# Lead Queuer Volunteer Manual

| Revision History | |
|---|---|
| **Revision** | **Description** |
| V25-26.1 | Initial 2025-26 Season Release |

# Overview

**Roles Covered:** Queuer, Pit Runner, Lead Queuer

## Job Description

A Queuer's main responsibility at events is to help inform teams when their match will start soon and help them get from the pit area to the competition fields as needed.

| Requirements | |
|---|---|
| Technical | Low |
| Physical | High |
| Administrative | Medium |
| Communication | High |
| Pre-event Training | Low |

## Time Commitment

Queuers should expect to spend 6-8 hours at a full day event and 3-4 hours at a league meet.

## Attire

- Comfortable closed-toe, closed-heel shoes, most of the day will be spent moving between the pit and competition areas.
- ANSI Z87.1 certified safety glasses are required in the competition and pit areas.

## Training and Certification

Read and complete all tasks listed in the `Pre-Event Training` section.

Any volunteer who applies to a role will be able to get into the Learning Management System (LMS) using the *'FIRST* Training' button. Roles with the training required will appear in the 'roles missing certification' area. For more help, you can read more about how to access your training.

If you have applied for a role but have not received access to the training, please email training@firstinspires.org. A separate confirmation of the role assignment will come later.

Queuers should speak to the Event Director to find out if there are additional requirements, such as meetings before the event or run-throughs of the queuing path before the event. The approximate training time is one hour.

# Roles and Responsibilities

> ***FIRST* is fun for all.** The most important role of a volunteer is to provide a safe, fun, and welcoming environment for all *FIRST* participants. When executing the duties of your role, always make decisions with the team experience in mind. Ask for help from event leadership if you feel your required duties conflict with the best team experience.

## Queuer

Responsible for facilitating team traffic to and from the playing field to help ensure the event stays on schedule. Queuer responsibilities include:

| Responsibilities |
|---|
| Ensure teams know their match times are coming up |
| Stage teams when they arrive at the queuing area to be ready to load in for their next match |
| Ensure a safe and orderly competition arena by confirming that all personnel in the queuing area are drive team members or authorized event personnel |
| Maintain an uninterrupted flow of teams to the field by ensuring teams are in the queuing area ahead of their match |
| Direct teams to the field and help teams depart from the field |

## Pit Runner

A Pit Runner is a type of Queuer that focuses on going to the pit area to inform teams that they need to report for their upcoming match. The key responsibility of the Runner is to interface with the Queuers and Lead Queuer to bring teams to the competition area. However, Runners should be aware of the key responsibilities and event day information for Queuers to successfully perform their role.

## Lead Queuer

Lead Queuers manage the flow of teams to and from the competition arena by working with the Event Director, *FIRST* Technical Advisor (FTA), and Queuers. The Lead Queuer is one of the primary leads that works to make the flow of event traffic to and from the pit area and competition fields is safe, orderly, and timely. Key responsibilities of the Lead Queuer include:

| Responsibilities |
|---|
| Work with the Event Director and the *FIRST* Technical Advisor (FTA) to create unrestricted paths to and from the pit area to the competition field |
| Ensure safe, orderly, and timely flow of robots and teams to and from the competition area |
| Manage the staging of teams in the queuing area |
| Maintain a proper number of teams in the queuing area |
| Direct the Queuers as needed to ensure that there is an uninterrupted flow of teams to the field |

The Lead Queuer may also opt to assign some of the Queuers as Runners, depending on the size of the event and the distance from the pit area to the competition area.

### Prerequisites for Lead Queuer Role

To serve as a Lead Queuer, previous experience as a Queuer or equivalent experience is required.

# Before the Event

Lead Queuers are sometimes part of the event planning committee and help with event traffic flow planning for teams and robots. Unless you are specifically asked to do pre-event planning there are no pre-event planning activities outside of training.

## Pre-Event Training
Pit Runners and Queuers do not require any Pre-Event training.

Lead Queuers must complete the required reading in this section and pass a certification test before serving in this role.

