

Test/Practice Area Volunteer Guidelines

This document covers recommendations and best practices for running the Test/Practice Area(s). Teams should refer to Section 14.6 Practice Areas of the [Game Manual](#) for specific rules and information but snippets are provided below for the volunteers reference.

TEST AREAS

All *FIRST*® Robotics Competition events have TEST AREAS – new for 2026, PRACTICE FIELDS have been renamed to TEST AREAS to better reflect usage, capabilities, and goals for the space. TEST AREAS are designed to be a space where teams can test their ROBOT with representative FIELD elements using a tether-only connection (i.e., not wirelessly). Teams may also be able to test their starting AUTO modes but TEST AREAS are not designed for full FIELD play such as AUTO modes that traverse larger areas of the FIELD or interact with multiple FIELD elements. Regardless of the event's specific setup, teams and volunteers must remain vigilant to ensure safe and courteous operation of TEST AREAS.

Layout

FIRST provides a recommended layout, but events may need to adjust exact placement depending on the space available in the venue, ceiling heights, obstacles in the area, or any other venue-specific requirements. Event Management and the FTA can help identify any venue-specific requirements that exist at the event.

Once a TEST AREA layout is determined, elements should remain as close as possible to that layout throughout the event unless Event Management or the FTA determines a change is required. The TEST AREA layout is specifically intended to discourage testing of complex AUTO routines for safety reasons. **Teams should not relocate elements from their original locations.**

AprilTags

FIRST provides a small set of official AprilTags for the TEST AREAS. The tags provided for the 2026 TEST AREA will include tags 2, 5, 8, 9, 10, 11, 13, 14, 15, and 16. Teams that wish to use other AprilTag IDs for the TEST AREA may print copies of other tags to bring to events but **should not remove** the provided tags. Printable copies of the field AprilTags can be found on the [Playing Field webpage](#). Teams may temporarily cover up the provided tags (e.g. with a blank sheet of paper) to prevent their vision systems from reading nearby tags unintentionally or cover up provided tags with printed AprilTags to facilitate specific situational robot testing.

SCORING ELEMENTS

FUEL is not provided and if a team wishes to practice with FUEL, they must bring their own. Teams should also label their fuel and are responsible for returning their FUEL.

HUMAN PLAYERS

HUMAN PLAYERS are welcome to practice throwing FUEL into the TEST AREA HUB if the area around the HUB is clear of other ROBOTS and humans to avoid missed shots hitting people or interfering with ROBOT testing. Priority is given to ROBOT practice over HUMAN PLAYER practice.

PRACTICE AREAS

PRACTICE AREAS are areas that provide a full FIELD setup to provide opportunities for teams to practice larger and more complicated actions than can be safely accomplished in a TEST AREA. Not all *FIRST* Robotics Competition events will have PRACTICE AREAS due to venue space or field hardware requirements. PRACTICE AREAS may provide tethered robot operation or wireless robot operation using the Field Management System. Volunteers should talk to their event's Event Management or FTA to

determine whether the event has a PRACTICE AREA or not, and to fully understand the setup, plan, and layout of a PRACTICE AREA if it exists.

TEST/PRACTICE AREA Rules

Many rules pertaining to TEST AREAS and PRACTICE AREAS exist in the [Game Manual](#) – here is a brief summary of a few important rules to keep in mind:

- Per **E601**, A team may only use the designated event practice areas with a ROBOT that has passed an initial, complete inspection. This means only teams with an initialed inspection sticker for *this event* may use the space
- Per **E603**, only team members actively driving or working on the ROBOT are allowed to be on the TEST/PRACTICE AREA.

The intent of this rule is to limit the number of people directly next to ROBOTS that are enabled. The recommendation is no more than 5 members per team, but some events may limit further due to available space.

Teams may have additional team members watching from a distance, provided the venue has space, but those members should be a safe distance from all ROBOTS operating at the TEST/PRACTICE AREA.

- Per **E604**, when using a tether on TEST AREAS and PRACTICE AREAS, teams must keep a safe distance from all ROBOTS and moving elements and must not interact directly with the ROBOT when it is enabled.

