



# **2010 CHAMPIONSHIP – FRC Essential Information**

## **Admission**

There is no fee to attend the 2010 Championship; the event and Pit are open to the public. Be sure to check out not only the FRC event, but the FLL World Festival, FTC World Championship, a display of the Jr.FLL projects, the International Robot Parade, a Hall of Fame display of previous FRC Chairman's Award-winning teams, Scholarship Row, the Supplier Showcase, and the *FIRST* Robotics Conference to name a few! You will find the competitions and Opening and Closing Ceremonies in the Georgia Dome. Appearances by Dean Kamen and Woodie Flowers add to the excitement of awards ceremonies. To find the Pit area, head to Building C of the Georgia World Congress Center (GWCC).

## **Agenda and Team Lists**

Print and bring the latest Championship Agenda. Also print enough division team lists to help with your team's scouting efforts. Both documents can be found here:

<http://www.usfirst.org/roboticsprograms/frc/content.aspx?id=432>

## **Alliance Scouting, Captains, and Pairing**

It's a good idea to position a scout team in the audience for each division since the Championship amounts to four (4) large competitions going on at once. Record each team's specialty/strategies and be able to provide your Alliance Captain with a list of preferred team choices if your team advances to final rounds.

Bring a clipboard and pen for the alliance pairing process, and cross out already selected teams as they are chosen. Consider using a highlighter or simply list teams in preferred order. Have a plan in place so your Alliance Captain can distribute Pit Crew Badges to your team in the Pit. They enable the team's crew to move from the Pit to Einstein field. Refer to section 9.6.1 of the FRC Manual.

## **Ambassadors**

"*FIRST* Ambassadors" will be attending the Championship to learn how the *FIRST* experience impacts participating teams. They will be wearing red shirts with the Ambassador designation. If an Ambassador stops by your Pit, please take a minute to share with her/him how *FIRST* has impacted your team and its individual members. Thank you in advance!

## **Autodesk Theater**

Autodesk will host daily education sessions on Animation and 3D Design incorporating Autodesk Inventor Professional and Autodesk 3ds Max and using examples from FRC. These informative and lively sessions are conducted by educators and *FIRST* fans Phil Dollan and Will Fowler. Joining Phil & Will is Larisa Dannis, who will take you on a tour of Autodesk's Education Community to show you how to access free software & learning materials and how to make the FRC dedicated section of the Community a favorite destination. Join the sessions to listen; to pepper our presenters with questions; and have a chance to win some great prizes! This year Autodesk is setting aside time for 1:1s, so if you've got a specific question or want to bring your work by for

a constructive critique, they are looking forward to that. See the list of sessions and scheduled times **at end of document**.

### **Awards Recipient Seating (SATURDAY) 2 per team**

Each FRC team should designate two (2) representatives to potentially receive an award. Find the **2 yellow wristbands** in your Registration Packet. The team representatives should wear them and **sit in Section 117** in the Dome **during the Saturday Closing Ceremony**. If your team does not have two representatives with yellow wristbands sitting IN SECTION 117 for the Saturday Awards Ceremony, your team will not be allowed onto the stage to receive any awards.

### **Badges**

Drive Team Badges: Each team will receive four (4) badges as a part of registration. Wear the badge on the left shoulder on the front of your shirt so referees, judges, and queuers can see it. Assign someone to keep them in a safe place, such as your toolbox, when not in use. Please do not bring them to your hotel, because teams often forget to bring them back the next day! These badges allow the wearers access to the playing field and designate **the**:

- 2 Drivers
- 1 Human Player
- 1 Coach (this Badge has a dot on it. The Coach cannot score points or drive the robot.)

**Pit Crew Badges** (Alliance Pairings): During the elimination rounds, extra team members are often needed to move the team robot from the pit station to the queuing area and playing field. Each alliance team can have three (3) additional “pit crew” members to help with necessary robot repairs and maintenance. These badges provide access to the field. *FIRST* distributes the badges to Alliance Captains during the pairing selection process on the division fields. All teams should assume they could be chosen for an alliance. Each Alliance Captain must set a logistics plan for badge distribution prior to the pairings to distribute the badges to the Pit Crew members. *Only one (1) adult mentor is permitted on this crew.*

**Safety Captain Badge:** Each team will receive one (1) Safety Captain Badge for this voluntary position. The wearer should be a responsible student team member or adult mentor. Section 2.6.2 of the FRC Competition Manual describes that the Safety Captain should help provide a safe area in the Pit; know the EMT’s location; ensure the use of safety glasses, enforce the “no running” and “no sparks” rules; and help keep the aisles clear. They should be gracious in this pursuit of a safe competition, report any accident/illness to a *FIRST* Staff member in the Pit Admin. Station, and report serious safety infractions to a Safety Advisor or the Pit Administration personnel.

### **Ceremonies and National Anthems**

Teams are expected to attend the Opening, Awards, and Closing Ceremonies to show appreciation for speakers, sponsors, and teams. These events enhance the meaning of *FIRST*. Please graciously observe the playing of all anthems by standing and remaining silent. Show respect for all countries in attendance.

