| Α | Administrative Manual                                    | . 6 |
|---|--|-----|
| 1 | Introduction   |     |
|   | 1.1 WHAT IS THE FIRST® ROBOTICS COMPETITION® (AKA FRC®)? | . 6 |
|   | 1.2 GRACIOUS PROFESSIONALISM®, A FIRST CREDO             | . 6 |
|   | 1.3 PROMINENT FRC AWARDS                                 | . 7 |
|   | 1.3.1 The Chairman's Award                               | . 7 |
|   | 1.3.2 The Woodie Flowers Award                           | . 7 |
|   | 1.3.3 The Dean's List Award                              | . 7 |
|   | 1.4 SAFETY: A FIRST CULTURE                              | . 7 |
| 2 | Communication  | . 8 |
|   | 2.1 OVERVIEW   | . 8 |
|   | 2.2 FIRST HEADQUARTERS - CONTACT INFORMATION             | . 9 |
|   | 2.3 TEAM SUPPORT   |     |
|   | 2.3.1 Please do not duplicate efforts                    | 10  |
|   | 2.4 TECHNICAL RESOURCES                                  |     |
|   | 2.5 ADDITIONAL SOFTWARE CONTACT INFORMATION              |     |
|   | 2.6 FIRST ROBOTICS COMPETITION WEBSITE                   |     |
|   | 2.6.1 Getting Answers to Your Competition Questions      |     |
|   | 2.6.2 FRC Q&A Forum                                      |     |
|   | 2.6.3 Email Blasts                                       |     |
|   | 2.6.4 FRC Blog   |     |
|   | 2.7 TIMS - SUPPLYING INFORMATION TO FIRST                |     |
|   | 2.8 JUDGES' INFORMATION                                  |     |
|   | 2.9 EVENT-SPECIFIC INFORMATION                           |     |
|   | 2.10 REGIONAL EVENTS AND CHAMPIONSHIP HOTEL INFORMATION  |     |
|   | 2.11 FIRST MARKETING TOOLS                               |     |
| 3 | Team Organization  |     |
|   | 3.1 GETTING STARTED: GUIDES, HANDBOOKS AND OTHER HELPFUL |     |
|   | RESOURCES  | 14  |
|   | 3.2 SUGGESTED LEADERSHIP ROLES                           | 14  |
|   | 3.2.1 Main Contact Responsibilities                      | 15  |
|   | 3.2.2 Alternate Contact Responsibilities                 | 16  |
|   | 3.2.3 Shipping Contact Responsibilities                  | 16  |
|   | 3.3 RECOMMENDED ADDITIONAL CONTACTS                      | 17  |
|   | 3.3.1 Corporate / University Contact Responsibilities    | 17  |
|   | 3.3.2 Public Relations Contact Responsibilities          | 18  |
|   | 3.3.3 Scholarship Responsibilities                       |     |

| 3.3.4 School Contact Responsibilities     | 18  |
|---|---|
| 3.3.5 Technical Contact Responsibilities  | 19  |
| 3.3.6 Travel Contact Responsibilities     | 19  |
| 3.4 OTHER IMPORTANT TEAM POSITIONS        | 20  |
| 3.4.1 Game Rules Monitor Responsibilities | 20  |
| 3.4.2 Safety Captain Responsibilities     | 20  |
| At The Events                             | 21  |
| 4.1 OVERVIEW                              | 22  |
| 4.2 FIRST SAFETY                          | 22  |
| 4.2.1 Safety Recommendations              | 22  |
| 4.2.2 Robot Carts                         |   |
| 4.2.3 Safety Recognition Program          | 23  |
| 4.3 COURTESIES AND RULES                  | 23  |
| 4.4 STAFF / VOLUNTEER BADGES              | 23  |
| 4.5 COMPETITION OVERVIEW                  | 24  |
| 4.5.1 Practice Matches                    | 24  |
| 4.5.1.1 Practice Time Slots               | 24  |
| 4.5.1.2 The Filler Line                   | 24  |
| 4.5.1.3 Courtesy                          | 24  |
| 4.5.2 Competition Matches                 | 24  |
| 4.5.2.1 Qualification Match Schedules     | 25  |
| 4.5.2.2 Scouting                          | 25  |
| 4.5.2.3 Early Matches                     | 25  |
| 4.5.3 Competition Agendas                 | 25  |
| 4.5.3.1 Championship Agenda               | 25  |
| 4.6 LOAD IN PROCEDURES                    | 25  |
| 4.6.1 Bag and Tag                         | 25  |
| 4.6.2 At Championship                     | 26  |
| 4.7 EVENT CHECK-IN                        | 26  |
| 4.7.1 Consent and Release Forms           | 27  |
| 4.7.2 Event Check In Envelope             | 27  |
| 4.8 THE PIT                               | 27  |
| 4.8.1 Pit Admin Station                   | 27  |
| 4.8.2 Team Pits                           | 28  |
| 4.8.2.1 Rules                             | 28  |
| 4.8.2.2 Pit Structure                     |   |
| 4.8.2.3 Space Regulations                 | 28  |
| 4.8.3 Spare Parts Station                 |   |
|   | 3.3.5 Technical Contact Responsibilities 3.3.6 Travel Contact Responsibilities 3.4 OTHER IMPORTANT TEAM POSITIONS 3.4.1 Game Rules Monitor Responsibilities 3.4.2 Safety Captain Responsibilities 4.1 OVERVIEW 4.2 FIRST SAFETY 4.2.1 Safety Recommendations 4.2.2 Robot Carts 4.2.3 Safety Recognition Program 4.3 COURTESIES AND RULES 4.4 STAFF / VOLUNTEER BADGES 4.5 COMPETITION OVERVIEW 4.5.1 Practice Matches 4.5.1.1 Practice Time Slots 4.5.1.2 The Filler Line 4.5.1.3 Courtesy 4.5.2 Competition Matches 4.5.2.1 Qualification Match Schedules 4.5.2.2 Scouting 4.5.2.3 Early Matches 4.5.3.1 Championship Agenda 4.6 LOAD IN PROCEDURES 4.6.1 Bag and Tag 4.6.2 At Championship 4.7 EVENT CHECK-IN 4.7.1 Consent and Release Forms 4.7.2 Event Check In Envelope 4.8 THE PIT 4.8.1 Pit Admin Station 4.8.2.1 Rules 4.8.2.1 Rules 4.8.2.2 Pit Structure 4.8.2.3 Space Regulations |

| 4.8.4 Inspection   | 29 |
|--|----|
| 4.8.5 Machine Shop                                       | 29 |
| 4.8.6 Team Provided Mobile Machine Shops                 | 30 |
| 4.8.6.1 Team-Provided Machine Shop Requirements          | 30 |
| 4.8.6.2 Local Restrictions                               | 30 |
| 4.8.6.3 Other Requirements                               | 30 |
| 4.8.7 Machine Tools at Events                            | 31 |
| 4.8.8 Suggested Equipment                                | 31 |
| 4.8.9 First Aid Station                                  | 31 |
| 4.8.10 Traffic Flow                                      | 31 |
| 4.8.11 Announcements                                     | 32 |
| 4.8.12 Queuing Your Team                                 | 32 |
| 4.8.13 Property Security                                 | 32 |
| 4.8.14 Lost and Found                                    | 32 |
| 4.9 CEREMONIES   | 33 |
| 4.9.1 All Teams Should Attend                            | 33 |
| 4.9.2 Pit Manners/Rules during the Ceremonies            | 33 |
| 4.10 PIT CLOSING ETIQUITTE                               | 33 |
| 4.11 TEAM SOCIALS  | 33 |
| 4.12 CHAMPIONSHIP FIRST FINALE                           | 33 |
| 4.13 TEAM SPIRIT AND TEAM "LOOK"                         | 34 |
| 4.13.1 Team Giveaways                                    | 34 |
| 4.13.2 Mascots and Team Costumes                         | 34 |
| 4.13.3 Competition Spirit                                | 34 |
| 4.13.4 Banners and Flags                                 | 34 |
| 4.14 BLEACHER RULES                                      | 35 |
| 4.15 SITE RESTRICTIONS                                   | 35 |
| 4.16 CONSIDERATIONS                                      | 35 |
| Robot Transportation                                     | 36 |
| 5.1 STOP BUILD DAY                                       | 36 |
| 5.2 BAG AND TAG  |    |
| 5.3 INSTRUCTIONS FOR "BAG AND TAG"                       | 37 |
| 5.4 ROBOT LOCK AND UNLOCK INSTRUCTIONS                   | 38 |
| 5.4.1 Completing the Robot Lock-Up Form                  | 38 |
| 5.4.2 When the Robot Lock-Up Form is required to be used | 38 |
| 5.4.3 Robot Displays                                     | 38 |
| 5.5 REQUESTING A ROBOT TRANSPORT EXEMPTION               | 39 |
| 5.6 "ROBOT ACCESS PERIOD" - FOR TEAMS ATTENDING 2-DAY    |    |
| EVENTS   | 39 |

5

|   | 5.6.1 'Robot Access Period' - Permitted Actions           | 40 |
|---|---|----|
|   | 5.6.2 'Robot Access Period' - Schedule                    | 40 |
|   | 5.7 ROBOT SHIPPING - FOR TEAMS GRANTED AN EXEMPTION OR    |    |
|   | ATTENDING CHAMPIONSHIP                                    | 40 |
|   | 5.7.1 Shipping Instructions for Exemptions Granted Teams  | 41 |
|   | 5.7.2 Shipping Your Robot to the Championship             | 42 |
|   | 5.7.3 Shipping your Robot using your own Funds            | 42 |
|   | 5.8 IMPORTANT SHIPPING CONTACTS                           | 43 |
|   | 5.8.1 FIRST Is Your Main Contact                          | 43 |
|   | 5.8.2 FedEx   | 43 |
|   | 5.9 REVISION HISTORY                                      | 43 |
| 6 | <b>Awards</b>   | 44 |
|   | 6.1 FIRST ROBOTICS COMPETITION AWARDS                     | 44 |
|   | 6.2 COMPLETE AWARDS LIST                                  | 44 |
|   | 6.3 AWARDS SUBMISSION PROCESS                             | 50 |
|   | 6.3.1 Submission Dates                                    | 50 |
|   | 6.4 THE CHAIRMAN'S AWARD                                  | 51 |
|   | 6.4.1 Overview  | 51 |
|   | 6.4.2 First-Year (Rookie) and NASA Grant Teams            | 51 |
|   | 6.4.3 Submission Information                              | 51 |
|   | 6.4.3.1 Submission Content                                | 52 |
|   | 6.4.3.2 Submission Format                                 | 52 |
|   | 6.4.3.3 Submission Process                                | 52 |
|   | 6.4.3.4 Interview Process and Video Requirement           | 53 |
|   | 6.4.4 The Chairman's Award Championship Award Process     | 55 |
|   | 6.4.5 The Allaire Medal - Leadership Exemplified          | 55 |
|   | 6.5 FIRST® FUTURE INNOVATOR AWARD (FFIA) Sponsored by the |    |
|   | Abbott Fund   | 56 |
|   | 6.5.1 Award Overview                                      | 56 |
|   | 6.5.2 Award Criteria                                      | 56 |
|   | 6.5.3 Award Judging                                       | 56 |
|   | 6.5.4 Additional Documentation and Video                  | 58 |
|   | 6.6 FIRST DEAN'S LIST                                     | 58 |
|   | 6.6.1 Submissions   | 59 |
|   | 6.6.2 Criteria  | 59 |
|   | 6.6.3 Judging   | 60 |
|   | 6.7 THE FOUNDER'S AWARD (Championship Only)               | 61 |
|   | 6.8 MEDIA AND TECHNOLOGY INNOVATION AWARD sponsored by    |    |
|   | Comcast NBCUniversal                                      | 61 |

| 6.8.1 Overview   |     | 61 |
|--|-----|----|
| 6.8.2 Award Criteria   |     | 61 |
| 6.8.3 Judging Criteria   |     |    |
| 6.8.4 Submission Process   |     |    |
| 6.8.5 Submission Dates   |     |    |
| 6.9 WOODIE FLOWERS AWARD   |     |    |
| 6.9.1 Eligibility  |     |    |
| 6.9.2 Spirit of the Award  |     |    |
| 6.9.3 Award Eligibility Requirements                             |     |    |
| 6.9.4 Judging Criteria   |     |    |
| 6.9.5 Entry Requirements   |     |    |
| 6.9.6 Submission Deadline  |     |    |
| 6.9.7 Entry Process  |     |    |
| 6.9.8 Prior Year Regional WFFA Recipient Re-Submission           |     |    |
| 6.10 ENTREPRENEURSHIP AWARD sponsored by Kleiner, Perkins,       | • • |    |
| Caufield & Byers   |     | 67 |
| 6.10.1 Business Plan Submission                                  |     |    |
| 6.10.2 Guidelines  |     |    |
| 6.10.3 Eligibility   |     |    |
| 6.11 FIRST SAFETY ANIMATION AWARD                                |     |    |
| 6.11.1 Award Overview  |     |    |
| 6.11.2 Theme   |     |    |
| 6.11.3 Criteria  |     |    |
| 6.11.4 Submission  |     |    |
| 6.11.5 Judging   |     |    |
| 6.11.6 Deadline  |     | 70 |
| 6.12 FIRST 3D Printing Award sponsored by America Makes and ORNL |     | 70 |
| 6.12.1 Award Overview  |     | 70 |
| 6.12.2 The Award   |     | 70 |
| 6.12.3 Award Criteria  |     | 71 |
| 6.12.4 Award Judging   |     | 71 |
| 6.12.5 Additional Documentation & Videos                         | • • | 71 |