Resources for training and certification:

| Lead Queuer Pre-event Training List | |
|---|---|
| **Requirement** | **Resource** |
| **Required** | Welcome to FIRST |
| **Required** | The Lead Queuer Volunteer Manual (this document) |
| **Required** | The Competition Manual – specifically:<br>• Section 13 - Tournament |
| **Required** | Review the Volunteer Handbook |
| **Required** | Field Operations Guide, which contains training and advice for managing the fields and related volunteers |
| Encouraged | Competition Manual – specifically:<br>• Section 5 - Event Rules |
| Encouraged | Complete Strategies for Inspiring Success for All modules. |
| Optional | Watch the game animation video for a general understanding of the game |
| **Required** | Complete the Lead Queuer Certification Test in the *FIRST* Learning System<br>(For volunteers outside of North America without a *FIRST* Dashboard Account use the PDF to self-certify) |

# Event Day

## Report Time

Your Event Director or Volunteer Coordinator will confirm the time you should arrive typically via email the week before the event. In most cases, arriving at least 1 hour before matches begin is sufficient.

When you arrive onsite, check-in with the Volunteer Coordinator and report to the Lead Queuer. The Lead Queuer should check-in with the Volunteer Coordinator and report to the Event Director and/or the *FIRST* Technical Advisor (FTA) to see if there is any already established team traffic flow pattern from the pits to the queuing area and competition fields.

## Match Flow and Timing

Many events use colored tape on the floor to indicate traffic patterns on the floor and/or folding tables to create staging areas near the competition field(s). Confirm with your leadership what is expected of your role at this event.

Consider the following when designing traffic flow patterns:

- Minimize crossing robot traffic
- Prioritize teams coming to the field over those departing the field
- Avoid mixing audience traffic flow with team traffic flow

The queueing staging area is where teams report with their robot ready to play before their scheduled matches. Typically, this consists of one or more tables that are identified as the next match up (Current

Match +1) and two matches out (Current Match +2) and indicate where the Red or Blue Alliance should stand.

## Queuing Depth Scales with Event Size

It is not a good experience for teams to always be required to be in queue so the depth of the queue (1 or more tables) should be based on the size of the events and the number of fields. The queuing depth should be as shallow as possible while still ensuring that the teams are ready and available before their match start time.

## Match Participation

It is your responsibility to ensure the teams are aware of the match schedule, but it is the team's responsibility to show up for their matches in a timely manner which does not impede match flow. It is also the team's right to decline to participate in a match. The Competition Manual is the only authoritative source for specific rules.

If a team says they do not plan to attend the match they are being queued for:

- Let the team know they will not receive any more reminders.
- Remind the team that they should send a single drive team member as a representative or they will be ineligible to earn credit for the match.
- Inform the Lead Queuer that the team stated they will not play in the match.
- The Lead Queuer will work with the field staff to start the match appropriately.
- If they are not delaying the match, a team may show up to play the match even after they have told queuing they will not attend the match

## Team Interaction and Support

When interacting with teams please always consider the team's perspective. The teams have put significant time and effort into this robot and want everything to be perfect before they show up to play a match. Trying to make a last-minute improvement or repair is a very stressful time for a team, and this can sometimes cause teams to push back on the match schedule.

Work with your Lead Queuer and the Head Referee if a team is consistently late to the queuing area to ask for more guidance. Only the Head Referee may issue any official warnings. The Competition Manual is the authoritative source for specific rules.

# Important Tools

## Public Schedule

The Program Delivery Partner or the Event Director should publish the public schedule of events before the event. This schedule will have a high-level overview of all the activities for the event. It is important that everyone at the event does their best to stay true to the public schedule so that teams and volunteers who have planned their day around these times have a good experience.

| Time | Agenda |
|---|---|
| 7:15 am | Doors Open for Staff & Key Volunteers |
| 7:30 am | Judges and Inspectors Report |
| 8:00 am | Doors Open for Teams |
| 8:30 am | Judging & Inspection Commences |
| 10:15 am | Team Check-in Hard Deadline (Check the Competition Manual) |
| 10:30 am | Match schedule is generated and distributed to teams. (Check the Competition Manual) <br> *Note to Scorekeeper: 6 Matches total (Check the Competition Manual)* |
| 10:40 am | Drivers' Meeting with Head Referee & Opening Ceremony |
| 11:00 am | Qualification Matches 1 - 8 <br> *Note to Scorekeeper: 7-minute cycle-time* |
| 12:00 pm | Lunch |
| 12:45 pm | Qualification Matches 9 - 45 <br> *Note to Scorekeeper: 5-minute cycle-times* |
| 3:50 pm | Qualification Matches Projected End |
| 4:00 pm | Alliance Selection |
| 4:20 pm | Double Elimination Rounds 1 - 4 |
| 5:10 pm | Award Ceremonies Start & Double Eliminations Round 5 |
| 6:20 pm | Projected End of Event |
| 7:00 pm | Doors Close |
| | *Occasionally things that happen out of the event's control may impact the schedule. In these cases, work closely with the Event Director to understand the updated agenda.* |