### **Chairman's Award Interviews**

Chairman's Award Judges will each be assigned a subset of the Regional Chairman's Award winners to interview. The interview schedule will be posted at the Pit Administration station Thursday afternoon. Please come to the Pit table to find out your interview time. **To avoid schedule conflicts, we recommend that the interviewees are not on the Drive Team.**

Swapping interview times is not encouraged, but if you must change your appointment, switch with a team in the same subset and notify the judges through the "Chairman's Runner," who will work with the teams and keep judges apprised of changes. It's best not to use match lists as a determining factor since matches do not always occur on schedule. Interviews begin shortly after the FRC Opening Ceremony Friday morning.

### **Concessions**

Besides the pre-order lunch option (see Pre-Order Lunches below), you can purchase food and drinks at the Dome Concourse area, from 8am to 6pm, and in the GWCC, Building C 3<sup>rd</sup> floor. There will also be snack kiosks in the Pit areas.

### **Directions to the Georgia Dome**

Are located at <http://www.gadome.com/getting/driving.html>

### **Division Champions and Special Seating**

The FRC Championship has four (4) divisional tournaments going on simultaneously. The division alliance winners are known as Division Champions. These teams compete on Saturday for Alliance Championship Finalist and Alliance Champion titles. When the Division Winners are announced, each team will receive 50 wristbands to designate special seating at the Saturday Awards Ceremony.

Division Champion alliance teams will be seated in Section 115.

### **Driver Meeting on Galileo Field – THURSDAY**

**Drivers/Referees** - Two (2) members from each team should report to the stands adjacent to the Galileo **stands** (not the field) at **8:15-9:15 AM on Thursday** for a question and answer session. Questions will be fielded on topics including autonomous mode, scoring, penalties, etc.

### **Dress: Appropriate and Safe**

Be aware of apparel and hair safety issues while working on your robot. Sandals, open-toed shoes, and Crocs are not allowed in the Pit. Wear relaxed, fun and appropriate clothing; remember, you represent your team and *FIRST*. Body paint in lieu of clothes, bathing suits, and other revealing clothes are not appropriate.

### **Elimination and Final Rounds**

Prior to the Championship, refer to Manual section 9 for information on alliance selection, elimination and final rounds, tournament rules, and the Championship match ladder. Section 9.6 is Championship specific.

### **FedEx Shipping Document – *Treat it like cash***

Each team will receive, and can use, only one (1) Bill of Lading or Air Waybill to ship one (1) robot crate home from the event. The appropriate document will be in your

registration envelope. **No replacements.** Any team that loses their shipping document will be required to pay for shipment home.

### **FIRST LEGO League (FLL)**

The FLL Pit Area is in Building C, Exhibition Hall C3. FLL Opening Ceremonies will be on Thursday evening in Centennial Olympic Park - (in case of inclement weather - Georgia Dome, Einstein Stage, 6 PM), and Closing Ceremonies are in the Georgia Ballroom –GWCC– Exhibition Hall C – level 3.

### **FIRST Tech Challenge (FTC)**

The FTC Pit is in Building C, Hall C2. FTC Opening Ceremonies are in the Georgia Dome, da Vinci Field on Thursday at 12:30pm and Closing Ceremonies are in the Georgia Ballroom, GWCC, Exhibition Hall C, level 3 on Saturday at 10:30am

### **FIRST Finale at Centennial Olympic Park**

The team social for the Championship event will be held on Saturday April 18, 6:30pm to 9:30pm. **Food is set out for the first two hours only.** Come enjoy lively music and a variety of high energy, interactive activities.

**Hotel Package Purchases:** *FIRST* Finale Tickets (wristbands) are included in the Steele Meetings, Inc. hotel packages. Adult team contacts can pick them up *Thursday 8-6, Friday 8-6, or Saturday until 3pm* at the Steele Meetings Booth in the foyer of the GWCC. Lost tickets will not be replaced.

**On-site *FIRST* Finale Ticket Purchase:** Teams staying at other hotels can buy tickets for \$45.00 each on a non-refundable, first come - first served basis at the Steele Meetings Booth in the foyer of the GWCC. Availability of onsite tickets will be determined by April 1, and will be in limited quantity. Lost tickets will not be replaced.

### **NEW! GEORGIA AQUARIUM**

The Georgia Aquarium has once again offered the *FIRST* Community a discounted rate of \$13 per person on Friday April 16, FROM 5:30 TO 10pm. For tickets and details, you can visit [www.atlanta.net/first](http://www.atlanta.net/first) or [http://www.georgiaaquarium.org/acb/stores/1/newclubfishlink.aspx?Conv\\_Id=745](http://www.georgiaaquarium.org/acb/stores/1/newclubfishlink.aspx?Conv_Id=745)

### **Inspection**

**Remember that qualifying matches begin at 1 pm on Thursday this year!** You will want to start the inspection process as soon as possible. Weigh and measure your robot early to help the inspection process move faster. The Inspectors often spot problems and provide suggestions for correction. Your robot must pass inspection to compete, but it doesn't have to be completely ready in order to request a preliminary inspection.