# Administrative Manual 1 Introduction



FIRST<sup>®</sup>, the FIRST<sup>®</sup> logo, FIRST<sup>®</sup> Robotics Competition, FRC<sup>®</sup>, Coopertition<sup>®</sup>, and Gracious Professionalism<sup>®</sup> are registered trademarks, and Sport for the Mind<sup>™</sup> are common law trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST<sup>®</sup>). ©2014FIRST. All rights reserved.

# 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 2014, FRC will reach 71,000 high-school students representing approximately 2,850 teams. FRC teams come from nearly every state in the United States, as well as many other countries. FRC teams will participate in fifty-four Regional Competitions, about forty FRC District Competitions, four District Championships, and approximately 400 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 2014 FRC Kickoff on **Saturday, January 4, 2014**. At the Kickoff event, all teams:

- see the 2014 game field for the first time;
- · learn about the 2014 game rules and regulations; and
- · receive their Kickoff Kits.

## 1.2 GRACIOUS PROFESSIONALISM®, A FIRST CREDO

Dr. Woodie Flowers, FIRST National Advisor and co-founder of FRC, coined the term **Gracious Professionalism**<sup>®</sup>.

Gracious Professionalism is part of the ethos of *FIRST*. It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community.

With Gracious Professionalism, fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process. They avoid treating anyone like losers. No chest thumping tough talk, but no sticky-sweet platitudes either. Knowledge, competition, and empathy are comfortably blended.

In the long run, Gracious Professionalism is part of pursuing a meaningful life. One can add to society and enjoy the satisfaction of knowing one has acted with integrity and sensitivity.

#### 1.3 PROMINENT FRC AWARDS

FIRST values and acknowledges team performance, both on field and off, that promotes our mission to change culture. The three (3) most prominent FRC awards that celebrate our culture are described below.

Additional awards recognize outstanding technical expertise, community involvement and safety practices. A complete list and description of awards available to teams can be found in <u>Section 6 - Awards</u> of the manual.

#### 1.3.1 The Chairman's Award

Every year, veteran FRC Teams have the opportunity to compete for *FIRST*'s most prestigious award; i.e., the Chairman's Award, which represents the spirit of *FIRST*. This award was created to maintain *FIRST*'s focus on changing culture in ways that would inspire greater levels of respect and honor for science and technology, as well as encourage more of today's youth to become scientists, engineers and technologists. The Chairman's Award honors the team that best embodies the goals and purpose of *FIRST* and is a model for other teams to emulate.

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 State or Region Championship. The recipients from the Regional events and the State or Region Championships will be eligible to be considered for the Chairman's Award presented at the FIRST Championship.

#### 1.3.2 The Woodie Flowers Award

The Woodie Flowers Award, founded in 1996 by Dr. William Murphy, celebrates outstanding mentors who lead, inspire and empower their team. Woodie Flowers Award winners demonstrate effective communication in the art and science of engineering and design.

Students submit an essay that nominates one (1) mentor from their team for consideration.

#### 1.3.3 The Dean's List Award

Now in its fifth year, this award celebrates outstanding student leaders whose passion for, and effectiveness at, attaining *FIRST* ideals is exemplary. Finalists are chosen by a panel of judges at each FRC regional and District Championship. From this pool of finalists, the Dean's List Award Committee will select 10 Winners at the Championship in St. Louis, MO.

Student winners are invited to a summit at *FIRST* HQ and DEKA which coincides with the FRC Supplier's Summit held over the summer.

Mentors submit an essay nominating a maximum of two (2) students, preferably in their sophomore or junior year, from their team for consideration.

#### 1.4 SAFETY: A FIRST CULTURE

Safety is critical within *FIRST* and must be observed continuously by all participants. As a part of the "Safety Awareness and Recognition Program", teams are observed and evaluated at many levels and by many individuals at the events and the Championship.

Key People in this Process:

Safety Advisors - evaluate team safety behavior and practices at Regional Competitions.

Referees and other Field Personnel - observe safety on the playing field as well as adherence to the game rules.

**Judges** - evaluate how teams have integrated safety into their robot designs when considering the team for technical awards.

**Teams** - Safe practices at the competitions are <u>mandatory</u>. Teams are required to adopt safe habits throughout the entire competition season including during travel to and from events <u>and</u> while working in their shops at home, etc...

More information on our safety program can be found here: http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual

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

# 2 Communication



FIRST<sup>®</sup>, the FIRST<sup>®</sup> logo, FIRST<sup>®</sup> Robotics Competition, FRC<sup>®</sup>, Coopertition<sup>®</sup>, and Gracious Professionalism<sup>®</sup> are registered trademarks, and Sport for the Mind<sup>™</sup> are common law trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST<sup>®</sup>). ©2014FIRST. All rights reserved.

#### 2.1 OVERVIEW

This section provides teams with necessary information for contacting *FIRST* staff, key vendors and others and how *FIRST* will communicate important season information. This section also contains help regarding the use of the *FIRST* logo, finding materials on the website, the Team Information Management System (TIMS) and tips on reserving hotels.

## 2.2 FIRST HEADQUARTERS - CONTACT INFORMATION

You can reach *FIRST* via mail, email, phone and fax or get information from our website. The office is open Monday through Friday from 8:30 AM to 5:00 PM, EST. Refer to the sections below for the appropriate help resource.

#### Be sure to provide your TEAM NUMBER on all communications!

| Mailing Address | 200 Bedford St, Manchester, NH 03101 |
|-----------------|--------------------------------------|
| Email Address   | frcteams@usfirst.org                 |
| Phone Numbers   | (603) 666-3906, "0" for team support |
|                 | (800) 871-8326, "0" for team support |
| Fax Numbers     | (603) 666-3907 (Main)                |
|                 | (603) 647-5772 (Finance)             |

### 2.3 TEAM SUPPORT

The Operations (Team Support) 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!



#### **Emails and Subject Lines**

Please write to <a href="mailto:frcteams@usfirst.org">frcteams@usfirst.org</a> with your questions.

To facilitate a quick reply, always include your **Team Number** in the **subject line**.

## 2.3.1 Please do not duplicate efforts

We ask that you do not contact or copy multiple people about the same problem. Being a small group, we must work efficiently and avoid having more than one person working on the same issue. We can usually answer questions or requests within one to two business days. Please do not hesitate to contact us by phone if your question requires immediate assistance.

## 2.4 TECHNICAL RESOURCES

Information on the 2014 Control System, including software and hardware, as well as other technical resources, will be available after Kickoff. For more information, please use the <u>Kit of Parts homepage</u>. The technical links are on the top of the page.

#### 2.5 ADDITIONAL SOFTWARE CONTACT INFORMATION

#### **PTC Software**

PTC offers donated software to all FIRST teams, Creo® – CAD software, Mathcad® – Engineering Calculations software, and Windchill® – Project and Document Management software. Visit <a href="www.ptc.com/go/first">www.ptc.com/go/first</a> for information on the free software solutions. If you cannot find answers to your questions from the above website, please contact <a href="FIRSTsupport@ptc.com">FIRSTsupport@ptc.com</a>.

#### **Autodesk**

Please go to <a href="www.autodesk.com/FIRST">www.autodesk.com/FIRST</a> and join the Community to download Autodesk software products. Visit the Community often to check on new information and resources; to get your 2014 Kit of Parts modeled in Autodesk Inventor Professional 2014 (available after Kickoff); and/or to submit your questions and requests for technical support.

#### 2.6 FIRST ROBOTICS COMPETITION WEBSITE

Visit the *FIRST* Robotics Competition (FRC) area on <u>www.usfirst.org</u> 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 shipment, and awards submissions: FRC Season Calendar
- Find links to the "Competition Manual and Related Documents" page, the "Robot Control System" page, the "Robot Shipping" page, the "Season News and Email Blasts" page, , and other information at: <a href="FRC Game & Season Info">FRC Game & Season Info</a>

# 2.6.1 Getting Answers to Your Competition Questions

Competition Manual: Sections relating to the game will be posted after Kickoff.

<u>Team Updates</u>: After 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.

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

#### 2.6.2 FRC Q&A Forum

After Kickoff, FIRST provides an on-line forum for questions and answers (Q & A). Please click <a href="here">here</a> to access the 2014 FRC Q&A System

#### 2.6.3 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.

# 2.6.4 FRC Blog

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

#### 2.7 TIMS - SUPPLYING INFORMATION TO FIRST

<u>TIMS</u> is the online system used by the Main and Alternate Contacts of the team to:

- 1. create a Team Profile;
- 2. register for events;
- 3. enter Kit and Kickoff Preferences;
- 4. enter Judge's Information (for awards); and
- 5. accept students to the team, track their electronic Consent and Release Forms, print a Team Roster and assign students to submit for key awards and track their progress.

TIMS additionally provides options to allow teams to register themselves as a team willing to mentor others or for a team to identify itself as a team in need of mentoring.

#### 2.8 JUDGES' INFORMATION

The Judges' Information Section is the best way to provide an overview of your team to the competition judges. Please take advantage of this opportunity and provide this important information in TIMS.

The Judges' Information is a team overview page. It is an opportunity to share valuable information and statistics about your team with *FIRST* and the judges at the events. This information is very important for planning events and very helpful in our efforts to procure funding. *FIRST* may use the robot photos you submit in the Awards Ceremonies. Enter the information under the "Judges' Information" section in TIMS.

The purpose of the Judges' Information page is to provide:

- a common starting point for judging each team;
- insight for Judges into the team's workings, history, goals, strengths and robot; and
- team data for FIRST and its archives.

Please refer to the Administrative Manual, Section 6 – The Awards, for more information about the individual awards.

#### 2.9 EVENT-SPECIFIC INFORMATION

Event-specific information such as agendas, site information, pre-order lunch forms etc. are posted under each event on our <u>Regional and District Events</u> page. Tip! Check back periodically as this page is updated in stages.

#### 2.10 REGIONAL EVENTS AND CHAMPIONSHIP HOTEL INFORMATION

Steele Meetings, Inc. will once again be handling the hotel reservation system for Regional Events and the Championship. Please click on the following link for more information and to make your reservations: <a href="http://www.firstchampionshiphousing.com/Home.aspx">http://www.firstchampionshiphousing.com/Home.aspx</a>.

#### 2.11 FIRST MARKETING TOOLS

There are numerous creative opportunities for designing a unique team identity. Every year, we see great examples of how teams "brand" their efforts with websites, team logos on robots, t-shirts, hats, banners, fliers and giveaways. These branding activities are a great way to get students interested in art, communications, computer and language arts to join and work on the team.

