

Event Rules Manual

DESTINATION:
**DEEP
SPACE**



Presented By



General Rules

The rules below apply throughout an event: from load in to load out.

E01. Follow the schedule. Teams may not be in the pits outside the designated pit hours.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E02. Personal safety comes first.

- A. All team members must wear safety glasses (only ANSI-approved, UL Listed, CE EN166 rated, AS/NZS certified, or CSA rated non-shaded) while in and around the playing field and in the pit area. Lightly tinted lenses are permitted provided eyes are clearly visible to others, but reflective lenses are prohibited.
- B. All team members must wear closed toed/heel shoes.
- C. All team members must tie back long hair.
- D. All team members must wear appropriate clothing.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E03. No saving seats. Teams are not permitted to save or designate seats for team members that are not present.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.


Teams may not hang banners or ribbons or otherwise designate seating. (Event staff will remove and discard any banners, roping, etc., used to designate seating) Please take turns sitting in the bleachers if seating is limited. If there is a crowding problem, we ask that you kindly leave after your team's match and return later, if possible.

E04. Don't throw items from the stands. Items may not be thrown from audience seating.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E05. Some things don't belong at events. Do not bring or use the following:

- skateboards
- 'hoverboards'
- drones



FIRST Robotics Competition Event Rules

- bottled gas tanks (e.g. helium)
- noisy devices or noisemakers, such as floor stompers, whistles and/or air horns
- walkie-talkies

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E06. 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).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E07. Don't sell stuff or distribute food. This includes, but is not limited to, raffle tickets, food, hats, shirts, candy, water, soft drinks, fruit, or any promotional products.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E08. Keep unnecessary noise to a minimum. Do not invite or bring live bands to play in the audience. Do not play loud music.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E09. Respect the venue. Teams may not damage the venue in any way, including, but not limited to bleachers, floors, walls, railings, etc.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E10. Practice in the pits or on the Practice Field. Teams may only practice with their robot in their pits or in designated practice areas that are open to all teams at events.

Teams may not set up their own practice equipment outside their pits. When practicing in their pit space, safety must remain the top priority for teams. If Event Management determines an in-pit practice setup is unsafe or interferes with activity in adjacent pits or pit aisles, the team will be required to discontinue the activity.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E11. Stay in your pit. Teams may not expand their pit activities to empty pit spaces, swap pit spaces with other teams, nor move themselves to empty pit spaces.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E12. No wireless communication. Teams may not set up their own 802.11a/b/g/n/ac (2.4GHz or 5GHz) wireless communication (e.g. access points or ad-hoc networks) in the venue.

A wireless hot spot created by a cellular device, camera, etc. is still considered an access point.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E13. Don't interfere with other wireless networks. No Team or Team member shall interfere or attempt to interfere with any other Team's or *FIRST* wireless communication. Except as expressly allowed for purposes of communicating with the Team's own Robot on the Field or a Practice Field, no Team or Team member shall connect or attempt to connect to any other Team's or *FIRST*'s wireless network.

Teams are encouraged to report suspected wireless security vulnerabilities to the *FIRST* Technical Advisor (FTA) if at the event or to *FIRST* via the [Wireless Security Feedback Form](#).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management and may lead to dismissal from event and/or legal action based on applicable laws.

E14. ROBOTS should be tethered if not on the FIELD or Practice FIELD. ROBOTS must be operated by tether when outside the FIELD or Practice FIELD.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E15. If operating wirelessly on the Practice FIELD, ROBOTS must use the provided Practice Field radio for communication.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E16. Children under 12 must be accompanied in the Pit by an adult at all times.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

Flags

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

E17. Be respectful when hanging your flags and banners.

- A. Do not cover or move other team or sponsor signs already in place.
- B. Share the available space fairly with other teams.
- C. Do not obstruct the view of spectators.
- D. Hang signs in a safe manner.

Respect venue-specific rules regarding sign location and hanging methods. At the end of the event, safely remove all signs and anything used to hang the signs (tape, string, etc.).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

Robot Carts

Most teams use carts to transport their robot throughout an event. Carts are not required but are strongly recommended (to minimize risk of muscle strains, dropped robots, and other hazards).

Any team using a robot cart must abide by the following rules:

E18. Carts must be safe and easy to use. Carts must be easy to control, maneuver, and pose no risk to bystanders.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E19. Carts must be the right size. Carts must fit through a standard 30-inch door.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E20. Keep carts where they belong. Carts must remain in the team pit area (or in the cart staging area, if during a match) when not in use.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E21. Carts are not noise-makers. Carts may not be equipped with music or other sound-generating devices, except for devices of reasonable volume used for safety purposes (e.g. to make others in the direct vicinity aware that a robot is on the move).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

In addition to the rules listed above, teams are strongly encouraged to put the team's number on the cart, refer to the [FIRST Safety Manual](#) for robot lifting techniques, and practice putting the robot on and off the cart to develop a quick, fluid routine.

Load In

Events set specific time frames, published on the event's agenda, in which teams are invited to load their robots and equipment in to their pit areas before pits are open for full access.

In general, Load In can be stressful for teams and volunteers; which can be mitigated by preparation and planning. Unanticipated factors, like traffic, weather, or other events, can change a team's scheduled arrival time, making the process difficult. The most important things a team should remember are to be safe and embody *Gracious Professionalism*. Teams who experience smooth and easy Load Ins are encouraged to check with others to see if they can help and make their experience as positive as possible.