*Figure 1: Example Schedule for a 30 Team Event*

## Registered Teams List

The Program Delivery Partner may provide a list of teams registered for the event or the scorekeeper can export a report of all the registered teams for the event. Sometimes this list may change the day of the event based on which teams show up. The Scorekeeper report will have the most accurate information about who is competing at an event. Notes that teams may be competing only in the judging portion of the event and not have a robot present.

### Test Event Teams

| Number | Team Number | Name | Affiliation | City | State | Country | Rookie Year |
|---|---|---|---|---|---|---|---|
| 1 | 1 | Team Unlimited | PTC & FTC1 Team Unlimited 4-H Club | Sharon | MA | USA | 2007 |
| 2 | 7 | Tactical Sheep | TechBrick Education/DoD STEM&TechBrick Education | Aberdeen Proving Ground | MD | USA | 2007 |
| 3 | 16 | bigskyrobotics | | missoula | MT | USA | 2007 |
| 4 | 18 | Techno Chix | Girl Scouts Heart of the Hudson | Port Chester | NY | USA | 2007 |
| 5 | 22 | 100 Scholars | 100 Black Men of Atlanta/Georgia Power/Johnson Research and Development/NCR/Lockheed Martin & 100 Black Men of Atlanta, Inc. | Atlanta | GA | USA | 2007 |
| 6 | 25 | Rock N' Roll Robots | Girl Scouts of Greater Los Angeles/NASA&Girl Scouts | Pasadena | CA | USA | 2007 |
| 7 | 99990 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 8 | 99991 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 9 | 99992 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 10 | 99993 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 11 | 99994 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 12 | 99995 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |
| 13 | 99996 | Off-Season Demo Team | Off-Season Demo Team | | | | 1992 |

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*Figure 2: Competing Team Report*

## Event Layout/Map

The Program Delivery Partner and Event Director should publish a map of the venue before the event. In some cases, details on the map might not be available until the day of the event.

The Event Layout / Map should detail the following:

- Load-In Path
- Parking for Personal Vehicles and Busses
- Team Check-in
- Volunteer Check-in
- Competition Area
- Pit Area (May include the `Pit Map`)
- Judging Room Locations (if applicable)
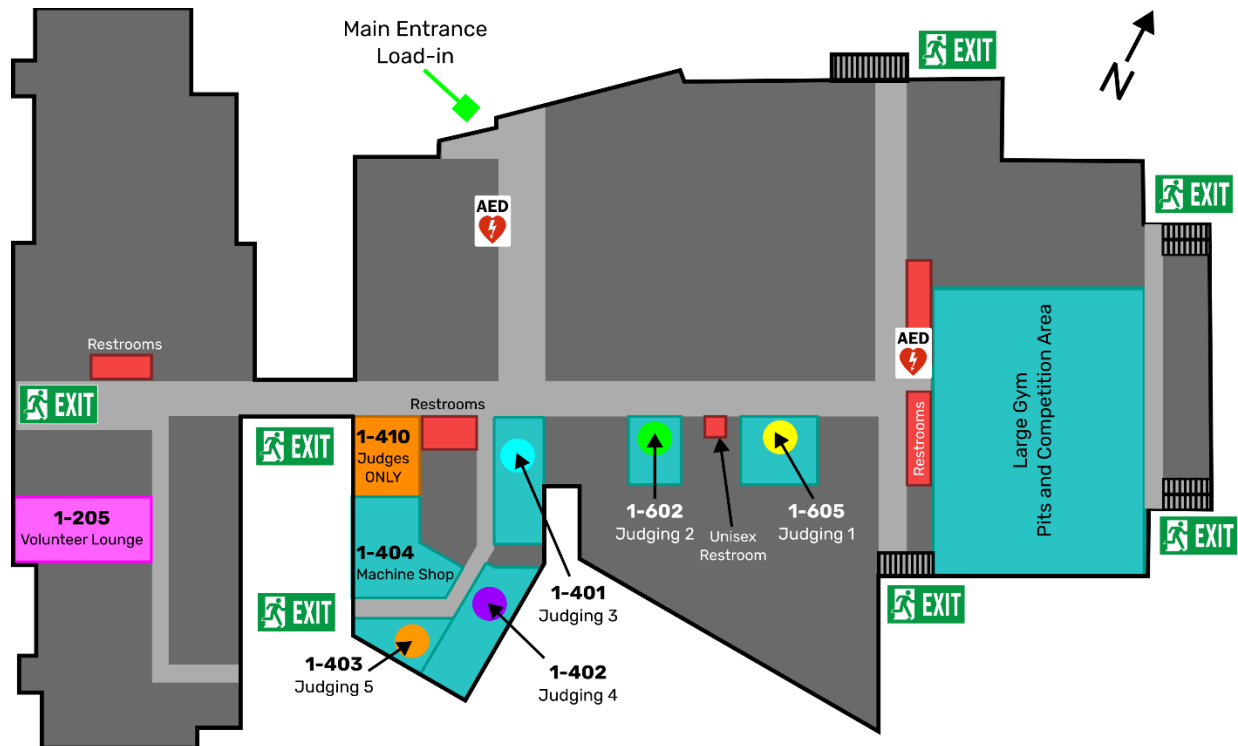- Safety Details as available (Emergency Exits, AED, Shelter in Place Locations)