As you manage your own promotion, you may want to incorporate the *FIRST* logo in what you do. Because our mark the combination of the composite graphic element plus the *FIRST* word mark – is a registered trademark, we have a few guidelines for you to follow when using *FIRST* or FRC logos. You can find the logos and information about how to legally use them at our <u>Marketing Tools</u> page.

Once the game is announced at Kickoff, you will be able to download this year's game logo at <a href="http://www.usfirst.org/roboticsprograms/marketing-tools/frc">http://www.usfirst.org/roboticsprograms/marketing-tools/frc</a>.

In addition to logos, you may find promotional fliers, brochures and presentations on the <u>Marketing Tools</u> page. We encourage you to use these materials to promote your team to potential team members, the community and Sponsors.

# 3 Team Organization



FIRST<sup>®</sup>, the FIRST<sup>®</sup> logo, FIRST<sup>®</sup> Robotics Competition, FRC<sup>®</sup>, Coopertition<sup>®</sup>, and Gracious Professionalism<sup>®</sup> are registered trademarks, and Sport for the Mind<sup>™</sup> are common law trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST<sup>®</sup>). ©2014FIRST. All rights reserved.

# 3.1 GETTING STARTED: GUIDES, HANDBOOKS AND OTHER HELPFUL RESOURCES

Read and print the following documents at: http://www.usfirst.org/roboticsprograms/frc/content.aspx?id=5504

- "Starting an FRC Team"
- · "FRC Handbook"
- "FIRST Mentoring Guide"
- · Community sponsored resources

Each of these documents provides information and suggestions for team organization. For help with other practical aspects of the competition, refer to the "Resources" fly-out on the left hand side of the FRC Home page at <a href="http://www.usfirst.org/roboticsprograms/frc">http://www.usfirst.org/roboticsprograms/frc</a>. Here you will find sponsorship links, tutorials, technical links for programming and pneumatics, ideas for team sustainability, mentoring resources and other assets.

Tip! Safety is an integral part of the FIRST programs. Be sure to read the safety page at <a href="http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual">http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual</a> where you will find the link for the "FIRST Robotics Competition Team Safety Manual."

Start your season off by assigning a Safety Captain, creating safe work places and establishing a safe work ethic.

#### 3.2 SUGGESTED LEADERSHIP ROLES

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 below). Although we

encourage the following guidelines, team structure is the team?s prerogative and the following are only suggestions.

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!

# 3.2.1 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 one 18 years old or older.

| Award Submissions:    | Assign student awards submitters in TIMS. Ensure submissions of Woodie Flowers,  |
|-----------------------|--|
|                       | Website, Chairman's, and other Awards by the respective deadlines. Find details in the   |
|                       | "Awards" section of the FRC Manual. Review <a href="http://frc-manual.usfirst.org/viewItem/9">http://frc-manual.usfirst.org/viewItem/9</a>             |
| FRC Blog:             | Monitor the FRC 'blog for "behind the scenes" news and   |
|                       | updates. http://www.usfirst.org/roboticsprograms/frc/blog  |
|                       |  |
| Calendar of Important | Monitor the FIRST website calendar for changes, additions at:  |
| Deadline Dates:       | http://www.usfirst.org/roboticsprograms/frc/frc-season-calendar  |
| Communications        | Read FIRST Communications, Team Updates, FRC Blog, etc. (see below). Ensures team is   |
|                       | educated on important information. Contacts FIRST Team Support with any questions.   |
| Consent and Release   | Ensure all team Consent and Release Forms are submitted. Please refer to Chapter 4- At   |
| Forms:                | the Events, Section 4.8.1 of the Adminsitrative Manual for more information regarding the  |
|                       | Consent and Release form.  |
|                       | Review   |
|                       | http://www.usfirst.org/roboticsprograms/frc/first-student-team-information-members-system-a  |
|                       | nd-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 FIRST, especially for use during vacations or team travel.  |
| Email Blasts:         | Receive, read and share with team email blasts. Email blast archive page located   |
|                       | at <a href="http://www.usfirst.org/roboticsprograms/frc/emailblastarchive.aspx">http://www.usfirst.org/roboticsprograms/frc/emailblastarchive.aspx</a> |
| Event Information:    | Register team for Events in the TIMS   |
| Judges' Information:  | Enter judges' information into the TIMS by the deadline  |
| Kit and Kickoff       | Submit selections in the TIMS by deadline  |
| Information:          |  |
| Robot Transportation: |  |
|                       | earning 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           | Invite team Scholarship Contact in the TIMS.   |
| Opportunities:        |  |
| 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 posted at <a href="http://frc-manual.usfirst.org/TeamUpdates/0">http://frc-manual.usfirst.org/TeamUpdates/0</a>                     |
| ·                     | I  |

| TIMS (Team Info     | Maintain and update team information via the TIMS: <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a> |
|---------------------|--|
| System):            |  |
| Track Twitter Feed: | Monitor the FRC Twitter Feed and Facebook Page for announcements about updates, news   |
|                     | and important information. <a href="http://twitter.com/FRCTeams">http://twitter.com/FRCTeams</a> (Twitter)   |
|                     | / https://www.facebook.com/FIRSTRoboticsCompetition (Facebook)   |

Tip! If team contacts are using school email addresses, please make sure the school's firewall allows emails from <a href="mailto:frcteams@usfirst.org">frcteams@usfirst.org</a>.

## 3.2.2 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 one over the age of 18**. Key duties of the Alternate Contact are outlined below:

| Calendar of Important | Monitor the Calendar of Important Deadline dates for changes, additions at:                   |
|-----------------------|---|
| Deadline Dates:       | http://www.usfirst.org/roboticsprograms/frc/frc-season-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 Administrative           |
|                       | Manual, Chapter 6- The Awards 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 FIRST 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       | Assist Main Contact with maintaining and updating team's TIMS record                          |
| System):              | at https://my.usfirst.org/frc/tims/site.lasso   |
| Vacation Coverage:    | Assist Main Contact with receiving communications and handling team issues during             |
|                       | vacation periods.   |

# 3.2.3 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 FIRST email blasts, read the FRC Blog and the Team Updates. |
|-----------------|--|
|                 | Communicate with FIRST 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 Administrative Manual <a href="Chapter 5 Robot Transportation">Chapter 5 Robot Transportation</a> . |
|                        | NEITHER FIRST NOR FEDEX WILL REPLACE LOST SHIPPING DOCUMENTS.   |
| Kit of Parts (KOP):    | 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.   |
|                        | 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 <a href="http://www.usfirst.org/roboticsprograms/frc/calendar">http://www.usfirst.org/roboticsprograms/frc/calendar</a>  |
| Dobot Transportation   |   |
| Robot Transportation   | <b>Read</b> Chapter 5 - Robot Transportation in the FRC Team Competition Manual as well as review supplemental instructions as directed in that chapter.  |
|                        | Be familiar with and conform to the following:  |
|                        | * Bag and Tag Events, 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 FedFy LIPS | Provide the Main or Alternate Contact with a shipping account number for the TIMS.  |
| or USPS Account        | This could directly impact the missing, defective, or broken parts replacement system for   |
| Number:                | your team.  |
|                        | Sponsor/school may let team use its shipping account, or obtain a number from the companies' websites.  |

# 3.3 RECOMMENDED ADDITIONAL CONTACTS

# 3.3.1 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

| 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 FIRST 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.                             |

# 3.3.2 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 the 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 | Responsible for receiving and disseminating any PR updates issued by FIRST, and using        |
| Updates:         | 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.   |

# 3.3.3 Scholarship 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: <a href="http://www.usfirst.org/aboutus/scholarships">http://www.usfirst.org/aboutus/scholarships</a> |
|----------------------|--|
| 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.  |

# 3.3.4 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.

| Communications:   | Receive school related team emails. Provide information/reply if necessary.  |
|-------------------|--|
|                   | 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 <u>Calendar of Important Deadlines</u> . Monitor Award due dates. Please refer to the Administrative Manual – <u>Chapter 6 – The Awards</u> . |
| 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: <a href="http://www.usfirst.org/aboutus/scholarships">http://www.usfirst.org/aboutus/scholarships</a>  |

# 3.3.5 Technical Contact Responsibilities

This person will assist the team with technical issues and problems related to engineering.

| 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 FIRST 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 FRC Game Manual – Section 5 after Kickoff. 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, pre-competition 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   |

# 3.3.6 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 Information: | 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 Administrative Manual Chapter 2 - Communications         |
|                      | section of the Manual for hints and good advice on choosing team hotels.                      |
|                      |   |
| Manual and Website:  | Refer to the "Site Info" on the website for special travel/parking instructions. Bring the    |
|                      | directions for the venue.   |
| Stores/Supplies:     | Refer to the Administrative Manual Chapter 4 - At the Events portion of the Manual 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?   |

# 3.4 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.

# 3.4.1 Game Rules Monitor Responsibilities

| Know Point System: | Be 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 <a href="http://frc-manual.usfirst.org">http://frc-manual.usfirst.org</a> .   |
|                    | Q&A is at <a href="http://www.usfirst.org/roboticsprograms/frc/game-q-and-a">http://www.usfirst.org/roboticsprograms/frc/game-q-and-a</a> |
| Monitor Team       | Communicate any changes, written in the updates, to the team.   |
| Updates:           | Team Updates are at: <a href="http://frc-manual.usfirst.org/TeamUpdates/0">http://frc-manual.usfirst.org/TeamUpdates/0</a>                |
|                    | News and Email Blasts are   |
|                    | at: http://www.usfirst.org/roboticsprograms/frc/emailblastarchive.aspx  |

# 3.4.2 Safety Captain Responsibilities

| At the Events:                  | 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.   |
| Home Work Site:                 | 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 FRC Competition<br>Manual: | Read "Courtesies and Rules" section in Administrative Manual Chapter 4 - At the Events section of the Manual. Meet with team members and decide what the team deems important in the safety area. Diplomatically enforce their findings.  |
| Read FRC Team Safety<br>Manual: | Print and read the "FIRST Robotics Competition Team Safety Manual", which can be found here: <a href="http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual">http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual</a> Meet with the team and go over the manual with everyone.   |
| Safety Policies:                | 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.  |
| Use Courtesy:                   | Suggest that the team build a robot cart if it doesn't have one.  At all times, think and behave with a <i>Gracious Professionalism</i> ® attitude.   |
|                                 | This position is one that makes teams aware of safety issues and inspires team members to improve safety conditions. It and supports the methods <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. |

# 4 At The Events



FIRST<sup>®</sup>, the FIRST<sup>®</sup> logo, FIRST<sup>®</sup> Robotics Competition, FRC<sup>®</sup>, Coopertition<sup>®</sup>, and Gracious Professionalism<sup>®</sup> are registered trademarks, and Sport for the Mind<sup>™</sup> are common law trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST<sup>®</sup>). ©2014FIRST. All rights reserved.

#### 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.

#### **4.2 FIRST SAFETY**

Participants and team mentors must review the *FIRST* safety policies and the *FIRST* Safety Manual located at <a href="http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual?id=470">http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual?id=470</a>. It provides sound safety practices for your workplace and *FIRST* events.

Every team should know, understand and 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 ANSI-approved, 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!

Please remember that fire extinguishers are available at the Pit Admin station and near the playing field. Please stay within your team's Pit or move to the competition viewing area. If the Pit area becomes too crowded for teams and

their machines to move back and forth to the field safely and quickly, *FIRST* will request that some team members leave the area.

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 devices to the cart; and
- Put your team number on your cart so it can be identified by field personnel.

NOTE: 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.

Refer to the <u>FIRST Safety Manual</u> for robot lifting techniques. By practicing these safety techniques, your team members will also develop a guick, 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.

#### 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, 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</u> staff!

#### 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. The Schedule will indicate the field you will practice and with what teams. *TEAMS CANNOT SWITCH PRACTICE TIMES.* 

#### 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 apart 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 <u>may not</u> switch practice times, there will be a designated Filler Line at each competition. Teams whose robots are ready for practice may join the Filler Line, <u>IF THEY HAVE PASSED FULL INSPECTION</u>. 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 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, the Pit Admin Supervisor will place a copy of the Qualification 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 Elimination 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 must queue up 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, 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 <a href="http://www.usfirst.org/roboticsprograms/frc/regional-events?id=430">http://www.usfirst.org/roboticsprograms/frc/regional-events?id=430</a>. Bring it with you so your team will have the event's agenda.

