



# **2016 *FIRST*® Championship A-Z Guide for *FIRST*® Robotics Competition Teams**

Additional information can be found on the *FIRST* Championship website:  
[www.firstchampionship.org](http://www.firstchampionship.org)



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**ADA Spectator Seating:** Electronic assistance doors are located at the following entrances: **Courtyard, Plaza and Washington.** Ramps to access the upper levels of the Edward Jones Dome are located at **Entry A.** Elevators are located at the **North Courtyard Lobby** of the Edward Jones Dome (enter at Entry A for access). All passenger elevators as well as room and restroom signs are equipped with braille signage to assist the visually impaired.

All permanent seating areas comply with the ADA. Seating for guests with disabilities in the Edward Jones Dome is in **Row U on the Concourse level.** All other seating arrangements in the convention center are portable, and accommodations for special seating can be made with advance notice.

All restrooms and drinking fountains are wheelchair accessible in the America's Center and the Edward Jones Dome. There are four (4) family restrooms on the Concourse level of the Edward Jones Dome and the Washington and Plaza First Aid rooms in the convention center have restrooms that can be used by guests needing additional assistance by a family member.

Guests with hearing impairments attending events in the Edward Jones Dome may obtain an assistive listening device from any guest service center or tune their own portable headset receiver to FM89.1 to pick-up the house sound system.

**Admission:** There is no fee to attend the 2016 *FIRST*<sup>®</sup> Championship; the event and Pits are open to the public! Be sure to visit all the *FIRST* programs.

- The *FIRST*<sup>®</sup> Robotics Competition Championship and the *FIRST*<sup>®</sup> LEGO<sup>®</sup> League World Festival are in the America's Center and Edward Jones Dome.
- The *FIRST*<sup>®</sup> Tech Challenge World Championship and *FIRST*<sup>®</sup> LEGO<sup>®</sup> League Junior World Festival Expo are at Union Station.
- *FIRST* Championship Opening and Closing Ceremonies can be found in the Edward Jones Dome.

**Alliance Scouting and Captains:** Teams tell us it's a good idea to position a scout team in the audience for each sub-division since the Championship amounts to eight (8) 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.

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.

**Awards Schedule (FRC):**

**Thursday, 6:00 pm—Edward Jones Dome**

- Dean's List Award

**Saturday, 7:30 am—Edward Jones Dome**





**Division Awards (2 Team Reps accept award)**

- Team Spirit Award sponsored by Chrysler
- Imagery Award, in honor of Jack Kamen
- Creativity Award sponsored by Xerox
- Entrepreneurship Award sponsored by Kleiner Perkins Caufield & Byers
- Rookie Inspiration Award
- Highest Rookie Seed Award
- Quality Award sponsored by Motorola Solutions Foundation
- Gracious Professionalism® Award sponsored by Johnson & Johnson
- Industrial Design Award sponsored by General Motors
- Judges Award
- Industrial Safety Award sponsored by UL
- Innovation in Control Award sponsored by Rockwell Automation
- Excellence in Engineering Award sponsored by Delphi
- Rookie All Star Award
- Engineering Inspiration Award – (note: full team comes down to dome floor for this award only)

**Saturday, 12:00 pm (or whenever playoff matches end)—Edward Jones Dome  
Sub-Division Playoff Awards**

- Finalist
- Winner

**Saturday, 2:30 pm—Edward Jones Dome  
Einstein Championship Matches and Awards**

- FRC Outstanding Volunteer Award
- Woodie Flowers Award
- Media & Technology Innovation Award, sponsored by Comcast NBCUniversal
- Finalist
- Winner

**Saturday, 6:00 pm—Edward Jones Dome  
Closing Ceremony**

- Chairman's Award

**Badges:**

**Drive Team Badges:** Each team will receive four (4) badges in its registration packet. Wear the badge on the front of your shirt near the left shoulder, so referees, judges, and queuers can see it. These badges allow the wearers access to the playing field and designate:

- One (1) Coach (this badge has a dot on it. *The Coach cannot score points or drive the robot.*)



- Two (2) Drivers
- One (1) Feeder

**Tip!** Assign someone to keep the badges 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!

**Pit Crew Badges (Alliance Pairings):** During the playoff 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 Safety Captain Badge for this voluntary position. Please visit the “Safety” section of this document for more information.