Keep in mind that if you have brought a robot from a 'Bag and Tag' event, **you may not unbag your robot until an inspector has signed off on your Robot Lock-Up form.**

### **Load In/Load Out – Plan Ahead**

To maximize the safety and efficiency of the load in process, plan your equipment load-in prior to arrival. Teams will not have access to the loading dock. All load in and load out will be through the Building C entrance off Northside Drive. Print and bring a map of the Georgia Dome and GWCC area. Go to <http://www.gadome.com/pdf/gwccmap.pdf>

**New! 3/31/10 - Wednesday night Load in 6pm to 9pm** (*Wednesday night Load in is optional, but highly recommended if possible!*) **This section has been updated with critical changes. Please read carefully every bullet point below!**

We want you to maximize the opportunity to move things in safely on Wednesday night and get your robot inspected in preparation of the qualification rounds starting Thursday at 1:00 pm this year! The rules for Wednesday night pit entry at the Championship are as follows:

- Up to five (5) of your team members (at least one must be an adult mentor) are permitted to load-in 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 and manageable way (Safety Advisors and other volunteers will be on site checking for, and helping mitigate, unsafe conditions).
- **IMPORTANT:** Uncrate your robot and move crate to the aisle so it is accessible to Shepard for removal.
- If you are arriving from a Bag and Tag event, you may take your bagged robot out of your crate, but **DO NOT** unbag robot until Inspected. Inspectors will be available to review your lock-up form Wednesday night. Once an inspector has signed off on your form, you may unbag your robot.
- Team members are permitted to stow load-in materials safely in their pit and out of the way of aisle traffic.
- Team members should begin charging batteries.
- Teams should encrypt radios
- Pit set up is permitted
- Working on the robot is permitted
- Safety glasses are required while in the pit
- An adult team member (one of the five permitted in the pit) may use this time to check-in/register at Pit Administration early to avoid the rush on Thursday morning.
- Make parking plans in advance of your offloading so you have a destination to go to. Teams will not be allowed to idle or park in front of the building doors.

**Load Out:** Do not have your vehicle at the curb unless you are there and are completely ready to load into the vehicle. The POLICE WILL ASK YOU TO MOVE.

### **Logo Loc – FIRST Merchandise**

Logo Loc, LTD., the official supplier for *FIRST* branded merchandise, will be selling *FIRST* products again this year at the Championship! The store is located in the *FIRST* Student Lounge area - featuring T-shirts, sweatshirts, hats, and other logo items. Also available will be numerous items offered in their online store. Cash, checks, and major credit cards will be accepted.

### **Lost and Found**

Bring found items to the Pit Administration area. If you lose something, obtain a “Lost Item” form from Pit Administration staff, fill it out, and turn it in. Call Team Support at

*FIRST* after the season and trucks have been unloaded, about 2 weeks post Championship.

Each building keeps lost articles at its information desk. Check there also. After the event, items go to the security office of each building for 30 days.

### **Machine Shop**

Refer to the Pit Map for the Machine Shop locations and the Agenda for the machine shop schedule. Please remember that there is no grinding, braising, or welding in the Pit.

### **Mascots**

Keep safety in mind. Make sure that mascot and team costumes are safe for the wearer as to vision and movement and are comfortable and cool enough to prevent fainting and dehydration. Mascots are not allowed on the playing field.

### **Media Passes**

Each team will receive one (1) non-transferable Media Pass and related instructions/caveats in its registration packet. Media representatives are permitted in designated access areas around the playing field only during their team's matches. They are not permitted on the playing field surface, areas marked off for human players, on the Dome floor during final rounds or ceremonies, or in any private venues, VIP, volunteer, or judges' areas. Mascots cannot be the team media person.

### **Mentor Reception *New! 3/31/10***

On Saturday, April 17, 2010 from 9:00 to 10:30 am, Autodesk will be hosting an FRC mentor recognition breakfast in the Georgia Ballroom, Section A, 3<sup>rd</sup> Floor, GWCC. Dr. Woodie Flowers, and Dave Lavery of NASA will be guest speakers starting at 9:30 am. To attend this event team mentors **must** reply to the *FIRST* invitation being sent shortly via email. All RSVP's must be received by 5:00 pm EST April 5<sup>th</sup> so we can have an accurate food count. If you have any questions, please contact us at [mentorcoach@usfirst.org](mailto:mentorcoach@usfirst.org)

### **NASA Web Casts**

NASA will be web-casting portions of the event. Find out more information and the link to the NASA page on the Championship event page:  
<http://www.usfirst.org/aboutus/content.aspx?id=4190>

### **Non-Engineering Mentor Organization**



You Are Invited to Attend Our 5<sup>th</sup> Annual Meeting

**When:** Friday, 4/16 (***New! 3/31/10** – Friday the 16<sup>th</sup>, not Thursday the 15th*)

10 am –12:00 noon in room C20. Feel free to drop in any time.

**Where:** Room C207 – at the GWCC (Room subject to change, all room assignments posted on video screens in C building lobby)



**What:** This will be an opportunity to meet and greet your fellow Non-Engineering Mentors (NEM'S). We will be distributing NEMO resources, and the limited edition "I found NEMO" buttons. We will have an open discussion, addressing any immediate concerns brought by the group.

