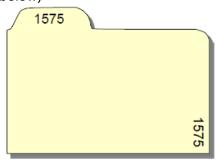
# **Inspection Manager Best Practices**

The Inspection Manager for *FIRST* Robotics Competition manages the paperwork and details associated with the inspection process and tracks the progress of all teams at the event through inspection. The Inspection Manager works at the direction of the Lead Robot Inspector (LRI). Please review the <u>full role description</u> which includes responsibilities and skills needed.

# **Inspection Station Set-Up**

- 1. **Preparing the Event Folders** -The Lead Robot Inspector (LRI) may decide to prepare the event folders ahead of the event itself but this job can also be given to the Inspection Manager during the set-up time of the event. The process is as follows:
  - Team Numbers should be clearly marked on the top label and along the side of the folder that will be most easily visible to inspectors (an example is shown below)



b. The LRI will bring the most current version of the inspection checklist to the event. 1 form should be placed inside of each folder.

Note: Since the checklist may get updated during the season, it is recommended to print them the day before the start of the event.

### **Inspection Station Management**

This section lays out the responsibilities for running the inspection station at the event. These are guidelines only. The LRI or Inspection Manager may have different preferences that should be discussed and agreed upon ahead of time.

The event LRI and designated Inspection Manager(s) are the only ones authorized to manage the folders and inspection sheets in the inspection folder box.

## Inspection folders:

- 1. *FIRST* includes 3 colored folders per event in the inspection file box. The use of these folders is optional. The preferred method is to keep the folders in team numerical order throughout the event. This is the method used at the Championship event(s).
- 2. When a team's sheet is taken out of the folder, flip the folder 90 degrees so that it is standing on its edge in the portrait position. This will make it stick out, and the number on the other end (see Preparation 1) will allow you to easily find it to return the sheet. It also serves as the visual system to know how many inspection sheets are out with inspectors.
- 3. Each robot inspector is given one inspection checklist when assigned to inspect a team. Each inspector should have no more than one team's checklist on their clipboard at any given time (unless directed by the Inspection Manager or LRI). These checklists are returned to the Inspection Manager to be filed. This ensures that the Inspection Manager can tell at any given time the inspection status of any given team.





- 4. A team must never be given their inspection form. They may review it at the Inspection Table.
- An inspector who brings back a partially completed inspection sheet should attach a note or make marks to indicate what still needs to be done or issues that need to be resolved.
- 6. Optional: Whiteboard/spreadsheet/digital data tracking, may be used at the direction of the event LRI.

# Inspection Stickers

- 1. The Inspection Manager should fill out the team number and event on each of the inspection stickers prior to inspections. Each event will receive a folder with inspection stickers inside for their event. It is important to use your assigned event stickers as the colors are pre-determined and help makes it easier for queueing to determine if a team has passed inspection for their specific event.
- 2. Check that the sticker is initialed by the robot inspector at the completion of their inspection, and before the robot inspector places the sticker on the robot. **The inspection sticker must be applied by a robot inspector.**
- 3. The inspection sticker sheets are to be handled by LRI or Inspection Manager only. Stickers are NOT to be handled to team members/mentors to apply to robot.

# Keep an inspection queue

- 1. There will be a point, usually starting about an hour before lunch, when there may be more teams ready for inspection than inspectors available. Keep a first-come first-served queue list so inspectors can be assigned new teams when they are available!
- 2. The Inspection Manager will assign inspectors to teams based on queue. Queue can be adjusted to accommodate practice matches.
- 3. The LRI may adjust the queue periodically to give priority to teams that have not yet started inspection.

### **Inspection Process**

The LRI may ask the Inspection Manager to assist with robot weight, sizing, and/or other minor, non-technical inspections.

Inspection starts when a team brings their robot and bumpers to the inspection station

- 1. Weigh the robot (Ensure the battery is not in the robot)
  - a. Record weight on the inspection sheet.
- 2. Weigh the bumpers
  - a. Ensure you weigh all mounting hardware, including the nuts, bolts, pins or whatever else they use to attach the bumpers to the robot.
  - b. Record bumper weight on the inspection sheet
- 3. Size the robot
  - a. Place the robot within the tape outline on the floor. If the robot is close or slightly over, verify the frame dimensions with a tape measure.
  - b. If compliant, initial the appropriate line on the spreadsheet.
- 4. Instruct the team to return to their pit and attach their bumpers.
  - a. If an inspector is available, give them the sheet. Otherwise, add the team to the queue and inform them of their position in the queue.
  - b. Inform the team of any expected delays in getting an inspector to their pit (for example, inspectors are at lunch).





| Timeline of Tasks  |  |
|--|--|
| Task   | Additional Information   |
| Set-Up Inspection Station  | You may be asked by the LRI to help setup the station and make sure you have everything prior to teams arriving.   |
| On-Site Training   | <ul> <li>The LRI will lead on-site training for all inspectors. This will likely take ~30 minutes to cover the entire inspection sheet.</li> </ul>   |
| Load In  | Keep a list of teams that have not loaded in yet   |
| Inspection desk  | Manage the desk and inspection queue throughout the event.   |
|  | Mid-afternoon on day 1, the queue may be empty. Send inspectors to check in with teams to find out when they think they will be ready and have them encourage teams to come in and start inspection.   |
| Know when lunch/dinner is served   | The LRI and Inspection Manager will coordinate schedules to ensure there is always someone running the inspection station.   |
| When match schedules are ready, identify the first match for each team that has not passed inspection. | <ul> <li>For teams in the first 3 matches, send an inspector to their<br/>pits to inform them that they are in the first 3 matches and<br/>will need to be in queue or on the field during opening<br/>ceremonies. Their inspections should be finished prior to<br/>the end of the day, or they may miss their first qualifying<br/>match.</li> </ul> |
| Re-inspections   | Throughout the event, teams will come up asking for reinspection. Pull their sheet and give it to an inspector to perform the inspection in the team's pit.  |
|  | If a change is going to affect the robot weight, record a new weight   |
| Playoff Reinspection   | Playoff reinspection should occur after the team's last match.   |
|  | After alliance selection, obtain the list of teams that are competing, and the backup teams. Compare this list to the teams that have passed re-inspection and track down any teams that are competing and still need to be re-inspected.  |
| End of Event   | Help pack up the inspection station. The scale should be left available until playoffs are over, as well as the inspection sheets. Everything else can be packed away.   |