#### 4.5.3.1 Championship Agenda

As Championship approaches, important event information will be posted at: <a href="http://www.usfirst.org/roboticsprograms/frc/championship-event">http://www.usfirst.org/roboticsprograms/frc/championship-event</a>

#### 4.6 LOAD IN PROCEDURES

# 4.6.1 Bag and Tag

Don't know what Bag & Tag means? On 'Stop Build Day' - Feb 18 <sup>th</sup>, all teams must stop work on the robot and seal it in a large bag (using a tag) that will be included in the 2014 Kit of Parts. Teams record when the robot is sealed on a Robot Lock-Up Form. Teams then transport the robot to and from the event on their own. Please check the public agenda for robot drop-off times. The robot may not be unbagged, and no work on the robot is allowed until the Robot Lock-Up Form from has been reviewed and signed off by an inspector.

See FRC Administration Manual Section 5 - Robot Transportation for more Bag and Tag details.

# 4.6.2 At Championship

For Championship, teams will ship their robots to the event in a crate. See Administrative Manual - <u>Section 5 - Robot Transportation</u> for more details.

For convenience and to help ensure safety in the Pit, five (5) people from each team will be allowed to uncrate and work on their robot on Wednesday evening. See Championship Agenda, when published, for specific times. At least one of the five team members entering the Pits must be a post-high school adult (the others may be either students or adults).

The priority tasks for team members are to uncrate their robot, have their Robot Lock-Up form signed off by an Inspector before they unbag their robot, and move their crate to the aisle so that it is accessible to Shepard Exposition Services (SES) for removal. Teams can then set up their Pit and get the robot INSPECTED. No work on the robot is allowed until the Robot Lock-Up Form has been reviewed and signed off by an inspector. The rules for Wednesday night Pit entry at the Championship are as follows:

- Teams will not be allowed to use the practice fields Wednesday night;
- Teams should be focused on setting up their Pits and getting inspected;
- The five team members will be permitted to load in team materials on Wednesday night;
- Team members may only make one trip with load-in materials;
- There is no set limit to the amount of material teams may load-in, but it must be done in a safe, manageable way (Safety Advisors and other volunteers will be on site checking for, and helping mitigate, unsafe conditions);
- · Safety glasses are required while in the Pit; and
- An adult team member (one of the five permitted in the Pit) may use this time to check-in early to avoid the rush on Thursday morning.

SES (Shepard Expo Services) Desk personnel will be on hand to help during this limited opening.

- If your crate has incurred damage, do not open it until you notify the SES Desk personnel right away about the problem.
- Look for any label on your crate having to do with weight or crate damage questions regarding your shipment.
   Contact the SES Desk <u>before</u> opening the crate. <u>Once your team opens a crate, you cannot protest a weight issue.</u>
- SES Resolution time for weight overage / damage problems:
  - Notify the SES Desk personnel <u>immediately</u>.
- When you have uncrated, notify the SES Desk personnel so haulers can remove the empty crate(s) and keep aisles clear and safe.

#### 4.7 EVENT CHECK-IN

Event check in takes place at the Pit Admin station the first morning of the event at the Regional Competitions, and

Wednesday evening and Thursday morning for the Championship. At each event, <u>an adult member</u> of each team should check in <u>by no later than noon on the first day of the event.</u>

Prior to attending your event(s), please download the Agenda and review other important information specific to your event. You can find agendas and other information on the 2013 *FIRST* Robotics Competition Regional Events page: <a href="http://www.usfirst.org/roboticsprograms/frc/regional-events">http://www.usfirst.org/roboticsprograms/frc/regional-events</a>

#### 4.7.1 Consent and Release Forms

We highly encourage all FRC team members to submit their Consent and Release forms electronically.

FRC Team Mentors registered in TIMS will submit in TIMS: <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a>. Student team members will submit via the FIRST Student Team Information Member System (STIMS) at: <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>. 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

Please note if a team member decides to submit their Consent and Release form electronically, it will cover the team member's attendance <u>for the entire season</u> – from Kickoff through Championship. However, if a team member chooses to turn in a "hardcopy" of the form (i.e., printed out from the website and signed) he/she will have to provide it at the Kickoff event (if attending) <u>and</u> at every competition. 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.

## 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:

• Pit Map;

track of!

- · Practice Match Schedule;
- Safety Captain Badge;
- · Team List; and
- · Operator Badges.

#### 4.8 THE PIT

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!

#### 4.8.1 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 Rules

For safety and because of insurance regulations:

- Teams cannot build any structure that supports people, or items for storage, above the workspace in their team Pit:
- 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'x10'x10'; 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.

## 4.8.3 Spare Parts Station

Spare parts will be available at the events.

Batteries & chargers <u>WILL NOT</u> be available at any event unless you have made prior arrangements with FIRST (email <u>FRCParts@usfirst.org</u> for more information). <u>NOTE TO NON-NORTH AMERICAN TEAMS</u> <u>TRAVELLING TO USA EVENTS</u> – Batteries will be provided to you at the Spare Parts Station and will be labeled with your team number. Please <u>DO NOT</u> ship batteries within your crate.

Teams are responsible for all items required at events. If a team needs a replacement high-value item, LOANERS will be available under 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 at each event. Certified inspectors will be on site. Inspectors can sometimes help find problems and/or provide suggestions during an early 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 ship it. This will help to make your official inspection go smoothly and quickly;
- Inspectors will use an official inspection sheet for checking robots; a draft 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 Administrative Manual <u>Section 4.5.1 Practice Matches</u> 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, *FIRST* strives 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. Team members are not allowed to travel with the robot. 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. Remember that Teams cannot be driven by the Machine Shop Shuttle Driver. All students must be accompanied by an Adult Mentor at all times. If an Adult Mentor accompanies students, we recommend have a second Mentor or minimum of two students, in order to be in line with Youth Protection guidelines which will become policy in May 2014.

Hours:

Pit/Machine Shop Specific 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.

# 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 two sections.

### 4.8.6.1 Team-Provided Machine Shop Requirements

- The machine shop must be run by properly trained individuals who are 18 years or older. Team members are not allowed to run shop equipment.
- Neither FIRST nor the venue is liable for any loss or damage to team owned equipment that should occur at
- 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

Although FIRST may approve a local machine shop use at any Regional, 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:

a. Include an electrical source for the mobile machine shop facility;

- b. 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;)
- c. Handle job requests through the same counter/process as the *FIRST* provided shop services. This includes the sponsoring team's requests; and
- d. Operate ONLY during the event hours when the Pit is open.

#### 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 caution 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 (1) 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 (1) person Example: 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 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. <u>Judges/Safety Advisors will notice noncompliance.</u>

#### 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 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.
- Highlight team practice times on the Practice Schedule on the first day of the event and your competition match times on your Match List for the second and third days.
- Listen carefully for the queuing announcements at Regional events 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.

# 4.9.2 Pit Manners/Rules during the Ceremonies

- 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
  - ALL hats off please.

#### 4.10 PIT CLOSING ETIQUITTE

<u>On Time</u>: 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 <a href="MOT">MOT</a>
FIRST sponsored.

#### 4.12 CHAMPIONSHIP FIRST FINALE

This event takes place after the Awards Ceremony on Saturday evening. Please refer to the Championship Event Information.

#### 4.13 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.

# 4.13.1 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.

#### 4.13.2 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.

## 4.13.3 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.

# 4.13.4 Banners and Flags

Sponsors provide *FIRST* with banners so we can display them in specified areas as a way of thanking them for their generosity. We encourage teams to bring team flags and/or sponsor banners, but we ask that you adhere to the following:

• DO NOT hang them in the competition area, since this area is designated for official FIRST sponsor banners

#### ONLY.

- You may bring banners to the competition area while your team competes, but do not leave them or use them
  to section off seating.
- Saving group seats is not permitted.
- Hang banners ONLY in your team Pit.

#### 4.14 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 allowed to save seating space.

With this in mind, it is not permitted to hang banners or ribbons to designate such an area. We will remove and discard any banners, roping, etc... Please take turns sitting in the bleachers, if seating is limited. Share the fun. When you see there is a crowding problem, leave after your team's match and return later for another few matches.

#### 4.15 SITE RESTRICTIONS

Please read the following common site restrictions and adhere to them in order to promote an orderly, safe, pleasant and exciting competition. Please refer to Administrative Manual - <u>Section 4.2 FIRST</u> <u>Safety</u> for additional site restrictions at your event.

- **Do not** bring food to the site. If you bring food, do not bring it onto the property.
- **Do not** use noisy devices, such as floor stompers, whistles and/or air horns.
- <u>Do not</u> arrange for Internet access or phone lines on the site or attempt to connect to the Internet.
- <u>Do not</u> 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.
- <u>Do not</u> 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.
- <u>Do not</u> 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.
- <u>Do not form "tunnels"</u> during the Awards Ceremony. This can cause discomfort to those traveling through them and creates safety issues.

#### 4.16 CONSIDERATIONS

You will often hear the expression Gracious Professionalism® throughout your involvement in *FIRST*. You can read Woodie Flowers' definition in <u>Section 1 – Introduction</u> of the 2013 FRC Administration Manual. 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<sup>®</sup> 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<sup>®</sup>.

# 5 Robot Transportation



FIRST<sup>®</sup>, the FIRST<sup>®</sup> logo, FIRST<sup>®</sup> Robotics Competition, FRC<sup>®</sup>, Coopertition<sup>®</sup>, and Gracious Professionalism<sup>®</sup> are registered trademarks, and Sport for the Mind<sup>™</sup> are common law trademarks of the United States Foundation for Inspiration and Recognition of Science and Technology (FIRST<sup>®</sup>). ©2014FIRST. All rights reserved.

#### **OVERVIEW**

Following the guidelines will ensure that your robot arrives where it needs to be on time so that your team can focus on the important thing – participating in the event!

#### 5.1 STOP BUILD DAY

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. If the team is not able to access their robot on Stop Build Day for bagging (e.g. the team's school is closed due to weather), the team will be able to bag late without penalty. The team may not perform more work on their robot after midnight Stop Build Day. The team may only take their robot, as it was on midnight of Stop Build Day, and put it in the bag after that time, without performing any additional work. The team should note on the Robot Lock-Up Form the reason for the late bag closure.

Note that "Stop Build Day" is a specific date, so you may work on your robot until midnight on that date in whatever time zone you are working.

STOP BUILD DAY is TUESDAY, FEBRUARY 18, 2014

#### 5.2 BAG AND TAG

All teams must "Bag and Tag" their robots. Teams are also required to transport their bagged and tagged (secured with one supplied zip tie from KoP) robot to their competition event(s).

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.

## 5.3 INSTRUCTIONS FOR "BAG AND TAG"

Each team will receive a special "Bag and Tag" kit in January with their Kit of Parts (KoP). The kit will contain:

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

Information on where to obtain additional tags can be found on the Where to Get More? document on the <u>Kit of Parts</u> website.

1. Bag and Tag your robot on Stop Build Day, and complete the *Robot Lock-Up Form*.

## The Proper Bagging Procedure:

- Set the bag on the floor, leaving room for the robot in the center.
  - Bags are provided in the Kickoff Kit for your convenience; however there is no requirement that Teams
    use those exact bags. Any commercially available clear bag large enough to contain the Robot may be
    used.
- 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.
  - If you run out of the tags supplied, you may use any commercially available serialized security tags.
  - If you need to lock up your robot and are not able to obtain additional tags in time, you may use a cable tie and create a numbered label yourself.
    - Inspectors will pay close attention to these home-made tags. Be prepared for additional discussion.
- Complete the <u>Robot Lock-Up Form</u> as required in <u>Section 5.5</u> to verify the date and time that the bag was sealed.
- If required, the Team may use two (2) bags to facilitate easier robot transportation. The second bag must also be sealed with a numbered tag and logged on the *Robot Lock-Up Form*.
- 2. You may **NOT** open your bag until:
- a) it has been checked, approved by an on-site inspector, AND
- b) 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.
  - 3. After your Robot Lock-Up Form has been properly checked and approved, your team may open the bag and

- prepare to compete.
- 4. After the event, if you are attending another event, such as the 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 *Section 5.6*.
- 5. Remove your robot from the event through the designated exit.
- 6. If you are attending the Championship as your next event, or have been granted an Exemption to ship your robot to an additional event, follow the instructions listed in <u>Section 5.7</u>.