**BrandIT Marketplace for FIRST:** Brandit Marketing Solutions in conjunction with Northwest Designs will be offering new and exciting merchandise at the Championship. The main stores will be located in the Edward Jones Dome on the 2<sup>nd</sup> floor concourse, as well as at Union Station in the area through the glass doors at the end of the *FIRST*® Tech Challenge Pits. In addition, there are smaller satellite stores behind the attendee registration area in the American’s Center, second floor of the Edward Jones Dome near the food concessions and in the student lounge area in the America’s Center. Store hours will be open in conjunction with the Pit and competition schedules and the main store at the Edward Jones Dome will remain open for the finale on Saturday night. Cash and major credit cards will be accepted.

We are excited to announce that once again, teams will be able to add their team numbers to their purchased apparel! Teams can pre-purchase *FIRST* apparel through the *FIRST* Marketplace online store ([www.usfirstmarketplace.com](http://www.usfirstmarketplace.com)).

**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. We ask that you show respect for all countries in attendance.

**Chairman’s Award Interviews:** **Sign up on Thursday morning (exact time TBA)** Teams must come to the Hall of Fame booth on Thursday to sign up for an interview slot. [Interview](#)



times and locations are filled on a first come, first served basis. There will be four Chairman's Award interview rooms.

**All interviews for the Chairman's Award will be conducted on Friday from 9:00 am- 6:00 pm.** (Note: The interview times available to teams for sign-up will be pre-determined by the Judges). To avoid schedule conflicts, we recommend that interviewees are not on the drive team. Swapping interview times is not encouraged, but if you must change your time, switch with a team (once you have their consent) that is assigned to the same interview room as you and notify the Judges through the "Judge Assistant/Chairman's Room Runner", who will work with the teams and keep Judges apprised of changes.

**Tip!** It's best not to use match lists as a determining factor, since matches do not always occur on schedule.

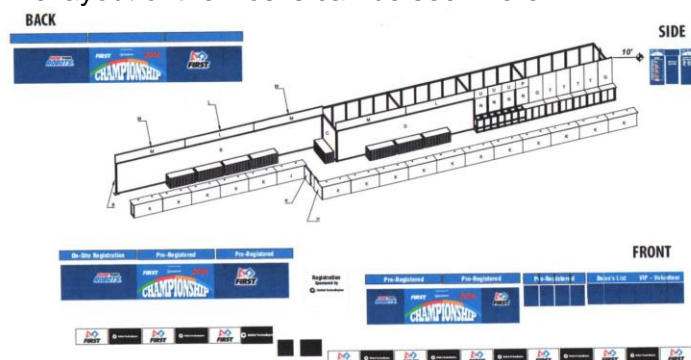
**Championship Attendee Registration:** *FIRST* requires every Championship attendee to be registered and badged, including adult team mentors, youth team members, parents, family members, chaperones, etc. who are participating in the event. Attendee registration grants access to each event as well as event transportation, and increases the security of the multi-venue event.

We strongly encourage your team to complete the attendee registration prior to your arrival in St. Louis, as this will expedite your team's attendee badge collection.

To begin the attendee registration, please go to:  
<http://registration.experientevent.com/ShowROB162/defaultTeams.aspx>.

**New this year!** Attendee registration will take place in Hall 3 of the America's Center starting Tuesday. There will be 30 kiosks available in the registration area. You will be able to obtain your badges at the kiosks by scanning the barcode on the confirmation email you were sent from Experient, and you can also search by team number or name.

The layout of the kiosks can be seen here:







**Tip!** If you have any competition/FRC Championship-specific questions, see FRC Pit Administration for assistance. Pit Administration will be available when Load In begins on Wednesday at 1:00 pm.

**Check-in at Pit Administration:**

**Wednesday, 1:00 pm - 8:30 pm**

**Thursday, 7:00 am - 8:30 am**

Teams' Main and/or Alternate Contacts must check-in at Pit Administration. At check-in, you will receive your team's registration packets. These packets contain important items such as driver badges, media passes, team lists and more!

**Crate Weight Complaint Resolution Times:** After your crate has been emptied, notify Shepard Exposition Services (SES) that your crate is ready for storage.

**Please note:** Any weight above 400 lbs. will be assessed at a specific price per 100 lbs. by SES. Before opening your crate, check the weight on the Bill of Lading on the side of your crate. If you feel that the weight is incorrect, please go to the SES desk as they will weigh the crate in front of you for clarity.