Generally, a safe distance is ~72.0in (~1.83m) from the ROBOT.

- Per **E605**, teams must be ready to DISABLE their ROBOT if the ROBOT does not move in the desired direction or in case of safety concerns.
- Per **E606**, teams may not step over the guardrail (in PRACTICE AREAS) or climb on, hang from, or damage any FIELD elements.
 - Teams should be given one verbal warning and if the issue continues, their access to the TEST/PRACTICE AREA may be removed. Event Manager and/or Program Delivery Partners should be notified if there are teams with repeat violations.

TEST/PRACTICE AREA Recommendations and Best Practices

Beyond the rules in the game manual, several recommendations and best practices exist to ensure an event's TEST/PRACTICE AREA(s) run safely and smoothly:

Safety

- Ensure that teams are always operating their robots in a safe manner. High speed driving/swerving, uncontrolled SCORING ELEMENT interactions, or not maintaining a safe distance between robots and people are all examples of things to watch out for.
- Ensure that teams disable the robot before approaching, making adjustments to, or moving the robot by hand.
- Volunteers should use their best judgement to determine the maximum number of teams allowed on a TEST/PRACTICE AREA at a time. This number may be influenced by several things including area size, venue size, game elements, and specific planned element use by teams.
 - For TEST AREAS, a good rule of thumb is allowing no more than 3 teams at a time
 - For PRACTICE AREAS, a good rule of thumb is allowing no more than 2 teams per field half at a time
 - Volunteers may allow additional teams provided teams are a safe distance from one another and are able to operate their robots safely.

- Generally, no more than 5 team members per team should be present at a TEST/PRACTICE AREA – and depending on space, some events may need to limit this number further to ensure safe space for robot operation is available
 - Some events may provide an area near the TEST/PRACTICE AREA for more team members to watch from a safe distance.
- Ensure all volunteers know the location of and how to request medical assistance, and where Pit Admin is located in case of injury. All injuries (minor or major) must be reported to Pit Admin.

Timing and Schedule

- *FIRST* highly recommends that TEST/PRACTICE AREAS close during the Opening and Closing Ceremonies so that volunteers and teams can participate in the ceremonies.
 - As events may vary, volunteers should check with their Volunteer Coordinator for specific timings of ceremonies.
- Volunteers should talk to the FTA or Event Management to determine how TEST/PRACTICE AREA scheduling should work. Generally, *FIRST* recommends one of the following methods to maintain TEST/PRACTICE AREA schedules:
 1. Sign up slots – Teams sign up for a 15-minute time slot to be on the TEST/PRACTICE AREA.
 - Filler Line – Should a team not show up for their scheduled time, volunteers can offer the time slot to another team waiting.
 2. Line up – Teams form a line and each team is given 15 minutes to be on the TEST/PRACTICE AREA. Volunteers should make sure to monitor time to give all teams equal time.

Dos and Don'ts of the TEST/PRACTICE AREA(S)

- **Do** keep a careful eye out for safety-related concerns and act on them immediately if you see anything.
- **Do** watch for damage to SCORING ELEMENTS or FIELD elements. Should damage occur, do not allow teams to continue practicing, and report the damage to the FTA or Field Supervisor in a timely manner.
- **Do** remind teams that CSAs, Robot Inspectors, FTAs, FTAA's, and many other volunteers are available as resources should help or troubleshooting be needed.
- **Do** watch that team members and spectators are not in the line of fire of ROBOTS on a TEST/PRACTICE AREA, both inside the area and in the areas surrounding it. FUEL may be errantly launched by robots into the surrounding area.
- **Do** be a role model of *Gracious Professionalism*® and calmness and always display a positive attitude. The way you handle yourself as a volunteer may impact the experience that team members have.
- **Do not** instruct the teams to make any changes to their Driver Station or their team Radios. If teams are having difficulty connecting, please contact the FTA, the FTAA, or a CSA.
- **Do not** touch a team's ROBOT or OPERATOR CONSOLE unless related to an imminent emergency.