Back-Up team, if a Back-Up team participated), until either all Wild Card slots generated at that event are distributed or the Finalist Alliance is out of teams, whichever comes first. If a member of the Finalist Alliance has already earned a spot at the FIRST Championship, they are passed over and the next member of the Alliance is given the available Wild Card slot. A team may decline a Wild Card slot they have been offered, but this does not pass the Wild Card slot down to the next team in line, instead, that Wild Card slot will go unused. Unused Wild Card slots will not be backfilled or replaced.

7.4 Teams Competing at District Events

Teams will accumulate points at the first two District events they attend in chronological order, as well as at the District Championship. Teams will not earn any points at third or subsequent District events, nor at any inter-district events or Regional events they attend during the 2015 season.

District teams will be ranked throughout the season based on the points they accumulate. Each District will determine the number of teams they wish to have at their District Championship. Teams attending the District Championship to compete with their ROBOT will be comprised of all teams who won the Chairman's Award at District events, in addition to teams from the pre-District Championship ranked list, in order, until all slots at the District Championship are filled. If a team declines an invitation to the District Championship, the next highest uninvited team on the list will be invited, and so on, until all slots are taken. See *Section 7.4.1.4* for details regarding competition at the District Championship for the Engineering Inspiration and Rookie All Star awards.

Teams from outside a given District, competing at a District event under the inter-district competition program, are not eligible to be selected for the Chairman's Award, the Engineering Inspiration Award, or the Rookie All Star Award. They are eligible for all other awards. Also, as they earn no points outside their home District, they are not eligible to attend the other District's Championship event.

With the exception of the Michigan District Championship, points earned at District Championships will be multiplied by three and then added to points earned at District events, to determine the final season points total for the Team. Because of the size of the Michigan District Championship in 2015, a modified points system, as shown in *Section 7.4.3.1*, will used to award points there. However, the points earned there will still be added to the points earned at District events to determine the season total.

7.4.1 District Ranking

Points are awarded to teams as follows:

Point Category	Points		
Qualifying Rounds			
Qualification Round Performance	$QualificationPoints (R, N, \alpha)$ $= \left InvERF \left(\frac{N - 2R + 2}{\alpha N} \right) \left(\frac{10}{InvERF \left(\frac{1}{\alpha} \right)} \right) + 12 \right $		
	(For typically-sized district events, this will result in a minimum of 4 points being awarded for qualification round performance. For events of all sizes, a maximum of 22 points will be awarded)		
Alliance Selection Results After Al	liance Selection is Complete		
Alliance Captains Draft Order Acceptance	Equal to 17 minus the Alliance Captain Number [e.g. 14 points for Alliance #3 Captain]		
	Equal to 17 minus the Draft Order Acceptance Number [e.g. 12 points for the Team that is 5th to accept an offer of Alliance]		
Playoff Round Performance			
Teams on Alliances Advancing Playoff Level [e.g. An Alliance advancing from Quarterfinals to Semifinals]	Points awarded based on team participation in individual playoff rounds, and whether or not the alliance advances. See details below.		
Awards			
Judged Team Awards	10 Points for Chairman's Award		
	8 Points each for Engineering Inspiration and Rookie All Star Awards		
	5 Points each for all other judged Team awards		
Team Age			
Team Age	10 Points for Rookie Teams		
	5 Points for second-year Teams		

7.4.1.1 Qualification Round Performance

This attribute measures the individual match performance of a Team.

Because RECYCLE RUSH is not a "win, loss, tie" game, the calculation of Qualification performance points is done using the equation (an inverse error function) on the previous page. The equation utilizes the following variables:

R – the qualification rank of the team at the event (as reported by FMS)

N – the number of FRC teams participating in the Qualification rounds at the event

Alpha (α) – a static value (1.07) used to standardize the distribution of points at events

This formula generates an approximately normal distribution of Qualification Round Performance points at an event, based on rank, with most teams getting a moderate number of points, and fewer teams getting the highest or lowest numbers of points available.