*Figure 3: Example Event Map*

## Judging Schedule



| | **Panel 1**<br>*Room 1605* | **Panel 2**<br>*Room 1602* | **Panel 3**<br>*Room 1401* | **Panel 4**<br>*Room 1402* | **Panel 5**<br>*Room 1403* |
|---|---|---|---|---|---|
| 08:30 AM – | 22077<br>Marcus Minions | 8204<br>Blue Machine | – | 27534<br>RoboChargers - Yellow | 25783<br>Tech Titans |
| 08:50 AM – | 13542<br>RoboChargers - Blue | 21171<br>ITKAN Robotics - M12 | 27532<br>RoboChargers - Orange | 23344<br>Technical Turbulence | 27536<br>RoboChargers - Gold |
| 09:10 AM – | 26300<br>Anomaly | 27533<br>RoboChargers - Purple | 20482<br>Wylie E. Robote | 12430<br>Dub East | 26693<br>Triad Robotics |
| 09:30 AM – | 23434<br>Cristo Rey Dallas Robotics | 7172<br>Technical Difficulties | 18871<br>RoboChargers - Green | 18227<br>Area 52 | 19991<br>Chuckleheads |
| 09:50 AM – | 26542<br>Apex Genesis | 13537<br>RoboChargers - Red | 19564<br>ITKAN Robotics - MAS | 19990<br>Marcus de-TECH-tives | 13552<br>RoboChargers - Pink |
| 10:10 AM – | 27531<br>RoboChargers - Cyan | 24563<br>Flower Mound Firewall | 26722<br>Tech Support | 27535<br>RoboChargers - Silver | 20483<br>Wall East |

*Figure 4: Example Judging Schedule*

## Match Schedule

The match list will be generated on the day of the event after the teams have been confirmed. This schedule will list which teams will play in which alliance (Red or Blue) and it will also list a match start times. Some events will have more than one competition field and/or more than one division, and each division will have its own schedule.