**Concessions:** There are several concession area options on the *FIRST* Championship campus, with a variety of different food options. The America's Center and the Edward Jones Dome do not allow any outside food to be brought in and consumed in the *FIRST* Championship campus. Security will ask you to leave with any outside food brought in.

**Consent and Release Forms and Team Roster:** During check-in, teams must provide a team roster and any paper copy Consent and Release Forms for students or mentors that did not complete the form electronically. If under 18, consent and release forms require a parent/legal guardian's signature. See: <http://www.firstinspires.org/resource-library/youth-team-member-consent-and-release-form> for complete details.

**Directions to the Edward Jones Dome:**

**Directions:**

**From I-44:**

I-44 intersects with I-55/70 near downtown. Exit merged interstates at downtown exit Memorial Drive. Memorial Drive to Washington Avenue. For the Broadway Central entrance to the Dome, turn left on Washington Avenue to 9th Street (one-way). Right on 9th Street (one-way) to Cole Street. Right on Cole Street to Broadway (one-way). Right on Broadway (one-way south) to Broadway Central entrance (located in center of the block in between Entries C and B).

**From I-55:**

See above directions after I-44 merge.

**From I-270:**





I-270 does not extend into downtown St. Louis. It does intersect with I-55, I-70, I-44 and Highway 40 at various points.

**From Illinois (I-55/70) via Poplar St. Bridge:**

Exit Bridge via the Memorial Drive exit (one-way north). Memorial Drive to Washington Avenue. For the Broadway Central entrance of the Dome, turn left on Washington Avenue to 9th Street (one-way). Right on 9th Street (one-way) to Cole Street. Right on Cole Street to Broadway (one-way). Right on Broadway (one-way south) to Broadway Central entrance (located in center of the block between entries C and B).

**From I-64 (Highway 40):**

Highway 40 to the 'Last Missouri Exit' (Broadway). At end of ramp make left on Cerre Street (one-way east). Cerre Street to 4th Street. Left on 4th Street to Washington Avenue. For the Broadway Central entrance to the Dome, turn left on Washington Avenue to 9th Street (one-way). Right on 9th Street (one-way) to Cole Street. Right on Cole Street to Broadway (one-way). Right on Broadway (one-way south) to Broadway Central entrance (located in center of the block between entries C and B).

**From Lambert St. Louis International Airport:**

The Edward Jones Dome is approximately 13 miles southeast of the airport. Take I-70 East to Broadway exit. Broadway (one-way south) to Washington Avenue. Broadway Central entrance to the Dome will be located in the center of the block between entries C and B.

<http://explorestlouis.com/meetings-conventions/americas-center/edward-jones-dome/>

**Division Awards and Alliance Selections:** **Saturday at 7:30 am in the Edward Jones Dome.** Each team will need to send two representatives to the dome floor in front of their assigned field by 7:15 am. One of these two representatives will be responsible for Alliance Selection.

**Division Breaks:** Each Division has been assigned a 2 hour break on Thursday, Friday and Saturday. Please use this time for lunch. Also take time to visit the Alliances, Scholarship Row and Sponsors at the Marriot Grand Hotel and *FIRST* Tech Challenge and *FIRST* Lego League Jr. at Union Station. Roundtrip shuttle transportation is provided outside the Plaza A entrance to the Edward Jones Dome.

**New! Dome Traffic Flow Layouts:** Please refer to the Dome traffic flow layouts posted here: <http://www.firstchampionship.org/sites/default/files/first-robotics-competition/2016-frc-dome-flow.pdf>.

**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 is not appropriate. Bathing suits and other revealing clothes are not appropriate.

**Driver's Meeting:**

**Wednesday, 5:00 pm**

The Driver's Meeting will take place in the Edward Jones Dome. Please sit in the stands closest to Gate A.

**Einstein Field Access - Saturday:** Beginning at **12:30 pm on Saturday**, additional security measures will be in place for the Einstein field. Immediately following Sub-Division Playoff Matches, Division Champion drive teams and robots need to report to the Einstein fields. A special access badge will be issued.

**FedEx Shipping Document process (for transporting your robot home):**

**Friday:**

**Step 1:** An adult mentor from the FRC team must visit the *FIRST* Shipping Desk located near Pit Administration to pick up the FedEx shipping document to ship their robot crate home from the event.

