

Contest One: *Capture the Flag*

ROBOTIC AUTONOMY
Summer 2002

You now can control your TrikeBot as if it were a very, very expensive remote-control car. It is time to demonstrate this joystick operation and some serious teamwork. Show off your TrikeBot and play *Capture the Flag*. Challenge another team for one-on-one competition. The playing field will support two games happening simultaneously. Every team will play at least twice.

The Game

We might call it *Capture the Flag*, but this version is meant for TrikeBots, not kids. Please pay attention to the important twists and rule changes we've made. The object of the game is to go inside your opponent's base, retrieve your flag from its safe zone, and return it back to your home base. Since you do not have arms on your TrikeBot yet, we will supply the flags and a means to pick them up. (Think Velcro!)

The rules:

1. Your robot shall begin at a designated position inside your base.
2. Before each game begins, you'll need to choose two seated positions for your team's two controllers on the first floor of Building 17. Each controller will have a laptop and will be able to connect to and drive your TrikeBot.
3. The third team member will move throughout the building to strategize, coordinate, and communicate to and between the two controllers. (Only one controller is able to operate the TrikeBot at a time.) But the field scout can neither touch anything, nor can they make a sound. They can only use hand signals. If they can see each other, the two controllers can also only give each other hand signals.
4. Any robot that hits a wall or obstacle at high speed is disqualified.
5. Any robot that hits another robot is disqualified.
6. You can not enter your opposing team's safe zone that contains their flag, even though it's inside your base. Doing so will disqualify you.
7. The team's TrikeBot that first carries its flag back to its home base wins. There is a 7 minute time limit.
 - Failing #1, the team carrying its flag closest to its base wins.
 - Failing #2, the team closest to its flag still remaining in its safe zone wins.

You will be doing a little bit of TrikeBot control and a lot of team strategy. *Good luck!*