**Who:** This meeting is open to all current members of NEMO and any adult who would like to join.

**About NEMO:** Non-Engineering Mentor Organization is a support group and information exchange for those adult mentors who help teams as part of the *FIRST* programs, including Jr.FLL, FLL, FTC and FRC. NEMO has a central clearinghouse for information that will benefit all teams. NEMs help with all the behind-the-scenes glue that hold the teams together including mentor recruitment and retention, travel, hotels, meals, parent involvement, fundraising, business plans, public relations, community service, team building and *FIRST* logistics.

**Joining NEMO:** visit [www.firstnemo.org](http://www.firstnemo.org) to find out how to join NEMO and join the private online forum. There are no dues to join, just a community of supportive people. Visit the "Resources" page to see all the papers written by NEMO members.

**Questions?** Kathie Kentfield, NEMO Director, [kathiek@firstnemo.org](mailto:kathiek@firstnemo.org)

## **Parking**

### ***Georgia Dome***

All Georgia Dome Parking decks will be open. Depending on lot, daily price is either \$8 or \$10 [http://www.gadome.com/about/parking\\_maps.html](http://www.gadome.com/about/parking_maps.html)

### ***GWCC/ Building C***

Refer to <http://www.gadome.com/events/20101firstrobotics.html> and scroll down to Event Day Parking. Click on *FIRST* to get parking information. **Special Note:** Blue Parking Lot available but not posted at above link yet. \$8/Entry. See end of document for Directions to this Lot.

## **Pit Announcements**

In an effort to keep announcements to a minimum, we will group together any parts requests for announcement every fifteen (15) minutes. If this need arises, please write your division, team number, and needed part on a piece of paper and give it to the Pit Administration staff. Additional announcements will be made at ½ hour intervals.

## **Pit Stations**

Each team has approximately the same Pit space. It is not gracious to expand your Pit station. Aisles must be clear for crate movement, safety, and queuing reasons, so we suggest that team members watch the matches and cheer on the teams instead of overflowing the pit stations into the aisles. There is a ten-foot (10) height limit. Do not build any structure that supports people or stores items above the work area/pit space. Structures, signage, or banners cannot be higher than ten feet above the floor. No advance placement requests are available. Positioning is random.

## **Practice Fields**

If you wish to practice running your robot, sign up with the practice field attendant for your division at the attendant's table near your practice field. You will share the field with another team; i.e., you will each have  $\frac{1}{2}$  of the field to practice on. You will be able to run your robot wirelessly on the practice field. Remember to review your team's practice and match schedules before you sign-up for your practice field. Keep the schedule viable by finishing your practice session on time. Please be on time or a little early for your chosen slot. Keep safety in mind during this process. See Practice Schedule at end of document.

## **Practice Matches**

**Schedule:** The Practice Rounds will run 9:30am-12:15pm Thursday in the Dome. We will run Practice Rounds, randomly assigned, each approximately ten minutes long. During this period there will be two matches, each run with the same timing with respect to autonomous and teleop periods as a standard competition match.

- MATCH A: The first MATCH of each practice round is intended to be a somewhat “free-form” session, in which the ROBOTS may be exercised to evaluate operational characteristics, gain driver experience, determine system robustness, etc. During this MATCH robots should avoid unnecessary robot-to-robot interaction to allow all teams to evaluate their performance without interference.
- MATCH B: The MATCH of each practice round will be conducted as a “competition match” with approximately two minutes for set up, two minutes and fifteen seconds of regular game play (including operations), and one minute to clear the field.

Robots are reset between matches, and teams should bring a spare battery, if necessary. Limited tethering between matches is allowed for necessary resets to the robot...lower an arm, etc. AC power will be provided field-side for this purpose. Depending on how the morning progresses, *FIRST* may make changes to match timing and eliminate additional plays as required. Rounds are tightly scheduled so re-programming between matches is not permitted. Teams **MUST** have visited the WPA table and have a valid inspection sticker on their robot to be allowed on the playing field, even during Practice Day.

**Filler Line:** Although teams may not switch practice times, there will be a “Filler Line,” limited to six robots at most, at each division field. Teams from the Filler Line will be used on a first come, first served basis to fill empty spots in practice matches left by teams that do not show up for their practice match. Criteria for joining the filler line are:

- **Only teams that have passed full inspection may join the Filler Line**
- Filler lines will be staging next to the division fields
- Teams can only use the filler line for their division
- Teams must join the Filler Line with their robot and drivers, ready to play



- A team may not work on its robot while in the Filler Line
- Teams may not occupy more than one spot in the Filler Line
- If a team is queued up for its practice match, it may not join the Filler Line

### **Pre-Order Lunches**

Budget your team lunch costs and save money over the concession stand prices. No food or drink is to be brought into the building. **The advance-ordering deadline is April 9.** For the order form and voucher pickup information, go to <http://www.usfirst.org/roboticsprograms/frc/content.aspx?id=432> and click on “Team Pre-order Lunch Option.”