## 5.4 ROBOT LOCK AND UNLOCK INSTRUCTIONS

# 5.4.1 Completing the Robot Lock-Up Form

The <u>Robot Lock-up Form</u> is available on the home page of the FRC Competition Manual: <a href="http://frc-manual.usfirst.org/">http://frc-manual.usfirst.org/</a>. Make sure that you complete every item on the form. INCOMPLETE FORMS WILL BE REJECTED BY INSPECTORS AT EVENTS AND DELAY EVENT PARTICIPATION. 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 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 un-bag their robots on time at events. **Be ready to show your** <u>Robot Lock-Up</u> Form when you first arrive at your event with your robot.

# 5.4.2 When the Robot Lock-Up Form is required to be used

The Robot Lock-Up Form MUST be used:

- on "Stop Build Day";
- after "Stop Build Day", during Robot Displays (new this year, see section 5.4.3)
- during any 'Robot Access Period' taken advantage of if you are attending a Two-day District event. See
   <u>Section 5.6</u> 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 Robot Lock-Up Form 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 Championship.

# 5.4.3 Robot Displays

New this year! 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 <a href="mailto:frcteams@usfirst.org">frcteams@usfirst.org</a>

## 5.5 REQUESTING A ROBOT TRANSPORT EXEMPTION

If the methods listed for transporting your robot with our traditional "Bag and Tag" system do not work for your team, you may request a Robot Transport Exemption. *FIRST* will provide two (2) shipments to teams granted the Exemption. With this Exemption, your team will be exempt from the physical transportation of the robot to the venue; teams are still required to Bag and Tag their robot.

#### **Basic Exemption Information:**

- 1. You may request a Robot Transport Exemption by emailing <a href="mailto:frclogistics@usfirst.org">frclogistics@usfirst.org</a>.
- 2. Include as much detail as you can in your request, and use the subject line: "Robot Transport Exemption Request, Team XXXX", with your team number in place of 'XXXX'
- 3. Only teams that have requested and been granted a Robot Transport Exemption will be able to make use of the FedEx shipping donation.
- 4. Robot Transport Exemptions are for Regional Events only. Robot Transport Exemptions to District Events will not be permitted.
- 5. Robot Transport Exemption requests will be handled on a case-by-case basis. Not every request will be granted. **Exemptions must be submitted by December 6, 2013.**
- 6. 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 by emailing <a href="mailto:frclogistics@usfirst.org">frclogistics@usfirst.org</a>.
- 7. Team's requests for Exemptions to consecutive weekly events will **NOT** be granted.
- 8. If an Exemption is approved, FIRST HQ will establish a robot storage/drayage location near the event site.
- 9. Robot transportation services under the FedEx donation will be provided for that event and *FIRST* HQ will provide shipping instructions for approved teams.

**DO NOT SHIP ROBOTS DIRECTLY TO THE SITE!** All Robot Transport Exemptions must use the Drayage service that is provided by *FIRST*. For more information, see Administrative Manual <u>Section 5.4 - Robot Lock and Unlock Instructions</u>.

If you have been granted a Robot Transport Exemption, you can find shipping instructions under Administrative Manual - Section 5.7.1- Shipping Instructions for Exemption Granted Teams.

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

## 5.6 "ROBOT ACCESS PERIOD" - FOR TEAMS ATTENDING 2-DAY EVENTS

Two-day District events for the 2014 season include Michigan District Events, Mid-Atlantic Robotics District Events, New England District Events and Pacific Northwest District Events. Teams attending these 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 30 minutes and the team may not have more than 3 access periods prior to each event. The robot must be locked up in between sessions and this must be documented on the Robot Lock-Up Form each time.

# 5.7 ROBOT SHIPPING – FOR TEAMS GRANTED AN EXEMPTION OR ATTENDING CHAMPIONSHIP

All Robot Transport Exemption granted teams and ALL teams attending the Championship must build a crate to ship their robot in. Robot shipments in crates must abide by standard freight shipping processes. This applies to any team moving their robot within a crate. FedEx will not pick up a robot that is not in a crate. All Robot Transport Exemption teams will receive detailed shipping instructions in their KoP. Teams attending the Championship will receive detailed shipping instructions upon qualifying for the event.

See the "Shipping Crate Construction" document posted with the FRC Administrative Manual for more details: <a href="https://www.usfirst.org/frc/competitionmanual">www.usfirst.org/frc/competitionmanual</a>. 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**.

FedEx Freight requires prior notice for pickups, especially if your location does not have a loading dock. If you have been granted an Exemption and/or are attending the Championship, you must call one week ahead 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. 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. For more information see the "Quoting and Booking a Robot Crate"

document posted with the FRC Administrative Manual for more details: www.usfirst.org/frc/competitionmanual.

#### **TOOL CRATE INFORMATION:**

Teams granted an Exemption or attending 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.

# 5.7.1 Shipping Instructions for Exemptions 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.
- 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, fill out and attach the appropriate shipping documentation to the crate to facilitate shipping from the drayage facility to its next destination (Regional, home, or Championship).
- 4. Please keep one (1) copy of your shipping documentation for your records to track the shipment. As soon you are able, please provide FIRST HQ (<a href="mailto:frclogistics@usfirst.org">frclogistics@usfirst.org</a>) 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: <a href="https://www.usfirst.org/frc/competitionmanual">www.usfirst.org/frc/competitionmanual</a>.

If your <u>first</u> 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 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 <u>Section 5.5</u> to lock up your robot. DO NOT open your bag at the event until it has been checked, approved by an 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 an Robot Transport Exemption is <u>not your first event</u> 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

Administrative Manual <u>Section 5.5 - Requesting a Robot Transport Exemption</u> 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 an 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:

- 1. If you are granted more than one Robot Transport Exemption, you will still ONLY receive two FedEx vouchers. Multiple exemptions 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).
- 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 Championship.
- 3. When teams qualify for the Championship, they will receive one (1) FedEx Voucher at the qualifying Regional to ship their robot to St. Louis. However, teams with a Robot Transport Exemption will **NOT** receive this voucher, as the two 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 Championship, or home. (ALL teams will receive a voucher to get their robot home from Championship at the Championship event during Check In).

# 5.7.2 Shipping Your Robot to the Championship

- 1. If your team qualifies for Championship, you will be given one (1) FedEx voucher at the qualifying event for shipping your robot to the Championship. All robots must be shipped to Championship. Team may not bring their robot themselves to Championship.
- 2. Go to Pit Administration to procure this voucher. Pit Administration will have the complete list of Championship qualifying teams.
- 3. Robots going to the Championship must be shipped by the **Thursday** after the final event that the team participated.
- a. Non-Exemption Granted Teams:
- i. 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 <u>Section 5.3</u>. Bring your robot back to your build site or other location away from the event venue, crate the robot and prepare for shipment to Championship. Follow the instructions as outlined in <u>Section 5.7</u> regarding crating requirements.
- b. Exemption Granted Teams:
- i. If you are shipping to 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 Championship drayage location.
  - 4. All teams attending the Championship will receive (1) one shipment home for their robot under the FedEx donation. The FedEx voucher for this shipment will be distributed at the Championship in the team's Check In packet.
  - 5. If the team would like to take their robot home as they leave Championship, they **MUST** email <a href="mailto:frclogistics@usfirst.org">frclogistics@usfirst.org</a> to have their request approved.

# 5.7.3 Shipping your Robot using your own Funds

Teams may ship their robot to any event 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.

# 5.8 IMPORTANT SHIPPING CONTACTS

## 5.8.1 FIRST Is Your Main 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:                         | www.usfirst.org/frc/competitionmanual   |
|--|---|
| Download shipping labels and Robot Lock Up Form: | www.usfirst.org/frc/robotshipping   |
| Phone:   | (800) 871-8326 OR (603)666-3906 - 8:30 AM to 5:00 PM<br>EST                   |
| Email:   | frclogistics@usfirst.org  Subject line: FIRST Team [your #] Shipping Question |
| Fax:   | (603) 666-3907  |
| Address:   | Team Support/Operations   |
|  | 200 Bedford Street  Manchester, NH 03101                                      |

# 5.8.2 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) |  |  |

## 5.9 REVISION HISTORY

| Date     | Section | Revision                  |  |  |
|----------|---------|---------------------------|--|--|
| 11/27/13 | 5.1     | Changed Stop Build Day    |  |  |
|          |         | date to February 18, 2014 |  |  |

# 6 Awards



## **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*<sup>®</sup> Robotics Competition Awards. Unless otherwise noted, all awards are given at Regional events, District events, District Championships and the *FIRST* Championship.

## 6.2 COMPLETE AWARDS LIST

| Award               | Description  | Selected By  | Regional | District | District CMP | FIRST CMP | FIRST CMP |
|---------------------|--|--|----------|----------|--------------|-----------|-----------|
| Chairman's<br>Award | The most prestigious award at FIRST, it honors the team that best represents a model for | Chairman's Judge Panel (application and interview process) | X        | X        | X            | Division  | X         |
|                     | other teams to<br>emulate and<br>best embodies<br>the purpose<br>and goals of<br>FIRST   |  |          |          |              |           |           |

| Creativity Award  Sponsored by                            | Celebrates<br>creativity in<br>design, use of<br>component, or<br>strategy of<br>play.   |   | X | X | X | Х |   |
|---|--|---|---|---|---|---|---|
| Xerox   | piay.  |   |   |   |   |   |   |
| Engineering<br>Inspiration<br>Award                       | Celebrates outstanding success in advancing respect and appreciation for engineering within a team's school and                  | Judges  | X | X | X | X |   |
|   | community.   |   |   |   |   |   |   |
|   | Celebrates the entrepreneuria I spirit by recognizing a  |   | Х | х | х | Х |   |
| Sponsored by<br>Kleiner<br>Perkins<br>Caufield &<br>Byers | team that has<br>developed the<br>framework for<br>a comprehensi<br>ve business<br>plan to scope,<br>manage, and<br>achieve team |   |   |   |   |   |   |
|   | objectives.  |   |   |   |   |   |   |
| Excellence in Engineering                                 | Celebrates an elegant and advantageous machine feature.  |   | X | X | X | X |   |
| Sponsored by<br>Delphi                                    |  |   |   |   |   |   |   |
| FIRST   | Celebrates outstanding   | Dean's List   | Х |   | X |   | Х |
| Dean's List Award   | student leaders whose passion for and effectiveness at attaining FIRST ideals  | Judge Panel<br>(nomination &<br>interview<br>process) |   |   |   |   |   |
| EIDST Euturo  | is exemplary.  | EIDOT Euturo  |   |   |   |   |   |
| FIRST Future<br>Innovator<br>Award                        | Celebrates innovation and intellectual property creation inspired by the   | Award Judge<br>Panel                                  |   |   |   |   | Х |

| Sponsored by<br>the Abbott<br>Fund                 | FIRST season experience.  |        |   |   |   |   |   |
|--|---|--------|---|---|---|---|---|
| Founder's<br>Award                                 | Recognizes the organization or individual that has contributed significantly to   | FIRST  |   |   |   |   | X |
|  | the growth of FIRST.  |        |   |   |   |   |   |
| Gracious Prof<br>essionalism <sup>®</sup><br>Award |   |        | X | Х | X | Х |   |
| Sponsored by<br>Johnson &<br>Johnson               | ssionalism in<br>the heat of<br>competition,<br>both on and<br>off the playing<br>field.  |        |   |   |   |   |   |
| Highest<br>Rookie<br>Seed Award                    | Celebrates the highest-seede d rookie team at the conclusion of the qualifying rounds.  |        | X | X | X | X |   |
| In honor of<br>Jack Kamen                          | In honor of Jack Kamen, Dean's father, for his dedication to art and illustration and his devotion to FIRST. This award celebrates attractiveness in engineering and outstanding visual aesthetic integration of machine and team appearance. |        | X | X | X | X |   |
| Industrial   | Celebrates  | Judges | Х | Х | Х | Х |   |

