

## Overview

There are 5 positions for the drive team in the 2017 game – driver, operator, coach, pilot, and human player. This document discusses things to keep in mind for all 5 positions and general items for everyone to remember.

## Game Flow

1. All 5 members must be in the queue on time when the team is up. In general, the match times given in the morning print out will change thorough out the day. There will be an announcement over the loudspeaker what match # should be in queue at a given time. Pay attention to our match numbers and queue when we need to.
2. After queue is complete and it's time for the robot to be placed on the field, there is an important step for everyone to play.
  - a. Driver & Coach – pick the robot off the cart and place onto the field. Ensure the robot starts with the balls and/or gear if desired. Line up the robot the way you want it. Walk back to the driver station after this is complete.
  - b. Operator – Carry the driver station over to our designated position (1 thru 3), turn the PC on, connect the Ethernet cable to the PC, and plug in the charger.
  - c. Pilot – The pilot should have the rope when in queue. The pilot is responsible for setting the rope up and then climbing into the airship.
  - d. Human Player – the human player should drive the robot cart, placing it in the designated area after the robot is lifted out of it. Then, go to the designated human player station.
3. Once the match is over, the following should happen:
  - a. Driver & Coach – Once the purple lights turn to green, enter the field and get ready to lift and robot out. Remove any balls or gears on the robot. If the robot climbed, get the pilot to help get the rope out, and the lift the robot out of the field over to where the robot cart is.
  - b. Operator – disconnect everything on the PC and carry the driver station back to the robot cart
  - c. Pilot – if necessary, help driver and coach get the robot down from climbing.
  - d. Human player – get the robot cart and move it to the designated exit
4. Once everything is complete, wheel the robot cart back to the pit

Note – The driver, coach, and operator roles are interchangeable for purposes of set up and clean up. For example, the coach can be responsible for the driver station and then driver and operator are responsible for moving the robot. Make sure it is 100% clear to everyone in queue who is doing what.

## Tips and Rules to Remember

Note – everyone needs to read the game manual front to back. Listed in this section is a highlight of the key things, but is not inclusive and knowledge of the entire game is key

### Everyone

- Have safety glasses and closed toe shoes on always
- No use of cell phones when our team is on the field. Don't even bring it out to check the time.
- Wear gloves when lifting the robot – it is very heavy and your hands will thank you.
- If the robot successfully climbed, it is very useful to have a flat head screwdriver handy to release the ratchet and take it down
- At the end of each match, the lights on the field will turn purple while the field reset crew cleans it up. After they clean it up, the lights will turn green. Do not enter the field until you see the lights turn green.

### Driver

- Understand the penalties for pinning and contacting the other robots when near their gear retrieval station.
- Memorize what the buttons on the controller do

### Operator

- Memorize what the buttons on the controller do
- It's very important to stay in sync with the driver as the operator controls the shooting and gear retrieval mechanisms.

### Coach

- The coach must stay behind the white line at all times during the match. Under no circumstances can the coach control the robot or do anything on the PC.
- Keep your hands at your side or behind your back – the driver and operator won't be looking at you – they'll be looking at the field. Stand behind them.

### Pilot

- Memorize the rules around how to get in and out of the airship, and about extending your hands out of it (hint – you can't).
- Know how the rope is properly mounted. If you don't, ask one of the field reset people to help you.
- When the 30 seconds left buzzer sounds, let down the rope. There will be 2 pilots and 3 ropes... communicate with the other pilot on who is going to let down the rope of the team whose pilot isn't represented.

### Human Player

- You'll probably have to place gears down into our robot and other teams. Try to understand how the mechanisms work, and communicate back to the driver if the robot is mispositioned