Each FRC sub-division has been assigned a 1-hour time slot to pick up the FedEx shipping document:

<b>SUB-DIVISION</b>	<b>TIME</b>
<b>Archimedes</b>	8:00 am – 9:00 am
<b>Carson</b>	9:00 am– 10:00 am
<b>Carver</b>	10:00 am– 11:00 am
<b>Curie</b>	11:00 am – 12:00 pm
<b>Galileo</b>	1:00 pm – 2:00 pm
<b>Hopper</b>	2:00 pm– 3:00 pm
<b>Newton</b>	3:00 pm – 4:00 pm
<b>Tesla</b>	4:00 pm – 5:00 pm

Any team that loses their FedEx shipment document will be required to pay for the shipment home. *Treat this document like cash!* **Replacements are not available.**

**Step 2:** After picking up the FedEx shipping document, teams will then need to visit the Shepard Exposition Services (SES) Desk near Pit Administration to pick up a Shepard Payment Authorization form and a Shepard Bill of Lading. Both of these forms are required by SES.



### **Saturday:**

**Step 3:** Remove all old shipping documents from your robot crate. Attach the completed and signed FedEx shipping document and colored sticker to the robot crate.

**Step 4:** Once the crate is packed and sealed, return to the SES Desk and turn in the completed Shepard Payment Authorization form and all copies of the Shepard Bill of Lading.

**Robot Removal Approved Teams** – A representative from Pit Administration will visit your team on Friday to provide you with a red sticker to attach to your robot crate. You will also be provided a release document that **must** be handed to a check out volunteer at the 9<sup>th</sup> street rolling doors when you exit the America's Center during load out.

The Pits close at **2:30 pm 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 participate in the *FIRST* Finale.

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 SES.

Due to the increased number of teams, FRC teams can expect to receive their robot/crate within 4-8 weeks after the *FIRST* Championship. Teams competing at off-season events in May and early June should consider transporting robot/crate home themselves. Please contact [frcteams@firstinspires.org](mailto:frcteams@firstinspires.org) for a Robot Removal Request form. **Only teams who have received prior approval from *FIRST* will be allowed to remove their robots from the event.**



**Robot removal requests are due by Friday, 4/15/16.**

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.

### **Field Measurement:**

**Wednesday, 3:30 pm- 4:30 pm**

The Division Fields in the Edward Jones Dome will be open on Wednesday from 3:30 pm – 4:30 pm for team field measurement. A driver's badge (which is provided in the team registration packets received at Pit Administration) is required in order to access the fields in the Edward Jones Dome.





**Final Rounds:** Refer to [Section 7 of the Game Manual](#) for information about Alliance Selection, playoff and final rounds, tournament rules and the Championship match ladder.

**FIRST Championship App:**



**FIRST Championship Conferences:** The *FIRST* Championship Conferences will be held on Wednesday- Friday. The conference has been expanded to include:

- Sessions and workshops. Sessions are 50 minutes and workshops are 110 minutes.
- Sessions and workshops will be held at both the America's Center and Union Station.
- Topics have been expanded to include areas of interest for all four *FIRST* programs.

A detailed conference schedule is available here:

<http://www.firstchampionship.org/sites/default/files/2016-cmp-conference-schedule.pdf>.

**FIRST Finale:**

**Saturday, 6:30 pm-10:00 pm**

The 2016 *FIRST* Finale will begin after closing ceremonies on Saturday. This year's finale is a multi-sensory experience for all ages!

- The excitement kicks off with **Stikyard**, a rhythmically-charged show of driving percussion.
- Next up, the action moves to the arena floor for an inspiring, high-flying performance of twists, jumps and flips by the **Jesse White Tumblers**.
- Back on stage, we welcome another feast for the senses - **Eclipse**. This acrobatic and dance-based performance group blends stunning motion graphics, impeccable music





and intricate body movements to transport the audience to a place where technology and live performers come together in one unique art form.

- The night concludes with the invigorating energy of critically acclaimed club **DJ, Andy Caldwell**, who will cap off the night with an "after hours" dance party suitable for all ages.

Together, these incredible performances add up to a night to remember and the perfect way for teams to celebrate their successes this season! The event is free with attendee badge.