| Design Award  | function in an efficiently designed |                 |   |     |   |     |   |
|---------------|-------------------------------------|-----------------|---|-----|---|-----|---|
| Sponsored by  | machine that                        |                 |   |     |   |     |   |
| General       | effectively                         |                 |   |     |   |     |   |
| Motors        | addresses the                       |                 |   |     |   |     |   |
|               | game                                |                 |   |     |   |     |   |
|               | challenge.                          | 0.1.1           |   | .,, |   | .,, |   |
|               | Celebrates the                      |                 | Х | X   | X | Х   |   |
| Safety Award  | team that                           | Advisors        |   |     |   |     |   |
|               | progresses                          |                 |   |     |   |     |   |
|               | beyond safety                       |                 |   |     |   |     |   |
| 0             | fundamentals                        |                 |   |     |   |     |   |
| Sponsored by  | by using                            |                 |   |     |   |     |   |
| Underwriters  | innovative                          |                 |   |     |   |     |   |
| Laboratories  | ways to                             |                 |   |     |   |     |   |
|               | eliminate or                        |                 |   |     |   |     |   |
|               | protect against                     |                 |   |     |   |     |   |
| 1             | hazards.                            | 1 1             |   | V   | V | V   |   |
|               | Celebrates an                       | Judges          | Х | Х   | Х | Х   |   |
| Control Award |                                     |                 |   |     |   |     |   |
|               | control system                      |                 |   |     |   |     |   |
|               | or application                      |                 |   |     |   |     |   |
|               | of control                          |                 |   |     |   |     |   |
| Sponsored by  |                                     |                 |   |     |   |     |   |
| Rockwell      | electrical,                         |                 |   |     |   |     |   |
| Automation    | mechanical or                       |                 |   |     |   |     |   |
|               | software – to                       |                 |   |     |   |     |   |
|               | provide unique                      |                 |   |     |   |     |   |
|               | machine                             |                 |   |     |   |     |   |
|               | functions.                          |                 | X | X   | X | V   |   |
|               | During the                          |                 | Α | ^   | ^ | Х   |   |
| ludges'       | course of the                       | ludas           |   |     |   |     |   |
| Judges'       | competition,                        | Judges          |   |     |   |     |   |
| Award         | the judging                         |                 |   |     |   |     |   |
|               | panel may                           |                 |   |     |   |     |   |
|               | decide a                            |                 |   |     |   |     |   |
|               | team's unique                       |                 |   |     |   |     |   |
|               | efforts,                            |                 |   |     |   |     |   |
|               | performance, or dynamics            |                 |   |     |   |     |   |
|               | merit                               |                 |   |     |   |     |   |
|               | recognition.                        |                 |   |     |   |     |   |
| Media &       | Award                               | Comcast         |   |     |   |     |   |
|               |                                     | NBCUniversal    |   |     |   |     |   |
| Innovation    | team that                           | . 1500 m vorsai |   |     |   |     | X |
| Award         | develops and                        |                 |   |     |   |     | , |
|               | implements                          |                 |   |     |   |     |   |
|               | the most                            |                 |   |     |   |     |   |
|               | outstanding                         |                 |   |     |   |     |   |
| Sponsored by  |                                     |                 |   |     |   |     |   |
| Comcast       | experience,                         |                 |   |     |   |     |   |
| NBCUniversal  |                                     |                 |   |     |   |     |   |
|               | strategy, and                       |                 |   |     |   |     |   |
| I             | ]                                   | l               |   |     | l |     |   |

|               |                    |        | •    |      |      |      |      |
|---------------|--------------------|--------|------|------|------|------|------|
|               | rationale for      |        |      |      |      |      |      |
|               | digital            |        |      |      |      |      |      |
|               | channels to        |        |      |      |      |      |      |
|               | disseminate        |        |      |      |      |      |      |
|               |                    |        |      |      |      |      |      |
|               | content to its     |        |      |      |      |      |      |
|               | audience and       |        |      |      |      |      |      |
|               | further the        |        |      |      |      |      |      |
|               | FIRST              |        |      |      |      |      |      |
|               | mission.           |        |      |      |      |      |      |
| Quality Award |                    | Judges | Х    | Х    | Х    | Х    |      |
| Quality Award | machine            | Juages | ^    | ^    | ^    | ^    |      |
|               |                    |        |      |      |      |      |      |
|               | robustness in      |        |      |      |      |      |      |
|               | concept and        |        |      |      |      |      |      |
| Sponsored by  | fabrication.       |        |      |      |      |      |      |
| Motorola      |                    |        |      |      |      |      |      |
| Rookie        | Celebrates the     | Judges | Х    | Х    | Х    | Х    |      |
|               | rookie team        | 9      | - •  | - •  | - •  | - •  |      |
| All Star      | exemplifying a     |        |      |      |      |      |      |
| Ali Stat      |                    |        |      |      |      |      |      |
|               | young but          |        |      |      |      |      |      |
| Award         | strong             |        |      |      |      |      |      |
|               | partnership        |        |      |      |      |      |      |
|               | effort, as well    |        |      |      |      |      |      |
|               | as                 |        |      |      |      |      |      |
|               | implementing       |        |      |      |      |      |      |
|               | the mission of     |        |      |      |      |      |      |
|               |                    |        |      |      |      |      |      |
|               | FIRST to           |        |      |      |      |      |      |
|               | inspire            |        |      |      |      |      |      |
|               | students to        |        |      |      |      |      |      |
|               | learn more         |        |      |      |      |      |      |
|               | about science      |        |      |      |      |      |      |
|               | and                |        |      |      |      |      |      |
|               | technology.        |        |      |      |      |      |      |
| Rookie        | Celebrates a       | Judges | Х    | Х    | Х    | Х    |      |
| INDONIE       |                    | Juuges | ^    | ^    | ^    | ^    |      |
|               | rookie team's      |        |      |      |      |      |      |
| Inspiration   | outstanding        |        |      |      |      |      |      |
|               | success in         |        |      |      |      |      |      |
| Award         | advancing          |        |      |      |      |      |      |
|               | respect and        |        |      |      |      |      |      |
|               | appreciation       |        |      |      |      |      |      |
|               | for                |        |      |      |      |      |      |
|               | engineering        |        |      |      |      |      |      |
|               |                    |        |      |      |      |      |      |
|               | and                |        |      |      |      |      |      |
|               | engineers,         |        |      |      |      |      |      |
|               | both within        |        |      |      |      |      |      |
|               | their school,      |        |      |      |      |      |      |
|               | as well as in      |        |      |      |      |      |      |
|               | their              |        |      |      |      |      |      |
|               | community.         |        |      |      |      |      |      |
| Safety        | Recognizes         | UL     | n/a  | n/a  | n/a  | n/a  | n/a  |
|               |                    | OL     | 11/a | 11/a | 11/a | II/a | 11/a |
| Animation     | the team that      |        |      |      |      |      |      |
|               | submits a          |        |      |      |      |      |      |
| Award         | short              |        |      |      |      |      |      |
|               | animated film      |        |      |      |      |      |      |
|               | that best          |        |      |      |      |      |      |
|               | promotes the       |        |      |      |      |      |      |
|               | I DI OHIOLOGI HIKA |        |      |      |      |      |      |

| *This is a        | current                  |                          |     |   |   |     |     |
|-------------------|--------------------------|--------------------------|-----|---|---|-----|-----|
| pre-season        | season's                 |                          |     |   |   |     |     |
| award             | team safety              |                          |     |   |   |     |     |
| Toom Spirit       | focus.<br>Celebrates     | ludgoo                   | X   | X | X | X   |     |
| Team Spirit Award | extraordinary            | Judges                   | ^   | ^ | ^ | ^   |     |
| Awaiu             |                          |                          |     |   |   |     |     |
|                   | enthusiasm               |                          |     |   |   |     |     |
|                   | and spirit               |                          |     |   |   |     |     |
| Changarad by      | through                  |                          |     |   |   |     |     |
| Sponsored by      | exceptional              |                          |     |   |   |     |     |
| Chrysler          | partnership and teamwork |                          |     |   |   |     |     |
|                   |                          |                          |     |   |   |     |     |
|                   | furthering the           |                          |     |   |   |     |     |
|                   | objectives of FIRST.     |                          |     |   |   |     |     |
| Volunteer of      |                          | Dogional/Dietri          | X   |   | X |     | X   |
| the Year          |                          | Regional/Distri          | Χ   |   | ^ |     | ^   |
|                   | an individual,           | ct Planning<br>Committee |     |   |   |     |     |
| Award             | business, or             | Committee                |     |   |   |     |     |
|                   | organization             |                          |     |   |   |     |     |
|                   | that                     |                          |     |   |   |     |     |
|                   | consistently             |                          |     |   |   |     |     |
|                   | excels in their          |                          |     |   |   |     |     |
|                   | efforts with             |                          |     |   |   |     |     |
|                   | proven results           |                          |     |   |   |     |     |
|                   | in the areas of          |                          |     |   |   |     |     |
|                   | Impact,                  |                          |     |   |   |     |     |
|                   | Leadership,              |                          |     |   |   |     |     |
|                   | Personal                 |                          |     |   |   |     |     |
|                   | Commitment,              |                          |     |   |   |     |     |
|                   | Community and Historical |                          |     |   |   |     |     |
|                   | Contributions.           |                          |     |   |   |     |     |
| Woodie            |                          | Prior WFA                | Х   |   | X |     | X   |
| Flowers           | Is presented to an       | Winners                  | ^   |   | ^ |     | ^   |
| riowers           | outstanding              | vviilileis               |     |   |   |     |     |
| Award             | Mentor in the            |                          |     |   |   |     |     |
| Awaiu             | robotics                 |                          |     |   |   |     |     |
|                   | competition              |                          |     |   |   |     |     |
|                   | who best                 |                          |     |   |   |     |     |
| Sponsored by      | leads,                   |                          |     |   |   |     |     |
| Sportsored by     | inspires, and            |                          |     |   |   |     |     |
| Dr. William       | empowers                 |                          |     |   |   |     |     |
| Murphy            | their team               |                          |     |   |   |     |     |
| Marphy            | using                    |                          |     |   |   |     |     |
|                   | excellent com            |                          |     |   |   |     |     |
|                   | munication               |                          |     |   |   |     |     |
|                   | skills.                  |                          |     |   |   |     |     |
| Finalist          | Celebrates the           | Robot                    | Х   | X | Х | Х   | X   |
| a.iot             | alliance that            | Performance              |     |   |   |     |     |
|                   | makes it to the          |                          |     |   |   |     |     |
|                   | final match of           |                          |     |   |   |     |     |
|                   | the                      |                          |     |   |   |     |     |
|                   | competition              |                          |     |   |   |     |     |
| Winner            | Celebrates the           | Robot                    | Х   | Х | Х | Х   | Х   |
|                   | alliance that            | Performance              | - • |   |   | - • | - • |
| ī '               | l                        |                          |     | İ | 1 |     |     |

|                | wins the final match of the competition |           |  |  |   |
|----------------|---|-----------|--|--|---|
|                | Recognizes                              | America   |  |  | X |
|                | the creative                            | Makes and |  |  |   |
| New This       | use of 3D                               | ORNL      |  |  |   |
| Year           | printing to                             |           |  |  |   |
|                | provide                                 |           |  |  |   |
| FIRST 3D       | innovative                              |           |  |  |   |
| Printing Award | design                                  |           |  |  |   |
|                | solutions,                              |           |  |  |   |
|                | resolve                                 |           |  |  |   |
|                | manufacturing                           |           |  |  |   |
| Sponsored by   | challenges,                             |           |  |  |   |
| America        | enhance                                 |           |  |  |   |
| Makes and      | marketing                               |           |  |  |   |
| ORNL           | solutions, and                          |           |  |  |   |
|                | engage in                               |           |  |  |   |
|                | community                               |           |  |  |   |
|                | outreach.                               |           |  |  |   |

## 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 STIMS and be able to view the awards submission section on their main page.

