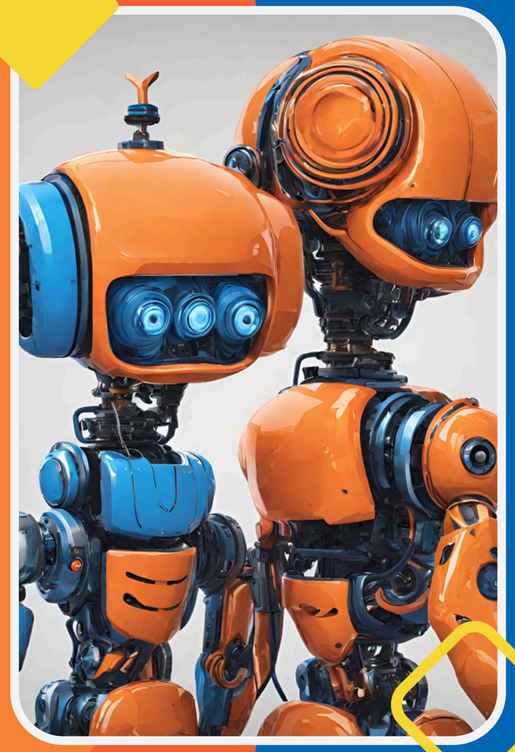
FIRST TECH CHALLENGE

FIRST KENTUCKY ROBOTICS

FIRST TECH CHALLENGE

COMPETITION READINESS

Agenda



- Meets vs Tournaments
- Check-in & Inspections
- Robot Inspections
- Field Inspections
- What to bring & Pit Design

FIRST KENTUCKY ROBOTICS

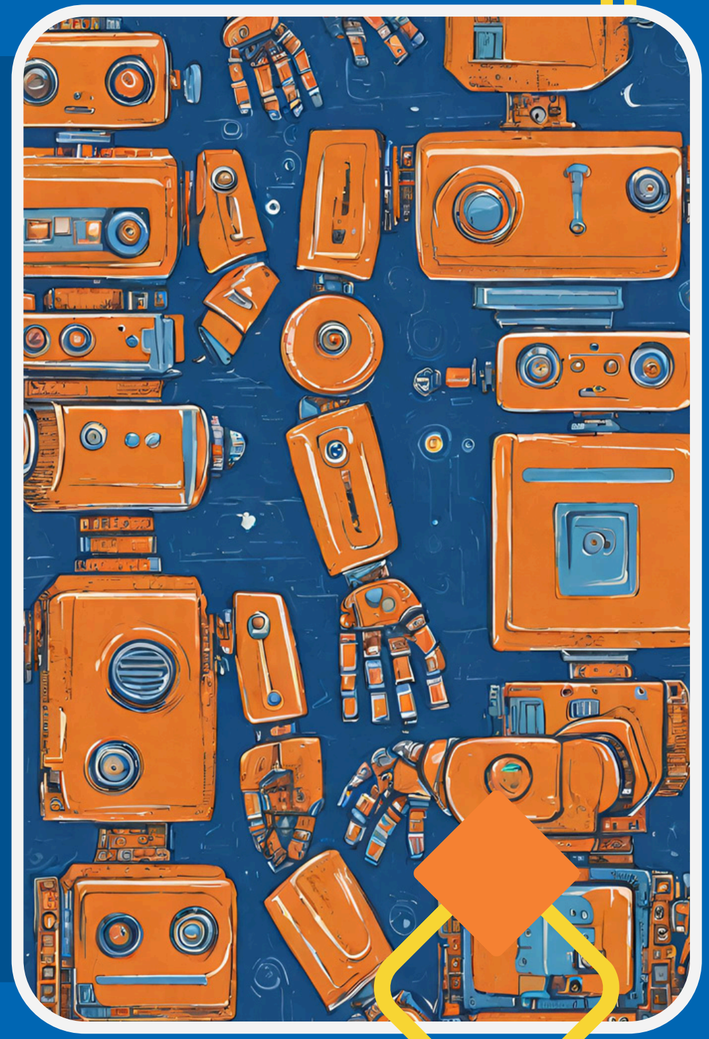
Meets vs. Tournaments or Championships

League Meets

- League meets are robot games only
- No semi or final matches
- Typically 5-6 matches per team
- Local, no overnight stays

Tournaments/Championships

- Robot games & Judging
- Semi-finals and finals matches
- Longer day, typically 8am-6pm so may involve an overnight stay



FIRST KENTUCKY ROBOTICS

Check-in & Inspections

Check-In

Robot Inspections

Field Inspections

Inspections

Robot Inspections

Field Inspections

Robot Inspections

Robot Inspections will get more technical as the season goes on. It's up to each team to ensure their robot will pass inspection.

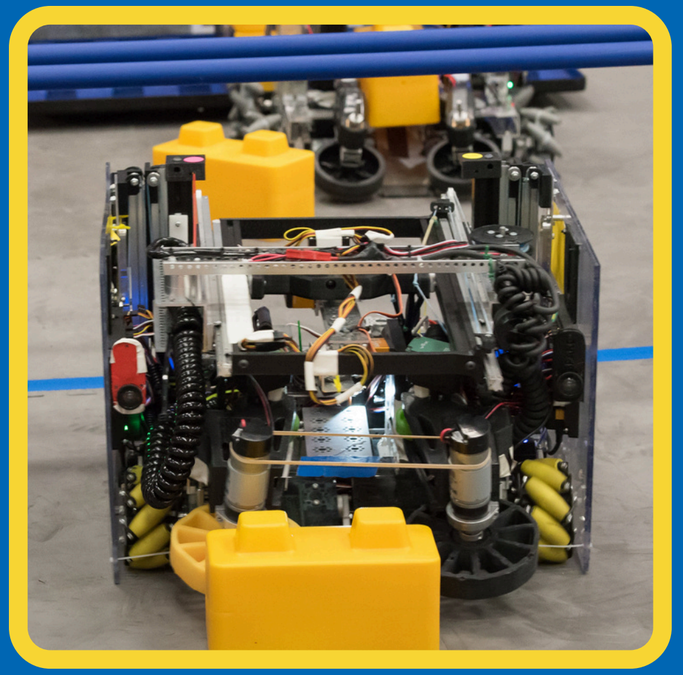
- Conduct self-inspection using ROBOT INSPECTION check-list and bring that to each event
- Robots must be inspected before participating in matches & re-inspected if any significant changes are made
- Robots must be safe and non-destructive
- Team props & Alliance Markers will be a part of this inspection