7.4.1.2 Alliance Selection Results

This attribute measures both individual Team qualification round seeding performance and recognition by peers.

Alliance Captains are recognized based on their qualification round seeding rank. This rank is a result of the rules for each game, which incorporate more attributes than simply the average score. There may be several Teams with identical or similar average scores at an event, but FRC games are typically set up to eliminate the chance of ties with regards to Team ranking.

Non-Alliance Captains are rewarded based on peer recognition. To be invited to join an Alliance, a Team's peers have decided that the Team has attributes that are desirable. Giving points for Alliance selection also supports come-from-behind Teams. A Team taking several matches to optimize their performance may be recognized as a late bloomer by a top seeded Team, even if that performance isn't reflected in the rankings because of poor performance in early matches. These points also have the potential to recognize Teams employing a minority strategy with their ROBOT. Teams with unique or divergent ROBOT capabilities that complement the strengths of other alliance members may be selected to fill a strategic niche.

Note also that Alliance Captains are given the same number of points as the Team drafted in the same sequence. For example, the third Alliance Captain gets the same number of points as the third draft. Numerical analysis supports the idea that Alliance Captains are about as strong in ROBOT performance as equivalently drafted Teams. As an additional minor benefit, awarding the same points for Alliance Captains and equivalent drafts lubricates the acceptance of draft offers between Alliance Captains, which gives Teams out of the top eight the chance to experience being Alliance Captains themselves.

7.4.1.3 Playoff Round Performance

This attribute measures Team performance as part of an Alliance.

In Quarterfinals, with 2 matches being played by each alliance in RECYCLE RUSH, each team on an alliance earns 5 points for each match they participated in, and only if the alliance advances.

In Semifinals, with 3 matches being played by each alliance in RECYCLE RUSH, each team on an alliance earns 3.3 points for every match they participated in, and only if the alliance advances to the final rounds. All points earned are rounded up to the next highest whole number.

In Finals, as these are played in the traditional Win-Loss-Tie, best 2 out of 3 format, teams on the Winning Alliance receive 5 points for every match they participated in which they won.

7.4.1.4 Awards

This attribute measures Team performance with respect to judged Team awards.

The points earned for Team awards in this system are not intended to capture the full value of the award to the Team winning the award, or to represent the full value of the award to FIRST. In many ways, the Team's experience in being selected for awards, especially the Chairman's Award, the Engineering Inspiration Award, and the Rookie All Star Award, is beyond measure, and could not be fully captured in its entirety by any points-based system. Points are being assigned to awards in this system only to help Teams recognize that FIRST continues to be "more than robots", with the emphasis on our cultural awards, and to assist in elevating award-winning Teams above non-award winning Teams in the ranking system.

Teams earning the Chairman's Award at the District event level get automatic byes to the District Championship, where they will compete both with their ROBOTS and for the District Championship Chairman's Award will earn the Team a slot at the FIRST Championship regardless of their final rank in their district.

Engineering Inspiration and Rookie All-Star Award winners at the District event level will compete at the District Championship level for those specific awards, even if they do not rank high enough to compete with their ROBOTS. Winning one of these awards at the District Championship will also earn them a slot at the FIRST Championship (with their ROBOT) regardless of their final rank in their Districts.

Note that Teams only get points for judged Team awards. If an award is not judged, for example, Rookie Highest Seed, or is not for a Team, for example, the Dean's List Award, no points are earned. Also, please note that the Industrial Safety Award, while it is judged by the Safety Advisors, is still considered a judged award and will earn the points indicated for the winning team.

7.4.1.5 Team Age

This attribute recognizes the difficulty in being a Rookie or second year Team.

Extra points are awarded to Rookie and second year Teams in recognition of the special challenges Teams face in those early years, and to increase the chance that they will make it to the District Championship to compete with their ROBOTS. Like our dedicated Rookie awards, these additional points are intended to recognize and motivate newer participants in FRC. These points are awarded once at the beginning of the season. Rookie year is calculated based on the year in which *FIRST* recognizes the Team as a Rookie.