### **PTC (*New!* 3/31/10 – schedule updated, see end of document)**

PTC’s booth, which is located in the pit area, is designed to “Celebrate *FIRST* Mentors” and educate the *FIRST* community on their free product development software offered to all *FIRST* teams. Mentors and students, please visit the PTC booth to give a video testimonial on what *FIRST* means to you, and tell PTC about your most memorable *FIRST* moments.

The PTC showcase is a great way to learn more about PTC products and how your team can use the same software used by leading companies around the world to quickly build a more competitive robot and communicate more effectively with your team. Demonstrations will be offered in the PTC booth on Thursday, Friday, and Saturday – see booth demonstrations schedule at end of document.

### **Queuing**

Teams are responsible for knowing when their matches are and will have to queue up a half hour prior to their matches without the help of an announcer.

For Qualification matches, we will run “dynamic scheduling.” *FIRST* will make every effort to keep close to the published schedules. Keep close watch of the pit display for any moment-to-moment changes. If your team is one of the first three (3) matches of the day, queue early enough to be on the field before the Opening Ceremony.

See Schedule, Attachment B.

### **Registration and Uncrating**

**Wednesday Early Uncrating/Registration: 6-9pm No Pit setup or robot work. See page 6 for important UPDATED as of 3/31/10 details!**

**Crate Weight Complaint Resolution Times:** Wednesday, 6pm - 9pm, Thursday, 7:45am - 8:30am. Disputes over the weight of your crate will only be accepted during these times, **before the crate is opened**. Visit the Shipping/Drayage desk located in the Pit.

**Uncrating:** Each person must bring safety glasses to enter the Pit. We recommend that you also wear gloves. When your crate is empty, notify Shepard Exposition Services that your crate is ready for storage.

Teams can also register Thursday, 8 am to noon. Form odd and even-numbered team lines for each division. You will be asked to provide a **cell phone number, hotel name,**

**and at display least 4 pairs of safety glasses at registration** as a part of the team safety process.

**Release Forms and Members and Mentors Roster:** If team members and mentors have attended a Regional Event and handed in a Consent and Release Form this season, they do not have to do it again. (Kickoff does not count.) Team persons attending this as their initial 2010 competition event must provide an updated roster and Consent and Release Form. If under 18, forms require a parent/legal guardian's signature.

### **Robot Parade FRIDAY *New!* 3/31/10 – correction in red below.**

The following should line up at Gate C (corner of dome floor) **Friday morning at 7:30 am:**

All Team Mascots; Ambassadors; 2009 Chairman's Award Team; Hall of Fame reps (2 per team); Scholarship winners; designated local and international FLL teams; *FIRST* Tech Challenge "Inspire Award" winners – all teams (2 representatives per team) and robots; and each **2010** Regional FRC Chairman's Award winner (2-3 representatives per team, robots optional).

### **Robotics Conferences**

The 2010 sessions for April 14<sup>th</sup> and 15<sup>th</sup>, which will be held in the GWCC, rooms C203, C204 and C205

<http://www.usfirst.org/community/firstplace/content.aspx?id=11300> For those who didn't register in advance, \$10 single-session passes will be available at the door, space permitting. The \$35/\$140 "All Presentations Access" registration is available only for individuals and teams that pre-register by the April 10 deadline. For more information please contact [firstconferences@usfirst.org](mailto:firstconferences@usfirst.org)

### **Safety**

**City Safety:** *FIRST* works closely with local officials to secure the safety of all event participants. We encourage team leaders to help keep everyone safe by asking their teams to adhere to a *buddy system* when moving about downtown Atlanta. Please do not venture out into the city on your own. Look to the local police and Ambassadors, as well as your hotel personnel, for assistance in locating a destination in the city. Remain on the defined path of Andrew Young International Boulevard. For a walking map of the downtown area near the Dome and GWCC, go to <http://www.gadome.com/pdf/Downtown%20map.pdf>.

Provide your team with key contact information for your designated Team Leader(s) or Safety Captain: personal contact cell phone numbers, hotel and room number(s), and the **Pit Emergency (only!) Number** below. Provide a cell phone number and your team's hotel name at event registration. Provide *pre-determined meeting points* in case anyone gets lost, and have a *daily meeting* with your team to emphasize the importance of all-around safety while at the event.

**Event Safety:** Be mindful of the nearest exits while in the GWCC and the Georgia Dome so you and your team members know where to go/how to exit in case of an

emergency. Review safety procedures and cautions with your team prior to traveling to the event, and designate an emergency meeting spot.

**Incident Reporting:** Report injuries and illness to the Pit Administration Station when they occur so a *FIRST* staff member can meet with the injured/ill party and document the incident or problem. This is an extremely important part of the event and we appreciate the cooperation of those involved. If anyone witnesses the accident, that input will be helpful also and may be useful in preventing future problems.

**Non-Medical Incident Reporting:** Report incidents relating to safety or *Gracious Professionalism™* to any of the Volunteer Coordinators or to someone at the Pit Administration Station.

**Pit Closing:** EMTs leave the premises at Pit closing time. For your team members' safety, please be respectful of the Pit closing time each day, especially the Saturday 5pm closing.