Chairman's Award, Entrepreneurship Award, Media and Technology Innovation Award, Safety Animation Award, and Woodie Flowers Award must be submitted through the *FIRST* Student Team Information Members System (STIMS) <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>. The *FIRST* Dean's List Award must be submitted by the team's main or alternate contact through TIMS, <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a>.

The *FIRST*<sup>®</sup> Future Innovator Award (FFIA) portal may be accessed through the *FIRST* Student Team Information Members System (STIMS) <a href="https://mv.usfirst.org/stims/site.lasso">https://mv.usfirst.org/stims/site.lasso</a> or the <a href="https://mv.usfirst.org/stims/site.lasso">FFIA</a> portal.

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**):

| Award            | Open Date                   | Close Date                  |
|------------------|-----------------------------|-----------------------------|
| Safety Animation | Thursday, October 10, 2013  | Thursday, December 12, 2013 |
| Chairman's Award | Thursday, November 14, 2013 | Thursday, February 13, 2014 |
|                  |                             |                             |

| Entrepreneurship Award              | Thursday, November 14, 2013          | Thursday, February 13, 2014         |
|-------------------------------------|--------------------------------------|-------------------------------------|
| Media & Technology Innovation Award | Midnight, Saturday, February 1, 2014 | Midnight, Friday, February 28, 2014 |
| Woodie Flowers Award                | Thursday, November 14, 2013          | Tuesday, February 18, 2014          |
| Dean's List                         | Thursday, November 14, 2013          | Thursday, February 20, 2014         |
| FIRST Future Innovator Award        | Thursday, November 14, 2013          | Thursday, March 6, 2014             |
| FIRST 3D Printing Award             | Friday, January 31, 2014             | Friday, March 14, 2014              |

## 6.4 THE 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. However, all teams that received a NASA Grant, including rookie recipients, must prepare a Chairman's Award submission on line through the *FIRST* Student Team Information Member System (STIMS) <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a> as part of the grant requirement (even though Rookie NASA Grant Teams will NOT be considered for the award and are NOT required to provide a DVD).

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 District event at which they are competing.

**Teams will be restricted to winning only once at each level of competition.** In other words, once a team has won at a Regional or District event, they may not win 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 winning the Chairman's Award at a District event may not win again at a later Regional.

*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* Student Team Information Members System (STIMS) (<a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>). Follow the directions shown on the site to submit your team's entry. Submission dates are listed in <a href="https://section.org/stims/site.lasso">Section.org/stims/site.lasso</a>).

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 <u>Section 6.3.1</u>. No entries will be accepted or altered after this deadline.

Chairman's Award submitters will go into STIMS ( <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>) 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.

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.

Important Note: 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 <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a>. Refer to Section 1 Communications for more details about the Judges Information Page.

#### 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 win at that event. Chairman's Award interviews are limited to ten minutes total; five minutes for a presentation by the team (which includes set-up) and up to five minutes of question and answer led by the Judges. Not more than three (3) team members, of which one (1) may be an 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, an adult mentor/assistant may provide translation services for students needing foreign language or sign language translation so the students and Judges may communicate. This adult mentor/assistant may be in addition to the three (3) Team members noted above, but may provide no assistance to the team other than the 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 5 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.

Note: 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 winning Chairman's Award team will also be required to bring a copy of their video to the *FIRST* Championship. Therefore, the winning team must also collect their video after the awards ceremony if they want to bring that copy to 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.
- 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

**Note:** Teams do not have to use professional equipment to get professional results. There is a good chance that someone on your team or in the school does this as a hobby and can be recruited to help.

#### Sound

• Should be clear of pops and hisses

## 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 obscene 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, using the <u>Chairman's Award Video Consent Form</u>)

#### New this year, Videos may be submitted to the Judges either on DVD or USB Flash Drive

#### **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

**Note**: 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.

## **Tips, Timelines & Tools**

- 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 & Release Form
- Guidelines and Tips video by Paul Lazarus of White Dwarf Productions

# 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 receiving The Chairman's Award at the Championship will select the Allaire Medal recipient. The adult and student team members of the Chairman's Award winning team determine the winner. 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.

# 6.5 FIRST® FUTURE INNOVATOR AWARD (FFIA) Sponsored by the Abbott Fund

This award recognizes creativity in effectively solving a real-world, complex problem through the invention of a unique solution beyond the requirements of the *FIRST* competition season. This award directly links to the *FIRST* mission to inspire young people to be science and technology leaders and to the *FIRST* vision to transform the culture by creating a world where science and technology are celebrated.

## 6.5.1 Award Overview

The FFIA competition is open to all FRC and FTC teams officially registered for the current FRC competition season. FRC and FTC teams must apply at the <u>FFIA PORTAL</u>. Students may also access the FFIA portal through STIMS at <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a> Submission dates are listed in <u>Section 6.3.1</u>.

The FFIA winner will be announced at the *FIRST* Championship. The winning inventor(s) will be granted an award sponsored by the Abbott Fund and will have the opportunity to meet personally with Dean Kamen. FIRST will provide transportation and hotel cost for one inventor and a chaperone to attend Championship (if the team and/or inventor is not already attending the Championship), and meet with Dean.

## 6.5.2 Award Criteria

Applicants make a formal electronic submission(s) by logging into the <u>FFIA PORTAL</u> or **STIMS** at <a href="https://my.usfirst.org/frc/tims/site.lasso">https://my.usfirst.org/frc/tims/site.lasso</a>. Ideas submitted for an FFIA in prior years will not be accepted unless the idea has been greatly improved/changed and could be considered new.

*FIRST* strongly encourages all teams to file for patent protection by filing a provisional patent application with the United States Patent and Trademark Office (USPTO), before submitting for the Future Innovator Award.

- Additional information regarding provisional patent applications can be found at www.uspto.gov
- Once an idea is shared through submission for this award, patent protection can only be sought in the United States and cannot be sought in any other jurisdiction, unless a provisional patent has been filed before submission.

# 6.5.3 Award Judging

At the FIRST Championship, the winner of the FIRST Future Innovator Award, sponsored by the Abbott Fund, will be announced and shown at the awards ceremony.

Submission will be judged on the following criteria:

- 1. Complexity of the problem to be solved by the invention
- 2. Effectiveness of the invention in solving the problem
- 3. Uniqueness of the invention
- 4. Simplicity of the invention
- 5. Practicality of developing and implementing the invention
- 6. Whether the invention was utilized for a FIRST -related activity
- 7. The degree to which to invention addresses one of the 14 Grand Challenges or the 4 Challenge Themes
- 8. Judge's Discretion (This criterion gives Judges the ability to take in to consideration elements of the invention not well captured above)

Student inventors are encouraged to think about and submit inventions that pertain to the National Academy of Engineering's 14 Grand Challenges ( <a href="http://www.engineeringchallenges.org">http://www.engineeringchallenges.org</a>).

More information regarding the 14 Grand Challenges can be found through the link below:

- 1. Make Solar Energy Economical
- 2. Provide Energy From Fusion
- 3. <u>Develop Carbon Sequestration Methods</u>
- 4. Manage The Nitrogen Cycle
- 5. Provide Access To Clean Water
- 6. Restore And Improve Urban Infrastructure
- 7. Advance Health Informatics
- 8. Engineer Better Medicines
- 9. Reverse-Engineer The Brain
- 10. Prevent Nuclear Terror
- 11. Secure Cyberspace
- 12. Enhance Virtual Reality
- 13. Advance Personalized Learning

#### 14. Engineer The Tools Of Scientific Discovery

Other interesting areas may be related to:

- 1. Sustainability
- 2. Health
- 3. Security
- 4. Joy of Living
- FIRST Robotics

The invention does not need to 'solve' one of the Grand Challenges or any of the other categories listed above, instead the Grand Challenges have been provided to give guidance for submissions for this award. Additionally, you can utilize the judging criteria for guidance as to what the judges will be looking for in evaluating submissions.

#### 6.5.4 Additional Documentation and Video

How to Apply for a Patent

Patent Process Video by Abbott

Submission Tips Video by Abbott

Any additional questions can be submitted to <a href="maxid@maxval-ip.com">maxid@maxval-ip.com</a>

## 6.6 FIRST DEAN'S LIST

In an effort to recognize the leadership and dedication of *the FIRST* most outstanding FRC students, the Kamen family sponsors an award for selected top students known as the *FIRST* Dean's List.

Similar to the very prestigious National Merit Scholarship Award winners, there are three (3) "categories" of FIRST Dean's List Award students:

- 1. FIRST Dean's List Nominees (the group of two (2) sophomore, junior, and/or senior students nominated by each FRC team). Note: Starting in the 2015 season, only students in grades 10 and 11 (sophomores and juniors) will be eligible.
- 2. *FIRST* Dean's List Finalists comprised of the two (2) students selected at each Regional and students selected at the District Championships.
- 3. *FIRST* Dean's List Winners (10 students selected from the *FIRST* Dean's List Finalists at the FRC Championship).

Teams nominating students as *FIRST* Dean's List Nominees should note that colleges and universities are extremely interested in recruiting *FIRST* Dean's List Award students and accordingly, only 10 <sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students (sophomores, juniors, and seniors) will be eligible for *FIRST* Dean's List. Please note, starting in 2015 only students

in grades 10 and 11 (sophomores and juniors) will be eligible.

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

Since its introduction in 2010, the *FIRST* Dean's List Award has attracted the attention of prestigious colleges and universities who desire to recruit *FIRST* Dean's List students. As *FIRST* believes such interest is beneficial to our students, those selected 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 their recruitment to the institution. Prestigious colleges have expressed great interest in meeting *FIRST* Dean's List's Award winners and *FIRST* hopes that each team will take advantage of the opportunity to nominate their best students as *FIRST* Dean's List Nominees!

## 6.6.1 Submissions

Applicants must first compete at the Regional or District Championship level to be considered at the Championship level. Nominees for the *FIRST* Dean's List are submitted by their mentor and supported by the entire team. These students will be reviewed and interviewed at or prior to one (1) Regional where their team is competing with two (2) *FIRST* Dean's List Finalists chosen at each Regional. District team students will be reviewed and interviewed at or prior to their local District Championship with the allocated number of Dean's List Finalists chosen at each District Championship.

All Dean's List Finalists will be considered for the final selection of ten (10) FIRST Dean's List Award winners at the FIRST Championship in St. Louis.

Each FRC mentor is invited to select up to two (2) students who are in the 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grades (sophomores, juniors, or seniors) as *FIRST* Dean's List Nominees. In deciding which students to nominate, mentors should consider the impact the award will have on the nominated student. For example, mentors may choose to nominate a junior whose college acceptance prospects would be enhanced by both the nomination and any subsequent advancement in the competition. Each non-district mentor may only submit their two (2) *FIRST* Dean's List Nominees to compete for the *FIRST* Dean's List Finalist designation at one (1) Regional. Students previously selected as *FIRST* Dean's List Nominees or Finalists ARE eligible for nomination again this year.

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.

## 6.6.2 Criteria

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

- demonstrated leadership and commitment to the ideals of FIRST;
- · interest in and passion for a long term commitment to FIRST and its ideals;
- overall individual contribution to their team;
- technical expertise and passion;

- entrepreneurship and creativity;
- · ability to motivate and lead fellow team members; and
- effectiveness at increasing awareness of FIRST in their school and community

Evaluation of Nominees and Finalists will be based on a one page essay, submitted by the mentor, which best describes each student's fulfillment of the criteria and a brief interview, for Nominees only, by the Judges. (As previously noted, Mentors can submit up to two nominations/essays per team). 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 veracity and accuracy of the submission data.

Each entry shall include identifying information; i.e., the student's cumulative GPA; and an essay of not more than 4,000 characters attesting to why the student has been nominated. Essays must be submitted no later than the closing date listed in <u>Section 6.3.1</u> to <a href="https://my.usfirst.org/tims/site.lasso">https://my.usfirst.org/tims/site.lasso</a>. A photograph of the *FIRST* Dean's List Nominee is encouraged, but optional, and the essay submission and such photos may be used, in promotion of the recipient and/or the award, at the discretion of *FIRST*. 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 Regional event, the mentor must select <u>one</u> event at which their nominations are to be considered. Each essay must clearly state the team name, the student name and grade level of the student(s) nominated, an explanation of why the student is nominated as well as the Regional event at which the nomination is to be considered. District teams must submit their nominees at the local District Championship.

