## **Submitted on 04-08-08**

The starting position is specified as "directly in front of the middle box". Does the robot have to be placed right in front of the box or can it be a few inches in front?

A few inches is OK. Should be well short of the cross-line spot, of course, and well short of the center-line (joint) of the track.

Thank you. That means the robot CAN start on the black line and middle box intersection. And is it okay in the final round, for our color sensor, which projects from the back of the robot, to be over the middle bin when it starts?

The rules say "in front of". The "back" end of the robot should not project over the middle [2] box, but it may project onto the (black line) border of the box. That should include any sensors or grippers, at least at the "start" command. Likewise, it should not extend as far as the "diamond" in the middle of the track.

The idea is that the robot is expected to proceed away from the [2] box, and toward the lettered boxes, at the start of the run. However, it is not precluded from taking a "peek" at the color(s) of the storage bin(s) at that time. For instance, it could start by extending a color sensor backwards, as long as it did not damage or move the box in the process. It could be higher than ~6.5", or it could protrude into the box, since the box is the same color everywhere.

In regards to the remote start, is is alright to use bluetooth to start the robot? Ex: sending the microcontroller on the robot the string "start" to begin movement.

Sure.

When testing our robots on the track the night before the competition will delivery bins and casks be provided? If not, is there any time before competition that we have access to them so we can calibrate to the same ones we would be using during competition?

There will be a set for each of the 2 practice trax.

## Submitted on 03-19-08

I have a question concerning the robotics competition. Does the robot need to end in the starting position, or does the time end when the last cask is placed?

The timing will stop when the last cask is placed (and the robot lets go).

I was hoping you could tell me the deadline for teams to register for the competition.

The last day to register (or withdraw) is 3/20, the same as the last day to book a hotel room thru the IEEE registration process.

The sign company that is working with us to create a practice track for our robot cannot read .dxf files. If I can find out what kind of files they do uses, would it be possible to get the .dxf file converted to that format?

We'll try. (So far, we have been able to convert to other formats as needed.)

Do our characters have to be 0.75"? We can only find the largest characters to be about 0.25 inches.

Somebody will be using 0.8", so i know it is possible. i have 5 clocks in my home that are 0.75' or more!

The Contest Rules state that the weights, should we choose to display, must be shown in "even" grams. I understand that this word "even," as used here, probably means "integer"; however, this word generally is used to mean divisible by two. So, I want to be sure about the usage here. Please clarify.

Integer.

Are you saying that the casks will be placed as close to center (of the lettered squares) as humanly possible or will they randomly be placed anywhere inside the square?

We'll try hard to "stick em in the middle", but don't have any magic system to achieve dead center.

Second, in the "starting position" section of the rules it states that the robot will "face" towards the center cask. What are you defining as "face"?

If the robot has a gripper/grasper device, it would face toward the other end of the track.

Is it legal for a robot to start and end within the 16" x 16" box, but unfold during the competition and refold before the time is stopped?

Sure, as long as the appendages don't detach ("multiple-robot" rule). Note: Be sure to warn the timekeeper during each competition run if you plan to do this, so that the clock is not stopped prematurely. We have had no penalty for "dimensions OK b4, but not-OK after". Rather than a disqualification, I will hereby institute a penalty of +50 points. (see Revision 2 of Rules)

In the competition rules, its states that the "plan" robot size cannot exceed 16" x 16". What exactly does this mean?

"Plan" is an architect/engineer term for the dimensions looking straight down -- the "non-height" dimensions.

We are in the process of creating the playing surface, and it looks like the 9" dimension isn't to scale. Should it be 19" or something?

You are correct. the error is on page 6 of the "Rules". the 9" is correct, and the .pdf & .dxf files are correct. Note that the photo of the track shows that the line is  $\sim$ 9" from the joint in the track. I'll fix the "Rules" page. thanks. (see Revision 3 of Rules)