**FIRST Innovation Faire:** Visit the *FIRST* Innovation Faire, located at the **Marriott Grand Hotel**. Join us for a Maker Faire-inspired area featuring *FIRST* Sponsors, Alliances, Suppliers, Scholarship Providers and other Special Guests. Attendees can receive exciting giveaways, witness new technology demonstrations and participate in fun, hands-on activities for all ages at the faire. For more information, please contact [InnovationFaire@firstinspires.org](mailto:InnovationFaire@firstinspires.org).

**FIRST LEGO League (FLL) and FIRST LEGO League Junior (FLL Jr.):** We encourage you to visit the FLL World Festival, located at the America's Center/Edward Jones Dome. The FLL Pits are open from 7:00 am- 5:30 pm on Thursday, and 7:00 am-5:00 pm on Friday. The FLL Medal Ceremony will take place on Saturday at 10:15 am. For more information, visit the FLL section of the *FIRST* Championship website: <http://www.firstchampionship.org/first-lego-league>.

The FLL Jr. World Festival Expo will be taking place at Union Station on Friday and Saturday. For details about the event, visit: <http://www.firstchampionship.org/first-lego-league-jr>.

**FIRST Tech Challenge (FTC):** The FTC World Championship will be held at Union Station. FTC teams check in on Wednesday morning from 6:00 am- 8:00 am. FTC Qualification Matches will begin at 1:45 pm on Wednesday, and will run on Thursday, Friday and Saturday as well.

The FTC Judged Awards Celebration will be held on Friday at 3:00 pm at the Peabody Opera house. Please refer to the FTC spectator schedule for additional information:

<http://www.firstchampionship.org/>

**FRC Sub-Divisional Team Viewing:** In an attempt to improve match viewing for teams during matches, a designated viewing area in a prime location will be available for the six (6) teams in the current match. We ask that teams leave the viewing area promptly following their matches in a gracious manner, to allow the next set of teams to view. The viewing area will be monitored by event staff and volunteers to help ensure fair access to all.

**FRC Team Load In:**  
**Wednesday:**

**Team load in will take place on 7<sup>th</sup> and 9<sup>th</sup> Streets from 1:00 pm - 4:00 pm:**

- Teams will be allowed to drop off their robot, tools, etc. and team representatives
- Teams cannot leave their vehicles parked on the street



- Teams blocking the entrance of another team trying to offload will be asked to move immediately by the St. Louis Police Department or a member of the Event Staff
- Teams are required to bring their own safety glasses
- Five (5) FRC Team Representatives are allowed admittance
- One (1) Team Representative must be an adult
- Four (4) Team Representatives may be students and or adults

**FRC Pits open to the public and all team members from 4:00 pm - 8:30 pm.**

#### **Safety Glasses:**

- Safety glasses will **not** be required at the FRC Pit entrance doors for the **first hour only from 1:00 pm - 2:00 pm**
- Upon entering assigned pit space, all FRC Team Representatives will need to unpack and wear safety glasses prior to beginning any work
- Starting at 2:00 pm, Safety Advisors will be at the FRC Pit entrance doors and safety glasses will be required in order to enter the pits from this point forward.
- Also starting at 2:00 pm, FRC volunteers and staff will begin patrolling the FRC pits to ensure safety glasses and safety procedures are being followed
- If a team is found to be in violation of the safety glasses and or safety procedures, a warning will be provided to the team
- If subsequent violations are found for the same team, the Director of FRC will be notified. The team may face possible sanctions or be escorted out of the FRC pits for the remainder of the evening.

**The load out doors will be open and available beginning Saturday at 8:30 am. Teams must load out by 2:30 pm** in advance of the *FIRST* Finale. For teams competing in the FRC Championship matches, please see Pit Administration for a space to store your pit items until after the competition.

Please be respectful of other teams and the public in your departure, leave your area clean, and be safe! Just like load in, do not pull your vehicle up to the curb unless your load is ready to go. You will be asked to move your vehicle if it sits for more than a few minutes by the St. Louis Police Department and/or building security and volunteers.

**Hall of Fame:** Visit the Hall of Fame (HOF) booth, home of previous FRC Chairman's Award Winners, located in the FRC Pits. The Chairman's Award represents the spirit of *FIRST*, and remains FRC's most prestigious award. The HOF booth will also have the Chairman's Award Clock and Woodie Flowers Award on display for viewing. This is a great opportunity for you to interact with some of the top FRC teams and learn what it takes to become a HOF team!

**Inspection:** Remember that qualification matches begin at 8:30 am on Thursday. 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 does not have to be complete in order to request a preliminary inspection.