E22. Equipment must be transported safely. Teams must bring their equipment in safely.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E23. Be efficient. Teams may only bring materials to and leave materials in their pit area. Teams must leave when finished delivering materials (or, in the case of Early Pit Setup, when setup is complete).

Violation: Teams will be asked to leave the pit area. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E24. The ROBOT stays in the sealed bag. No work, of any kind, may be done on the robot or robot-related materials (e.g. items in a team's withholding allowance). The only exception is that teams may plug chargers in and start charging batteries.

Violation: Team will meet with LRI and other Event Staff to discuss and understand the level of violation. Action will be taken depending on severity of violation.

Early Pit Setup

At some of events, the Load In period allows teams to set up their pit area before the event officially starts. If this is the case, it will be indicated on the event's agenda.

If pit set up is allowed, the following rule applies (in addition to Team Load In and General Pit Rules):

E25. Be sure your pit is safe, even if you aren't in it. Teams must have their pits in a safe state by the time pits close (even if some tasks are left undone).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E26. Only five team members (one of which must be an adult) may be in the pit area.

Violation: Extra team members will be asked to leave. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

If an event has designated Early Pit Setup times both the evening before and the morning before pits open to all, a team may use both periods to set up its pits, but, per E26, must leave once pit set up is complete. Teams can be expected to be asked to leave by event personnel if it is noted that their pit set up is complete and they have not yet left the pit area.

Check-In

Event check-in takes place at the Pit Administration station the evening before and/or the first morning of each event.

E27. Teams must check in. An adult team member must check in no later than ninety (90) minutes before Qualification Matches are scheduled to start.

Violation: Teams will be contacted in their pit. Failure to Check-In may result in a team not participating in the event.

Upon receipt of your team's consent and release forms, each team will receive the Drive Team & Safety Captain Buttons. Other resources may be available, depending on the event.

Ceremonies

At every event, there are Opening and Closing Ceremonies to show honor and respect for represented countries, sponsors, teams, mentors, volunteers and award winners. Ceremonies provide everyone with the

opportunity to applaud the successes of team members and mentors. They also give teams a chance to "meet" the volunteers and other important persons and sponsors involved with the event.

At the Awards Ceremony, *FIRST* presents trophies and medallions to outstanding teams. 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. An exception is if a few team members need to remain in their pit to continue work on their robot during the Opening or Closing Ceremonies, they may.

E28. Team members must be quiet and respectful during all ceremonies except when applause or vocal approval of a ceremony activity is warranted. Team members must not:

- A. Use power tools
- B. Use loud hand tools (hammers, saws, etc)
- C. Shout, yell, or use loud voices, unless as a demonstration of approval during a ceremony activity.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E29. Team members limited. 5 team members are allowed in the team's pit during ceremonies if continued work on the robot is necessary.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E30. Team members, including any remaining in the pits, should exhibit peaceful behavior during the presentation of all national anthems. Traditionally, team members stand to face the flag, remove hats, and either sing along or maintain a respectful silence during the anthems of all nations present at the event. If team members wish to abstain, they have a right to do so, as long as they remain silent and non-disruptive.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

Machine Shop

Some events host a machine shop, open during specific hours (see the event's agenda), to help teams with repair and fabrication of their robots. Machine shops are typically 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 all events.

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 are in place to transport the robot or parts to and from the machine shop. In this case, a team fills out a Machine Shop Request Form that travels with the robot or parts, 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.

E31. Team members may not travel to off-site machine shops with the robot being transported by volunteers.

Teams may travel to the off-site Machine Shop on their own, either by walking or using their own vehicle, but all student team members must be accompanied by an adult at all times. Teams should strongly consider including a third team member per the *FIRST* Youth Protection Program guidelines found [here](#).

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

Machine Tools at Events

Small, bench-top machinery, with appropriate guards, is permitted in team pits. 'Small' machinery is machinery that can be easily lifted by one person.

Examples: Small band saws, drill presses, desktop CNC mills, and sanders.

E32. Use tools safely and appropriately.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E33. Tools that throw sparks or produce open flames are prohibited.

Examples of tools that throw sparks or produce open flames include, but are not limited to, welders, bench and angle grinders, gas torches, etc.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E34. Floor standing power tools are prohibited.

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

Violation: Teams will be asked to remove or not bring in floor standing power tools. Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E35. Paint in the designated areas.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E36. Brazing/welding is prohibited.

Violation: Teams will be asked to remove or not bring in brazing/welding tools. Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E37. Soldering may be done using an electric iron/gun only.

Violation: Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

Team Pits

A team pit is the designated space, usually 10 ft. by 10 ft. by 10 ft., where a team may work on their robot. Each team is assigned a pit space marked with their team number. This helps team members, judges, and visitors find teams easily. Each team's pit has a table and power outlet.

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

E38. Clear aisles at all times. Aisles must be kept clear.

Violation: A verbal warning. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E39. Structures must be safe. Teams may not build any structure that supports people or items for storage above the work area.

Violation: A verbal warning. Any pit structures that is deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.

E40. Display safely. Team signs, flags, and displays must be securely mounted to the pit structure.

Violation: A verbal warning. Any pit structures that is deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed. Repeated violations will be addressed by the Head REFEREE, the Lead ROBOT Inspector and/or Event Management.