**Pit Safety and Age Stipulation:** Children aged twelve (12) and under must have an adult, aged eighteen (18) or older, with them at all times.

**Pit EMERGENCY Phone Number:** These are the phone and fax numbers in the Pit for emergency situations **ONLY** and are operative only during Pit hours. Provide your families with your team contact information, and give this number as an alternative emergency number in case of a death, hospitalization, or other such dire emergency only. (404) 222-5900 and fax (404) 222-5901.

**Robots/Crates:** You must ship your robot and any additional crate home through Shepard Exposition Services. You cannot take your robot or crate from the event unless you have received written permission from FRC. See Section 4.5.9 of the Manual for instructions on requesting a shipping exception.

**Safety Captains:** Each Safety Captain should continue to encourage teams to work and promote safe activity in the Pit, while transporting robots, and traveling to/from and competing on the competition fields.

**Safety Glasses:** Teams must bring ANSI-approved safety glasses for every team member and guest. Every person in the FRC Pit area must wear them. Rose, blue, and amber tints are OK, but reflective lenses are not. Whenever persons are on the playing field, are repairing a robot or observing robot repair, they must wear them. To qualify as safety glasses, regular corrective vision glasses must be polycarbonate/plastic material with attached safety side shields. You must wear safety goggles over all other corrective glasses.

**Safety Recognition Program:** FRC Teams will all be involved in the program and will receive ten (10) safety tokens at registration. *If you expect to earn lots of tokens, bring a container to keep them safe and together.* Each team keeps five tokens and passes the other five on as “peer recognition credits” to teams displaying safe behaviors and safe techniques. Teams can award all five tokens to one team or dole them out any way they see fit. Teams can earn additional safety credits when the Safety Advisors observe best safety practices throughout the event. The advisors will share feedback

with teams about why the credits were awarded. The top 3 teams will receive Safety Award pins.

Teams are expected to maintain safe behaviors as the tournament progresses and the competitive pressures increase. Safety Advisors will choose the top safety-oriented team based on the team members' consistent actions and safety drive. Underwriters Laboratory (UL) sponsors the "UL Industrial Safety Award" trophy for the Awards Ceremony on Saturday. The Safety Advisors also choose a "Star of the Day" on Thursday and Friday. This award is given to a mentor, student, or volunteer. Teams will see the winners' names on a special poster board in the Pit on Friday and Saturday.

### **Scholarship Row**

All team members - especially sophomores, juniors, seniors and parents:

Visit the Scholarship Row display booths in the Pit, near the main entrance from the Lobby. Stop by to meet representatives from many of the colleges and universities that offer scholarships through our FRC and FTC programs. It's a great way to start planning for college and find out about *FIRST* Scholarship opportunities. Seniors may find out about scholarships that are still available for use next fall. It is also vital that these scholarship providers know that students and their parents are interested in learning more about what their individual schools have to offer. Visiting this area is a wonderful way of showing appreciation for the scholarship opportunities.

### **Scoring Disputes**

If a team needs clarification on a ruling or score, a pre-college student from that team should address the Head Referee after a field reset has been signaled. Depending on the timing, the Head Referee may postpone any requested discussion until the end of the subsequent match. Head Referees will only discuss calls, scores, penalties, or match outcomes with pre-college students. The Head Referee's ruling is *final*, and there is no recourse. There is no review of tape or digital media.

### **Security**

Be sure to keep valuable items with you. If you have to leave something valuable in the Pit, such as a laptop or camera, make sure you have someone in your Pit Station at all times.

### **Shipping Crew – Team Instructions**

Load-out is difficult and crowded. **The Pit closes at 5pm on Saturday, and all teams must have shipping preparations complete before then.** So the process is not left to the last minute, appoint a crew to this task prior to the event. This will help clear the Pit on time and will help ensure that your team gets to the *FIRST* Finale in time to eat before the meal service ends.

One of this crew must be a post-high school adult. **Begin packing your crate as soon as you know your team is no longer competing.** You must ship your robot/crate(s) through Shepard Exposition Services. Only teams who have received prior approval from *FIRST* will be allowed to remove their robots from the event. The **adult** shipping crewmember must:

- Visit the Shepard Exposition Services desk to let them know that your team needs its crate. (Refer to the Pit Map for the Shepard location). Pick up a Shepard Bill of Lading (BOL).
- Once the Crate is packed, sealed, and labeled, return to the Shepard desk and turn in the completed Shepard BOL and the appropriate, completed FedEx document. Your shipment will require a lift gate if your destination does not have a loading dock. Make a note on the FedEx document if the delivery truck needs a lift gate. Put your FedEx tracking/pro number on the Shepard BOL.
- **Tool crates (any non-robot crates) must ship with the Shepard Logistics carrier.** Make a note on the BOL if the delivery truck needs a lift gate.

**You will receive copies of the FedEx and Shepard documents for future tracking** and reference. At this time, Shepard will sign off that they have taken possession of the crate.

Teams approved to remove your robot from the event will not have access to the loading dock, and must dismantle and remove your crate completely.