**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. Any items turned into Pit Administration and not claimed before the end of the event will return with staff to *FIRST* HQ in Manchester, NH. If you cannot locate your lost item before the event is over, email [frcteams@firstinspires.org](mailto:frcteams@firstinspires.org) about two weeks after Championship with a detailed description of the lost item. Additionally, each building keeps lost articles at its information desk, so we suggest checking there also. After the event, items go to the security office at the venue for 30 days.

**Machine Shop:** Once again, NASA is graciously sponsoring and managing the FRC Machine Shops. Refer to the Pit Map to see the locations and the Agenda for the schedule. The NASA Machine Shops are conveniently located near the loading dock area of the FRC Pits. 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.

**Mascot Dance: Saturday, 2:00 pm**

Calling all mascots! We need your help to lead a dance on the dome floor to get the crowd ready to start the 2016 FRC Championship Matches. We ask that interested team mascots gather at Entrance A in the Edward Jones Dome.

**Media Passes:** Each team will receive one (1) non-transferable Team Media Pass and related instructions/caveats in its registration packet. Media representatives are permitted in designated media access areas around the playing field only during their team’s Qualification and Sub-Division Playoff Matches. The directions of Playing Field Supervisors must be followed at all times. Team Media are not permitted on: the actual playing field surface; in areas marked off for human players; in playing field areas during Championship Matches or ceremonies; in any private venues or VIP, Volunteer, or Judges’ areas, or the *FIRST* Media Center for professional, bona fide media. Mascots will not be recognized as an official team media person.

**Mentor/Coach Breakfast Celebration Sponsored by Booz Allen Hamilton: Friday, 7:00 am**

The Mentor/Coach Breakfast will be taking place on Friday at 7:00 am in the America’s Ballroom, located on the 2<sup>nd</sup> level of the America’s Center. The program includes guest speakers and great networking potential. This is a cross-program event for all *FIRST* Mentors and Coaches.

**Non-Engineering Mentor Organization (NEMO): Friday, 10:00 am- 12:00 pm**

We invite adult mentors from all four *FIRST* programs to attend our NEMO (Non-Engineering





Mentor Organization) Annual Meeting on Friday in room 255 at the America's Center. This room has the best view in the house! Come check it out! Come and go as your schedule allows.

**Non-Medical Incident Reporting:** Report incidents relating to safety or *Gracious Professionalism*® to any program's Pit Administration area.

**Pit Announcements:** In an effort to keep announcements to a minimum, we will group together parts requests for announcement every 15 minutes. To submit a request, 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 half hour intervals. Please note: Announcements are for event related purposes only. No personal announcements will be considered.

**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. For the Saturday closing, we request that only essential team members be in the pit to handle the pack up, the rest must wait outside the Pits at a designated location to keep aisles clear for freight movement and team load out.

**Pit Hours:** FRC Pit Hours are as follows:

- *Wednesday 1:00 pm- 4:00 pm (Team Load-in, 5 Team Reps only)*
- Wednesday 4:00 pm- 8:30 pm (open to all team members and the public)
- Thursday 7:00 am- 5:30 pm
- Friday 7:00 am- 7:00 pm
- Saturday 6:45 am- 2:30 pm

**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 Stations:** Each team has approximately the same Pit space. Extending beyond your Pit space is not allowed. 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. Structures, signage, or banners cannot be higher than ten feet above the floor. Do not build any structure that supports people or stores items above the work area/pit space. If the height exceeds ten feet, you will be asked to take it down. No advance placement requests are available. Positioning is random. No requests for displays, additional tables, Pit locations, division assignments, meeting rooms, or additional space will be considered.

**Practice Fields:** On Wednesday, practice fields are only open for robots that have completed inspection and will be available for tethered operation on a first come, first served basis. A maximum of 15 minutes per use per turn is available. On Thursday and Friday, if you wish to practice running your robot during practice matches on the full Practice Fields, all spots will be filled via first come, first served filler lines available at the entrance to the fields. You must run





your robot wirelessly on the practice field on Thursday and Friday. Remember to review your team's match schedules before getting in line for the practice field. Additional practice areas will be available for first-come-first-served tethered operation and can be found on the venue map. **Please keep safety in mind when using these areas.**

Detailed information about practice fields can be found here:  
<http://www.firstchampionship.org/sites/default/files/first-robotics-competition/2016-frc-championship-practice-fields.pdf>.