*Figure 5: Example Match Schedule*

## Pit Map

Pit maps are typically provided by either the Event Director or by the Scorekeeper. Having a map of where each team is in the pit is key, as teams, parents or Queuers might need to find. Pit Maps created in FTC Scoring will appear on the FTC-Events page.
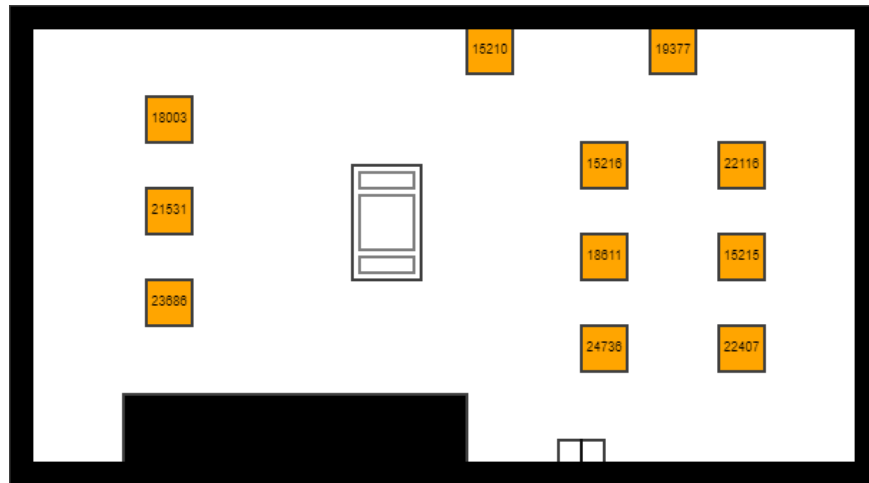


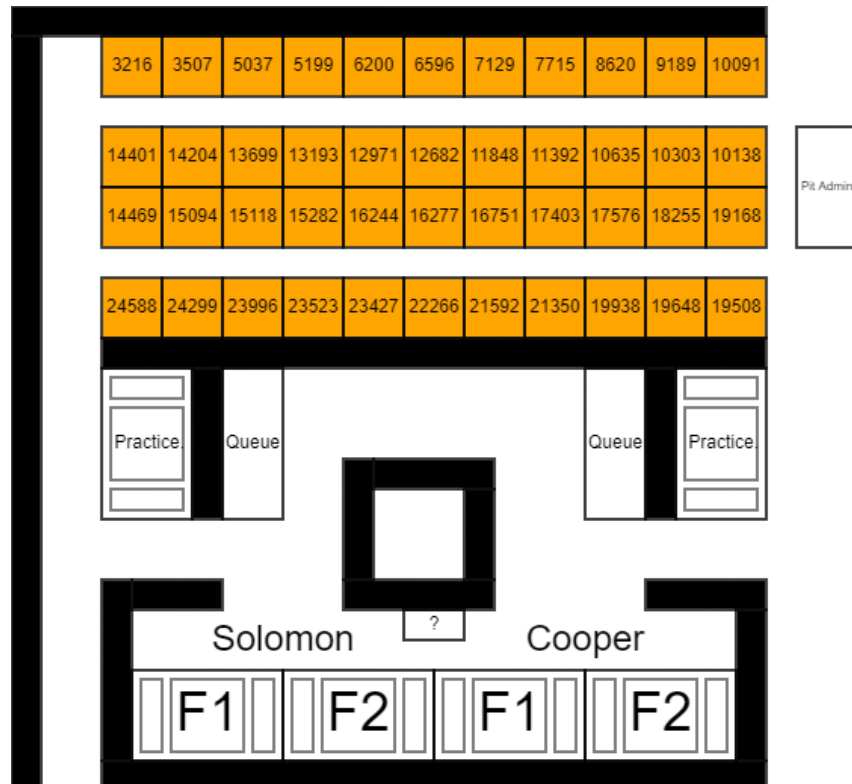*Figure 6: Example Pit Map for a small12-team Qualifier Event*



*Figure 7: Example Pit Map for a Typical Regional Championship Event Match*

# Useful Links and Information

## On-Call Support Numbers

> ### On-Call Support
> These numbers are for _volunteer support only_. Teams should not use these numbers to call about rulings or technical assistance.
>
> Administrative, Judge, Referee and Non-Technical Issues:       (603)206-2412
>
> Scoring System (FTC Live) or other Technical Issues:       (603)206-2450
> Call or use the **built-in chat feature on FTC Live** available for events with internet access

## Pre-Event Support

Mon – Fri     8:30am – 5:00pm Eastern Time (UTC-4 or UTC-5)
Contact Support including live chat or email customerservice@firstinspires.org

## Program Resources

FIRST Tech Challenge Website

Event Search

Game and Season Resources

FIRST Tech Challenge Blog

Volunteer Resources

Team Email Blasts

## Feedback

We strive to create support materials that are the best they can be. If you have feedback about this manual, please email customerservice@firstinspires.org or by contacting support. Thank you!