7.4.2 Additional Notes

7.4.2.1 Third/Out-of-District Event Participation

District Teams participating in three or more home District events during the season, or at any events outside of their home District, do not earn points for their actions at those events. The first two events attended inside their home District, chronologically, will be used for District point calculations. Teams will still be eligible for awards at those later events, and any benefits that go along with winning those awards, if the event is in their home District.

7.4.2.2 Regional Participation

District Teams do not earn points for their actions at any Regionals they may attend, but are still eligible for Team awards at those events, and any benefits that may go along with winning those awards, such as earning their way to the FIRST Championship. However, if a District Team does earn a slot at the FIRST Championship while attending a Regional event, that slot does count against the total Championship allocation the District is receiving for the season.

7.4.2.3 Multiple Awards

District Teams will only be able to be selected for FRC's most prestigious awards - Chairman's Award, Engineering Inspiration Award, and Rookie All Star Award - once per season at the District level. This supports the broader distribution of those awards.

7.4.2.4 Ties

Teams earning the same points in this system will be sorted in rank using this hierarchy:

1st Order Sort: Total Playoff Round Performance Points

2nd Order Sort: Best Playoff Round Finish at a single event

3rd Order Sort: Total Alliance Selection Results Points

4th Order Sort: Highest Qualification Round Seed or Draft Order Acceptance (i.e. Highest Alliance Selection points at a single event)

5th Order Sort: Total Qualification Round Performance Points

6th Order Sort: Highest Individual Match Score

7th Order Sort: Second Highest Individual Match Score 8th Order Sort: Third Highest Individual Match Score

9th Order Sort: Random Selection

7.4.3 District Championship

Number of teams attending District Championship

Fil	M 11	02
IN		32
Μ	AR	55
NI	Ē	60
Pi	IW	64

7.4.3.1 Michigan District Championship

At the 2015 Michigan District Championship, because of the number of teams in attendance, the event will have a 16 Alliance playoff, rather than a standard 8 Alliance playoff. The first round of this playoff, the Eighth Finals, will be played similarly to a standard Quarter Final playoff, under the same rules, with each Alliance playing two matches and the top 8 Alliances then advancing to the Quarter Finals. The specific order and Alliance pairings for the Eighth Finals is yet to be determined, but this manual will be updated when that information is available. Once the top 8 Alliances have been determined, the process will proceed as described in the FRC Game Manual, Section 5, The Tournament.

Alliance selection will follow the same serpentine draft and process as the standard 8 Alliance selection described in the FRC Game Manual, Section 5, The Tournament, but with 16 Alliances rather than 8.

With the exception of the 'Alliance Selection Results' category, points at the Michigan District Championship will be awarded as described in Section 7.4.1, and will be multiplied by three and summed with district event points, just like all other districts, in determining final season point totals for Teams. As an example, a team winning the Engineering Inspiration Award at the Michigan Championship will earn 24 points, the standard 8 points as shown in Section 7.4.1, multiplied by three, as with other Districts.

In place of the 'Alliance Selection Results' category in Section 7.4.1, Teams at the Michigan District Championship will be assigned points per the table below. Please note these points will not be multiplied by three as points at District Championships normally would be in determining final season point totals for Teams. Instead, the points are added, just as shown, to Teams' season point totals, in place of the 'Alliance Selection Results' points shown in Section 7.4.1.