# 6.6.3 Judging

At each FRC regional event, Judges will select two (2) students from the FIRST Dean's List Nominees as *FIRST* Dean's List Finalists. The two (2) Regional FIRST Dean's List Finalists will be honored at the award ceremonies at that regional event. For District teams, *FIRST* Dean's List Finalists will be selected and honored at the District Championship.

All nominees will receive a live, 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 nominee is interviewed and has a fair opportunity for selection.

Every nominee will receive written feedback from the judges. A standard form will be used and for interviews that are conducted at an event, can be retrieved after the awards ceremony, from Pit Administration.

All *FIRST* Dean's List Finalists will be considered for the *FIRST* Dean's List at the *FIRST* Championship using the essays provided and any interview feedback available. Finalist candidates need not be present at the *FIRST* Championship in order to be considered. Ten (10) Students will be selected as the *FIRST* Dean's List Award Winners for the 2014 FRC season.

The ten (10) 2014 FIRST Dean's List Award winners will receive the following:

- a unique trophy and public recognition at the FIRST Championship;
- a written recommendation from FIRST leadership to the college(s) or employer(s) of their choice;
- a credit towards the winning student's team next season registration fee;
- a commemorative plaque for the student's school;
- an invitation for them, and a chaperone, to attend an expenses paid FIRST Dean's List Award Summit, at

- FIRST Headquarters in Manchester, New Hampshire; and
- an opportunity to work with all members of the FIRST Dean's List and FIRST leaders to advance the mission
  of FIRST.

## 6.7 THE FOUNDER'S AWARD (Championship Only)

Each year FIRST presents this award to honor an organization or individual that has contributed significantly to the growth of FIRST.

# 6.8 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.

#### 6.8.1 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!

## 6.8.2 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.

# 6.8.3 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 2014 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 <u>FIRST</u> <u>Branding and Design Standards</u>?

#### • Functionality (15 points)

- Does content load quickly?
- o 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?

## 6.8.4 Submission Process

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

Submissions are not to exceed two pages including graphics. The maximum allowable size for the PDF document submission is 50 MB. 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.

#### 6.8.5 Submission Dates

Submissions will be accepted during the dates listed in <u>Section 6.3.1</u>.

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.

## 6.9 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

# 6.9.1 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.

# 6.9.2 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.

# 6.9.3 Award Eligibility Requirements

<u>Regional WFFA (except District Event Teams)</u> – 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.

<u>District Championship WFFA</u> (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.

<u>FIRST Championship WFA</u> – 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.

# 6.9.4 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.

# 6.9.5 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.

## 6.9.6 Submission Deadline

The Woodie Flowers Award entries are due by the closing dated listed in Section 6.3.1.

# 6.9.7 Entry Process

Students enter their candidate through the *FIRST* Student Team Information Members System (STIMS) <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>.

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 <u>Section 6.3.1</u>. No entries will be accepted or altered after this date.

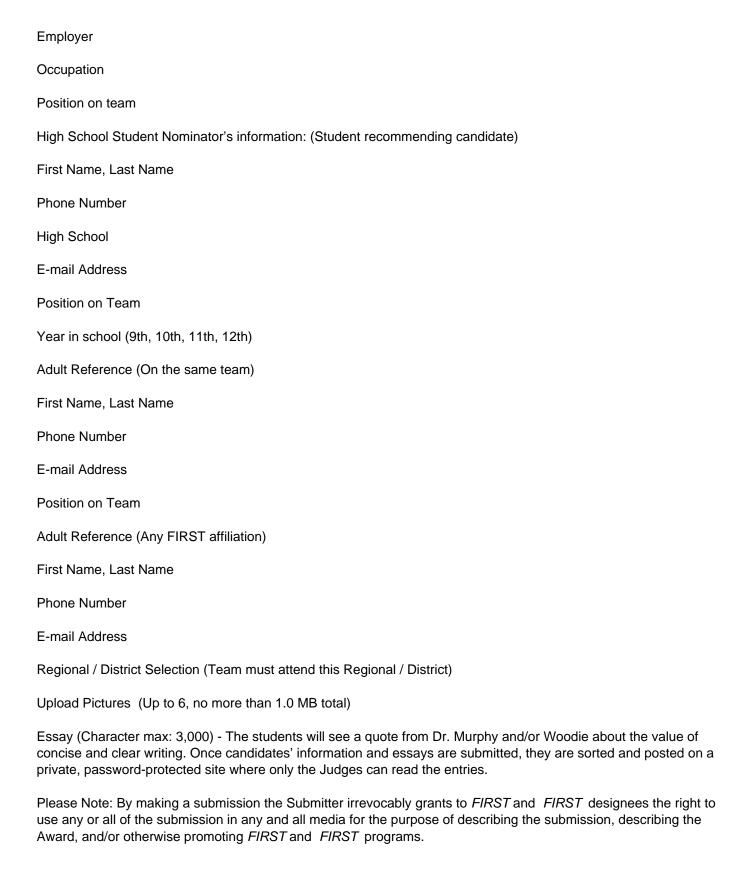
Students will go to the website to enter information in the following fields:

Team Number

Candidate Information:

First Name, Middle Initial, Last Name

Address, City, State, zip code



# 6.9.8 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.

# 6.10 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 self-sustaining program.

## 6.10.1 Business Plan Submission

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

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

## 6.10.2 Guidelines

- A formal business plan is submitted through STIMS at (<a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a>).
- 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 <u>all</u> 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
- Picture 1
- Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- Picture 2
- Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- Picture 3
- Please upload 5" x 4" 100 dpi resolution images that end in .JPG or .GIF
- 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.

# 6.10.3 Eligibility

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

## 6.11 FIRST SAFETY ANIMATION AWARD

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

#### 6.11.1 Award Overview

Your team is invited to participate in the 10<sup>th</sup> annual *FIRST* Safety Animation Contest for FRC student team members.

## 6.11.2 Theme

The theme for 2014 is: " Safe Driving"

Many FRC team members, at some point in their journeys from their homes to their events and back, will find themselves traveling in private vehicles. If you are a driver, you should keep your eyes on the road, your hands on the wheel and your mind on the job. FRC teams practice safety throughout the FRC season, not only when building and competing. Now it's time to spread the word to participants and spectators. Your 2014 Safety Animation should demonstrate the ways safe driving benefit everyone.

Driver Distractions fall into three major categories:

- External distractions are things outside your vehicle that may cause you to take your eyes off the road ahead
  of you
- **Psychomotor** distractions are things inside your vehicle that may cause you to take your eyes off the road ahead and your hands off the steering wheel where they belong
- Cognitive distractions are things that can take your mind off the task of driving and cause your attention to wander from the road

Ideas for consideration include:

- · Personal awareness of what's outside your vehicle
- Plan ahead
- Buckle Up
- Secure Loose Objects
- Pay attention while driving no texting, phone calls or other distractions

The FIRST Safety Manual, which contains the FRC safety rules that FRC teams live by, is available here <a href="http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual">http://www.usfirst.org/roboticsprograms/frc/safety-video-and-manual</a>

## 6.11.3 Criteria

Animations should:

- Be no more than 40 seconds long including opening and credits
- Be submitted electronically as a region one .iso image of a DVD
- Video must be in English

#### 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 obscene 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.

## 6.11.4 Submission

Animations must be submitted by your team's student award submitter in STIMS, <a href="https://my.usfirst.org/stims/site.lasso">https://my.usfirst.org/stims/site.lasso</a> between the submission dates listed in <a href="Section 6.3">Section 6.3</a>.

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.

# 6.11.5 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 email blast and Frank's Blog. The winning team will receive a trophy and their video will be played at their first event.

#### 6.11.6 Deadline

Animations must be submitted online between the dates listed in <u>Section 6.3.1</u>.

# 6.12 FIRST 3D Printing Award sponsored by America Makes and ORNL

#### **New This Year!**

The *FIRST* 3D Printing Award (3DPA) recognizes the creative use of 3D printing to provide innovative design solutions, resolve manufacturing challenges, enhance marketing solutions, and engage in community outreach. Sponsored by America Makes and the Oak Ridge National Laboratory (ORNL), this award seeks to motivate teams to explore applications of 3D Printing that directly support the *FIRST* mission of inspiring young people to be science and technology leaders and to the *FIRST* vision of transforming the culture by creating a world where science and technology are celebrated.

#### 6.12.1 Award Overview

The 3DPA competition is open to all FRC teams for the 2014 FRC competition season. To be eligible, teams must have a functional (not cosmetic) 3D Printed part or 3D Printed assembly that is intended for use on their competition ROBOT or OPERATOR CONSOLE. FRC Teams may apply at the 3DPA Portal. The 3DPA Portal will be open for submissions according to the dates listed in Section 6.3.1.

#### 6.12.2 The Award

The 3DPA Team winner will be announced at the FIRST Championship and presented with an award sponsored by America Makes and ORNL.

America Makes and ORNL will provide transportation and hotel cost for one team representative and a chaperone to receive the award at the Championship Event (if the team is not already attending the Championship).

## 6.12.3 Award Criteria

Applicants should submit their proposals electronically via the instructions at the <u>3DPA Portal</u>: <a href="http://americamakes.us/3DPA">http://americamakes.us/3DPA</a>.

The template document should be downloaded from the portal and used for submissions.

Teams should mail a physical copy of their 3D Printed parts, must be received by the close date listed in <u>Section 6.3.1</u>, in accordance to the instructions on the <u>3DPA Portal</u> (will not be accessible until the opening date listed in <u>Section 6.3.1</u>).

# 6.12.4 Award Judging

The winner of the *FIRST* 3D Printing Award, sponsored by America Makes and ORNL, will be announced at the 2014 *FIRST* Championship.

Submissions for the FIRST 3DPA will be judged according to the following criteria:

- Innovation of 3D Printed part (40%)
  - Physical part should be submitted for evaluation
- 3D Printing Design Rules & Knowledge Base Enhancement (20%)
  - Design rule usage
    - Self-supporting angle rules
    - Internal fill style optimized for function
    - Build orientation decisions
  - Design rule creation
    - Document new design rules you captured during your design and build of parts
  - Knowledge Base Enhancement
    - Identify models and sources for 3D Printing optimized parts your team used
    - Identify the 3D Printed models your team created?
    - How many did you make available to other teams and how did you make them available?
    - Identify any online contributions you made to blogs, YouTube, model libraries, websites
- 3D Printing Mentoring (20%)
  - Identify mentoring your team received regarding the use of 3D Printing
  - · Identify mentoring your team provided regarding the use of 3D Printing
- Community Outreach (10%)
  - Document 3D Printing demonstrations provided to schools, clubs, and sponsors.
- Use of 3D Printing for Marketing (10%)
  - Document how 3D Printing was used for marketing applications.

# 6.12.5 Additional Documentation & Videos

## Example of 3D CAD Model Libraries

- <a href="http://www.firstcadlibrary.com/">http://www.firstcadlibrary.com/</a>
- <a href="http://www.3dcontentcentral.net/3DContentCentral/parts/supplier/User-Library/140/185/185/Models.aspx?title="first-kobotics&isredirect=true">http://www.3dcontentcentral.net/3DContentCentral/parts/supplier/User-Library/140/185/185/Models.aspx?title=FIRST+Robotics&isredirect=true</a>

## Examples of mentoring YouTube videos

• "3DPrinterHowTo" <a href="http://www.youtube.com/channel/UCuicqiLTmcbLlglgOpFkefQ">http://www.youtube.com/channel/UCuicqiLTmcbLlglgOpFkefQ</a>

## Questions?

For questions related to the *FIRST* 3DPA, email Bill Macy, America Makes Deputy Director of Technology Transition at <u>Bill.macy@ncdmm.org</u> with the email subject line: *FIRST* 3DPA.