### **Spare Parts**

The Pit Map shows the Spare Parts location. Parts are available on a limited basis. The attendant will be able to contact a Field Tech Advisor or Lead Inspector if you need approval for any of the applicable components.

### **Supplier Showcase**

Please take some time during the Championship to visit the Supplier Showcase, located in the GWCC on the second floor outside the Food World Foyer. Suppliers will display exhibits and be able to answer any questions you have about their products. More importantly, they look forward to feedback from you!

The suppliers will be available on Thursday, April 15 from 10am to 5pm and on Friday, April 16 from 10am to 4pm. Please come by and personally thank them for their continued support of *FIRST*!

### **Transportation**

MARTA is the public transportation system in Atlanta and is what staff and most teams will rely on to get around. Find information regarding MARTA at <http://www.itsmarta.com>. We are assured that Atlanta and the MARTA system are expecting and looking forward to our arrival! They will have ample train cars available for our transportation. The buddy system should apply.

**Visitor Passes:** <http://www.itsmarta.com/visitor-pass.aspx?terms=visitor+passes>

**Where to buy passes:** <http://www.itsmarta.com/farefinder.aspx?terms=fare+finder>

**Airport** - If you are flying in, you can purchase passes near the baggage claim. You will find large signage at the airport to direct you to the station, which is designated as S7. The cashier is open Monday through Friday from 6:30am to 10:30pm - Saturday and Sunday - 7:30am to 10:30pm

**5 Points Station** - The other cashier is located at the 5 Points Station. This is where all the lines intersect. It is close to the Georgia Dome. This cashier is open from



6:30am to 7pm Monday through Friday, and from 7:30am to 5:00pm Saturday.  
Closed Sunday.

**Token machines** - Located in train stations. The fare to ride the Marta is \$2.00 per person per ride. The passes provide people with unlimited rides. Have dollar bills handy for the machines in case you arrive after the token windows close! View the fare table at: <http://www.itsmarta.com/fares-passes.aspx>

### **Updates and Changes**

Refer to the white board in the Pit Administration area for new/updated information.

### **Video Recording Hookups**

Each field, including Einstein & Da Vinci, will have a "Recording Table" located near the dasher (the wall between the seats & the dome floor). The tables will have:

- numerous AC power outlets
- numerous audio feeds from that field with RCA & mini connectors. The box is called a "Press Mult."
- numerous video feeds from that field with RCA & BNC connectors. The box is called a "Video DA."
- one (1) video monitor to view the feed & to use to tune recording device

Use common courtesy when recording so everyone has a chance to record matches. Team members may plug in whenever they like. Occasionally we have run out of feeds and teams have looped from deck to deck to share feeds, or unplugged their deck during matches of no interest. Teams must bring short cables to go from the Press Mult or Video DA box to their device.

### **Wireless Networks**

Wireless internet access is now available in the concourse areas of the GWCC. This access is **not available** in the pits. Daily rates start at \$15.00. Teams will not be allowed to set up their own wireless networks at the Championship. While we certainly appreciate the positive potential team-created wireless networks could represent, there is a chance such wireless networks could interfere with planned activities during the event.

### **Wristbands**

**Wristbands are not replaceable.** There will be at least 3 occasions when teams will use wristbands:

**A. Early robot uncrating**

**B. FRC Closing Ceremony:**

1. Every team - There will be 2 for each team. See above-"Awards Recipient Seating (2 per team)"
2. Winning Division teams – These teams will receive 50 wristbands when the winners are announced. They wear and show them to enjoy the special seating set aside for them.



- C. *FIRST* Finale** – Teams participating in the Hotel Package benefit, and those who purchase tickets through Steele Meetings, will receive wristbands for the *FIRST* Finale. Each person must wear the wristband to gain entrance into Centennial Olympic Park.

**Autodesk Theater Schedule (Located in the Pit)**

**Thursday, April 16**

10:00–10:30 a.m.	Phil Dollan	Getting Started with Autodesk Inventor
10:30–11:00 a.m.	Will Fowler	The End is <i>NOT</i> the Beginning (Designing an animation with Autodesk 3ds Max)
11:00 a.m. – 1:00 p.m.	<b>ROCK BAND</b>	
1:00–1:30 p.m. Beyond	Larisa Dannis	Deluxe Tour: The Education Community &
2:00- 2:30 p.m.	Phil Dollan	Re-Use and Analyze (Autodesk Inventor)
2:30- 3:00 p.m.	Will Fowler	I Added 50 Lights & My Scene's Still Dark (Intro to 3-point lighting with Autodesk 3ds Max)
3:00 – 4:00 p.m.	Phil & Will	“The Doctors Will See You Now” – Drop in for consultations, constructive critique, one-on-one demonstrations with Phil & Will
6:00 - 7:00 p.m.	The Show	<b>The</b> Annual Show – with the Phillies & Wilbur awards, tons of info & lots of laughs with Phil & Will