**Practice Matches: Wednesday, 6:00 pm – 8:00 pm**

Teams **MUST** have visited the WPA table to be allowed on the playing field, even during Practice Matches.

**Filler Line:** Although teams may not switch practice times, there will be a “Filler Line,” limited to six (6) 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 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:** Teams can pre-order lunches for the Championship. To place a pre-order lunch order, please complete the form available here: <http://yourboxlunch.myshopify.com/>.

Bracelet pick up will be located in the Plaza Lobby near the Team Registration Desk in the America's Center.

**Lunch Bracelet Pick Up Times:**

- Wednesday: 1:00 pm- 8:00 pm
- Thursday: 8:00 am- 11:00 am

Box lunch pick up is in the 2nd Floor Atrium, which is located on the second level of the America's Center on Thursday, Friday and Saturday.

**Queuing:** Teams are responsible for knowing their match times and will have to queue up a half hour prior to their matches without the help of an announcer. Teams need a minimum of 15



minutes to travel from their Pit space to the dome fields. Please leave extra time to get back and forth between the pits and dome fields.

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. Please do not expect audio queuing to prompt you—you are responsible for your own schedule.

**Safety:** Please take a moment to review important safety tips and information here: <http://www.firstchampionship.org/sites/default/files/plan-your-visit/travel-advisory-2016.pdf>.

**New! Robot Service Center:** Located in the Pit area. The robot service center is an opportunity for our Suppliers to directly support teams during the competition with technical help, spare parts, or assist with repairs. It will be open mostly while pits are open and is scheduled as follows:

- Wednesday 5:00 pm-8:30 pm
- Thursday 7:00 am-6:00 pm
- Friday 7:00 am-6:00 pm
- Saturday 8:30 am-4:30 pm

**Schedule and Team Lists:** Print and bring the latest Championship Schedule. Also print enough division team lists to help with your team’s scouting efforts. Both documents can be found on the Championship website: [www.firstchampionship.org](http://www.firstchampionship.org).

#### **Scholarship Row Presented by BAE Systems, NVIDIA, AND SpaceX:**

**All team members - especially high school freshmen, sophomores, juniors, seniors and parents:**

Scholarship Row at the 2016 *FIRST* Championship Innovation Faire is a place for participants, parents and mentors to talk with representatives from some of the colleges, universities and organizations that make *FIRST* Scholarships available. This is an ideal opportunity for sophomores and juniors who are planning for college to talk first-hand to college representatives. Seniors can find out about scholarships that are still available for the coming fall, and for freshmen, it's never too early to start thinking about college! For more information, please visit: <http://www.firstchampionship.org>. In 2016, over \$25 million in college scholarships are available to *FIRST* Participants from nearly 200 Scholarship Providers.

#### **Scholarship Row Hours:**

- Thursday 10:00 am – 5:30 pm
- Friday 10:00 am – 4:30 pm



- Saturday 8:00 am – 12:00 pm

**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 at all times or placed in a lockable compartment in your Pit station. FIRST and the America's Center/Edward Jones Dome do not guarantee security of personal items. We strongly recommend that you do not leave behind valuable items in your Pits at any time, such as personal computers, cell phones, cameras, etc. You can report any lost items to Pit Administration (see *Lost and Found*).

Remember, the Pits are open to the public. **Please take proper security measures to protect any valuable items.**

**Site Restrictions:**

Please read the following restrictions and adhere to them in order to promote an orderly, safe, pleasant, and exciting competition. As a group, we all should honor agreements with the venue and help promote the spirit of good partnership.

Please:

- **Do not use skateboards or 'hover boards'.** This is a safety concern.
- **Do not use drones.** This is a safety concern.
- **Do not bring bottled gas tanks (e.g. helium).** This is a safety concern.
- **Do not use noisy devices**, such as floor stompers, whistles and/or air horns.
- **Do not** arrange for Internet access or phone lines from venue service providers or attempt to use venue internet connections reserved for event purposes (e.g., FMS or streaming).
- **Do not sell any products.** This includes food, hats, shirts or any promotional products.
- **Do not distribute any food products**, such as candy, water, soft drinks or fruit.
- **Do not sell raffle tickets.**
- **Do not use walkie-talkies.**
- **Do not invite or bring live bands to play in the audience.** This dilutes the presentation on the playing field and is too loud and confusing for the audience.