Robot Inspections

Common reasons team don’t pass inspection

- Team numbers must be visible on two sides of the robot (180 degrees apart) and at least 2.5" high & survive match play (not paper)
- Robots must have main power switch with label (at least 1" x 2.63"

- Robot must fit INSIDE 18" x 18" x 18" box.
- No sharp objects around the robot & no wires dangling.
- Alliance markers & Team manufactured game elements must also pass inspection



Field Inspections

Field Inspections are checking on how the robot works on the field

- Conduct self-inspection using FIELD INSPECTION check-list and bring that to each tournament
- Run self-inspection on your driver's station and robot controller & ensure that all options have a green check-mark
- Ensure you have your driver and drive coach badges and human player and media badges if applicable
- The Field Inspectors will let you know the flow of the day
- Teams should be able to disable robot when instructed, and robot is able to switch between teleop and driver-controlled correctly

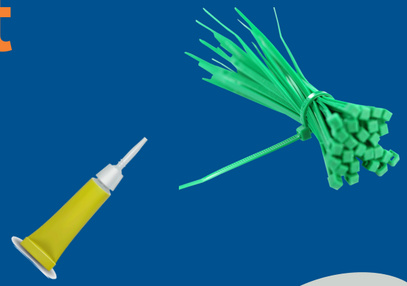
Field Inspections

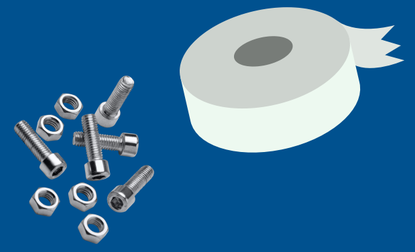
Common reasons team don’t pass inspection

- Robot Controller & Driver Station app versions do not match
- Driver station and Robot Controller are using a supported version
- Driver station must be named Team number - RC. Ex. 1111-RC
- Robot Controller must be named Team number - DS. Ex. 1111-DS
- RC password cannot be PASSWORD

What to Bring to Every Event

Robot!





1. **Cart for robot transportation**
2. **Extension cord & power strip**
3. **Extra Battery & Charging Cords**
4. **Alliance Markers and Team props**
5. **Programming Computer**
6. **Bin of Extra parts**
7. **Tool Box with basic tools**
8. **Team Roster from *FIRST* website (should show all members have signed consent & release forms)**
9. **Robot Inspection Checklist - complete**
10. **Field Inspection Checklist - complete**
11. **Safety glasses for all**
12. **Drive Team buttons (if you've gotten them this season)**

FIRST KENTUCKY ROBOTICS

Pit Design - League Meets

- Simple
- Quick
- Identifiable
- functional

Pit Design - Tournaments

- Be Creative!
- Work within guidelines given for the event
- Simple is also okay

Pit Design - Tournaments

Example pits seen in KY

Pit Design - Tournaments

Example pits seen in KY

Pit Design - Tournaments

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Example pits seen in KY

Pit Design - Tournaments

Example pits seen in KY

Your Support Team

KELLI
Program Delivery Partner-PDP

HEATHER
Program Delivery Partner-PDP

OTHER COACHES & MENTORS

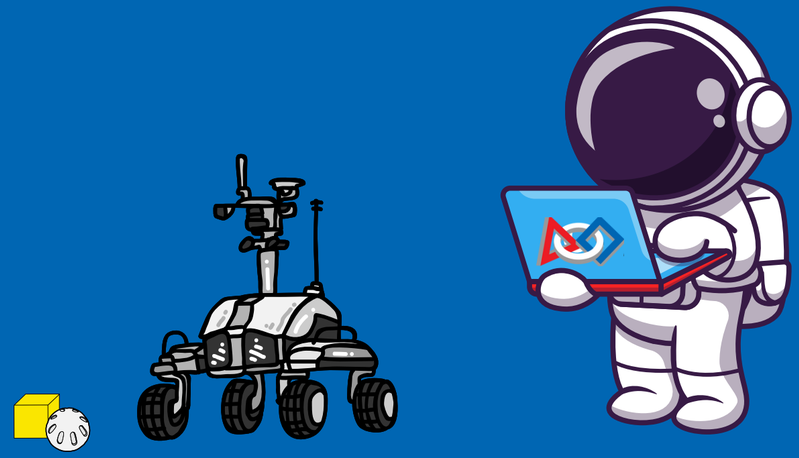
AND YOU!
AS YOUR EXPERIENCE INCREASES

JEFF
Senior Mentor

JACKIE
Senior Mentor

FIRST® KENTUCKY ROBOTICS

The material is based upon work supported by NASA and the Kentucky Space Grant Consortium under NASA award 80NSSC20M0047.



GOOD LUCK!

Contact Information:

info@kyfirstrobotics.org OR
firstname@kyfirstrobotics.org

www.kyfirstrobotics.org

@kyfirstrobotics.org

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