**Friday, April 17**

10:00–10:30 a.m.	Will Fowler	The End is <i>NOT</i> the Beginning (Designing an animation using Autodesk 3ds Max)
10:30–11:00 a.m.	Phil Dollan	Getting Started with Autodesk Inventor
11:00- 11:30 a.m.	Larisa Dannis	Deluxe Tour: The Education Community & Beyond
11:30 a.m. – 1:00 .p.m.	<b>ROCK BAND</b>	

1:00–1:30 p.m.	Will Fowler	I Added 50 Lights & My Scene's Still Dark (Intro to 3-point lighting with Autodesk 3ds Max)
1:30- 2:00 p.m.	Phil Dollan	The Professional Side of Autodesk Inventor
2:30–3:00 p.m.	Will Fowler	Meet Mr. Mental Ray (Overview of Mental Ray Renderer in Autodesk 3ds Max)
3:30- 4:00 p.m.	Phil & Will	“The Doctors Will See You Now” – Drop in for consultations, constructive critique, one-on-one demonstrations with Phil & Will

**Saturday, April 18**

10:00–10:30 a.m.	Will Fowler	The End is NOT the Beginning (Designing an animation using Autodesk 3ds Max)
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## Blue Parking Lot Directions

### **FROM THE AIRPORT AND THE SOUTH:**

Take I-75/85 north to the Central Avenue Exit (Exit 246). Turn left on Martin Luther King, Jr. Drive. Turn right onto Northside Drive. GWCC Building C is located on your right immediately following the Georgia Dome. Turn left into Blue Parking Lot on Northside Drive across from GWCC Building C.

### **FROM THE NORTH:**

Take I-75 south to Northside Drive (Exit 252). Turn right on Northside Drive. Turn right into Blue Parking Lot on Northside Drive across from GWCC Building C.

Take I-75/85 south to 10th Street (Exit 250). Turn right onto 10th Street. Turn left on Northside Drive. Turn right into Blue Parking Lot on Northside Drive across from GWCC Building C.

\* Alternate Route: Take I-75/85 south to North Avenue (Exit 249 D). Turn right on North Avenue. Turn left on Northside Drive. Turn right into Blue Parking Lot on Northside Drive across from GWCC Building C.

### **FROM THE WEST:**

Take I-20 east to Spring Street (Exit 56B). Turn left onto Spring Street and left onto Martin Luther King, Jr. Drive. Turn right onto Northside Drive. GWCC Building C is located on your right immediately following the Georgia Dome. Turn left into Blue Parking Lot on Northside Drive across from GWCC Building C.

### **FROM THE EAST:**

Take I-20 west to Spring Street (Exit 56B). Turn right onto Spring Street and left onto Martin Luther King, Jr. Drive. Turn right onto Northside Drive. GWCC Building C is located on your right immediately following the Georgia Dome. Turn left into Blue Parking Lot on Northside Drive across from GWCC Building C.

Parking is not on a 24-hour basis. The lot will close upon completion of the event day. Upon arrival, ask lot attendant for parking specifics.

## **PTC Booth Demonstrations Schedule (Located in the Pit)**

**Updated 3/31/2010**

### **1. Enhance Your Robot Design – Learn how to get started using PTC Software!**

- Thursday at 8:30 am and 1:45 pm
- Friday 11:00 am and 3:00 pm
- Saturday at 9:00 am

### **2. Enhance Your *FIRST* Team Collaboration with Windchill**

- Thursday at 9:00 am and 2:15 pm
- Friday at 11:30 am and 3:30 pm
- Saturday at 9:45 am

### **3. Faster Robot Conceptualization with Pro/ENGINEER**

- Thursday at 9:30 am and 2:30 pm
- Friday at 11:45 am and 3:45 pm
- Saturday at 10:00 am

### **4. Analyzing Your Robot's Motion with Pro/ENGINEER Mechanisms**

- Thursday at 9:45 am and 2:45 pm
- Friday at 12:15 pm and 4:00 pm
- Saturday at 10:15 am

### **5. Optimize Your Robot Design with Mathcad**

- Thursday at 1:15 pm and 4:30 pm
- Friday at 12:45 pm and 4:30 pm
- Saturday at 10:45 am

**PTC will ALSO be offering sessions at the *FIRST* Robotics conference on Thursday.**

These workshops allow us to dedicate more time to help you learn about our software

**Schedule follows next page.**

. **Schedule of *FIRST* Robotics Conference Sessions**

1. 10:00 am – Enhance your *FIRST* Team Collaboration using PTC's Windchill (C204)
2. 11:00 am – Optimize your Robot Design using PTC's Pro/ENGINEER (Room C204)
3. 12:00 pm – Optimize your Robot Design using PTC's Mathcad (Room C204)

***\*\*The first 2500 visitors at the booth will get a PTC/FIRST baseball cap!***

***\*\*Each day, we will have a limited number of Pro/ENGINEER and Mathcad CD's to give away!***

***\*\*Attend a booth demonstration OR a Conference Session, and be entered into a daily drawing for an iPod Touch or a Kindle!***



### **Practice Field Schedule**

Times are subject to modification. Listen for Pit Announcements/postings for any changes

Thursday:	8:30am to 5:30pm
Friday:	9:15am to 5:30pm
Saturday:	8:00am to 11am