Alliance	Captain	First Pick	Second Pick
Alliance 1	48	48	1.5
Alliance 2	46.5	46.5	3
Alliance 3	45	45	4.5
Alliance 4	43.5	43.5	6
Alliance 5	42	42	7.5
Alliance 6	40.5	40.5	9
Alliance 7	39	39	10.5
Alliance 8	37.5	37.5	12
Alliance 9	36	36	13.5

Alliance	Captain	First Pick	Second Pick
Alliance 10	34.5	34.5	15
Alliance 11	33	33	16.5
Alliance 12	31.5	31.5	18
Alliance 13	30	30	19.5
Alliance 14	28.5	28.5	21
Alliance 15	27	27	22.5
Alliance 16	25.5	25.5	24

As an example, the Team picked second for Alliance 11 would earn 16.5 points, and these points would be added, without multiplying, to the Team's season total.

The first playoff round, with 16 Alliances, is the Octofinals. As in Quarterfinals, two matches will be played by each Alliance in the Octofinals, and each team earns 5 points for each Match in which they participated and only if their Alliance advances.

Eight Alliances advance from the Octofinals to the Quarterfinals using the same advancement rules from Quarterfinals to the Semifinals defined in *FRC Game Manual, Section 5.4.3*, but with 16 Alliances narrowing to eight.

All Timeout and Backup rules per FRC Game Manual, Section 5.5.6 apply during Octofinals. Octofinals are played on two separate Fields, and as such, reference to the Field Reset Signal preceding an Alliance's Match in T16 and T19 refers to the Field Reset Signal for the last Match played in the tournament, which in most cases will be the Match just played on the opposite Field.

7.4.4 FIRST Championship Teams from Districts

Districts will receive the percentage of available slots at the *FIRST* Championship, rounded up to the nearest whole slot, equal to the percentage of teams they have in their district compared to all of FRC in the current season. In calculating available slots at the *FIRST* Championship, pre-qualified teams will be excluded.

These allocated slots are guaranteed to the Districts. These slots will be made up of qualifying award winners from the District Championship (Chairman's Award, Engineering Award, and Rookie All Star winners), all teams on the Winning Alliance from the District Championship (including any Back-Up teams participating), any qualifying award winners among district teams who traveled to Regionals, plus the teams on the final District ranking list, as deep in the ranking list as the District needs to go to fill their allocation. If a District team earns a slot to the *FIRST* Championship within the season, but is not able to attend for whatever reason, the top ranked team who has not yet been offered a slot is given the opportunity, and so on, until all slots are filled. District teams earning *FIRST* Championship slots at Regionals do count against the District allocation. Even though a District team may earn their *FIRST* Championship slot at a Regional, they are still from the District and can be considered part of the District contingent to the *FIRST* Championship.

Pre-qualified teams, as defined in Section 7.2, from a District do not count against their slot allocation. Districts are able to send to the *FIRST* Championship the number of teams allocated to them using the proportional representation model, plus their unique pre-qualified teams. Unlike the allocated slots, however, slots for pre-qualified teams may not be backfilled. If a pre-qualified team from a District is not able to attend the *FIRST* Championship, it will not be replaced with another team from the District. A pre-qualified team slot is reserved for that specific team only, not the District from which that team comes.

District Championship Allocation

HIVI		68
IN		10
MAF	3	25
NE		35
	V.	31

7.5 Championship Waitlist

Teams may join the Championship Waitlist to fill any remaining *FIRST* Championship slots not consumed by qualifying Regional or District teams. Teams who sign up for the Waitlist will be randomly selected at various points throughout the season in an effort to give teams as much time to make travel plans as possible while ensuring we do not exceed *FIRST* Championship capacity.

Rookies are not eligible to sign up for the Waitlist.

Teams may sign up for the Waitlist through <u>TIMS</u>. To do so, a team's Main or Alternate Contact must login to TIMS, click on the "Team Summary" button and select the "Edit/View" button in the Event Registration section.

Teams will receive a number of "entries" to get selected from the Waitlist equal to 2015 minus the last year they attended Championship (or their rookie year, or when they most recently returned as an active team, whichever year is the most recent). As examples, a team that attended in 2014 will get one entry in the waitlist drawing, a team that last attended in 2013 will get two, and a team that has never attended but has been continuously active since 2005 will get ten.