- **Do not play loud music in the Pit** because it interferes with important announcements. If a team receives more than a warning or two, the power to the team Pit will be shut off and/or the music device confiscated.
- **Do not form "tunnels"** during the Awards Ceremony. This can cause discomfort to those traveling through them and creates safety issues.
- **Do not save seats.**

**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.

**Student Ambassadors:** Guests are invited to take an in-depth tour of the Championship with our most knowledgeable tour guides, our students! Tours are available on Thursday, Friday and Saturday and are subject to availability. Please see the registration/badging desk located outside of the Pits to set up a tour.

**Sub-Division Champions and Special Seating:** The FRC Championship has 8 sub-divisional tournaments going on simultaneously. The sub-division alliance winners are known as Division Champions. These teams compete on Saturday for Alliance Championship Finalist and Alliance Champion Winner titles. When the Division Winners are announced, each team will receive 40 wristbands to designate special seating at the Saturday Awards Ceremony. Division Champion alliance teams will be seated in **Sections 126, 127, and 128 (lower level) and Sections 127 and 128 (upper level)**. Teams will need to obtain the wristbands from the field Volunteer Coordinator.

**We will be clearing Sections 126, 127, and 128 (lower level) and Sections 127 and 128 (upper level) starting at 12:30 pm on Saturday. Anyone sitting in these sections will be asked to move. These sections are reserved for the Division Champion alliance teams competing in the FRC Championship Matches.**

**Sub-Division Playoff Pit Spaces:** There will be assigned pit spaces for FRC sub-division playoff to be shared by 4 team alliances. We strongly suggest alliances work together to share the space accordingly including tools and equipment. Any pit structures cannot exceed 6 feet in height.

**New! Team Button Exchange:** Teams will receive packages of buttons for trading when they check-in at Pit Administration. Each team member will receive two buttons (one to keep and one to trade). We encourage you to find a team member in another *FIRST* program (or a volunteer) to trade with!

**Transportation:** MetroLink and MetroBus provide easy access to the neighborhoods, attractions and shopping districts throughout the bi-state region. The newly expanded MetroLink light rail, which has been called one of the best mass transit systems in the country, provides





access to many area attractions. Beginning at Lambert St. Louis International Airport, MetroLink stretches 48 miles through Missouri and Illinois and includes stops at 37 stations. Trains usually run every seven (7) minutes during peak hours, and every 10 minutes throughout the rest of the day, and every 15 minutes or so on weeknights. MetroBus serves the many municipalities in St. Louis County, and visitors can access a special MetroBus route that connects downtown to a variety of popular attractions. Complete information on fares, stations and timetables can be found at [www.metrostlouis.org](http://www.metrostlouis.org).

**Metro Map:**

[http://www.metrostlouis.org/Libraries/System\\_Map\\_PDFs/Map\\_DownTown\\_STL\\_083010.pdf](http://www.metrostlouis.org/Libraries/System_Map_PDFs/Map_DownTown_STL_083010.pdf)

In addition, there will be free shuttle transportation between the *FIRST* Championship venues this year for registered participants. Please visit the Campus Map on the Championship website: <http://championship.usfirst.org> for shuttle locations.

**United States Air Force Rapid Strike Simulator:** Jump on board a ride that lets you experience a real Air Force mission including an F-22 flight, C-17 cargo drop, Special Operations ground surveillance, satellite communications, and a Reaper missile strike – all from a FIRST person point-of-view. Come and see the fast-paced, high-energy nature of a complex Air Force mission conducted in a deployed environment. **Rapid Strike will be located just outside of the front doors at the Edward Jones Dome on 7<sup>th</sup> Street.**

**Updates and Changes:** Refer to the white board in the Pit Administration area for new/updated information and listen for announcements.

**Video Recording Hookups:** Teams are welcome to record their matches. Please see the Field Supervisor for the location of the Multi AV boxes, which you can connect your audio and video recording devices to. There are a limited amount of Multi AV boxes available, so we ask that you kindly limit recording to the matches that your team is playing in.

**Webcast:** A link to the Championship live stream will be available on the *FIRST* Championship website here: <http://www.firstchampionship.org/watch-live>.

**Wireless Networks:** Free wireless internet access is now available in the common areas of the America's Center. **This access is not available on the Pit floor or in the Edward Jones Dome.** Due to the wireless nature of *FIRST* control systems, wireless availability will be evaluated during the course of the event. 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.