

## **Clarification Document**

## Mobile Robotics

Section 1.A: Q: What are the minimum requirements for a tele-op robot? How much autonomous functionality can a tele-OP entry have? A: Tele-OP Robots can have autonomous features. However, it does need to be under the active control of a driver.

Section 3.7.B.b.v: The taps should all be at the following heights (from the base of the tree), 11", 17", and 23":



Section 3.7B.b.vi: The 2x2 tree insert depicted in Appendix A caused some issues with the golf balls jamming. This was not the intent, so the following modification has been made to the 2x2 insert:



Section 3.7.B.d: Q: Can teams use taps (dowels) to do things? A: Yes. They are pieces available to use. But cannot be destroyed.

Section 3.7.C.e: Q: Snow Pile Orientation Question: Can snow be used upside down or sideways to qualify for delivery points? A: Delivery points: orientation doesn't matter. Taffy points: points must be the original orientation. (Note: 5.1.B.d top defined for taffy points)

Section 3.7.D: Q: Can a team drive tele-Op robots into the autonomous zone? A: Yes.

Section 3.7.D: Q: Can an autonomous bot extend beyond the vertical plane formed by the edges of the boiler? A: No. As per 5.2.A.b 'Within the "Sugar Shack Boiler" is defined as within the 24-inch square defining the "Inside of the Sugar Shack Boiler".)

Section 3.8.d: Q: What happens to taps that fall into the opponent's court? A: Up to the Judge to decide if they should be removed or not. See also 10.Z.a

Section 5.2: Q: Do red balls (Maple Taffy) need to go in the boiler first? A: No. Only the end state of the game matters for scoring.

Section 5.2.B.b: Q: Balls must be fully supported by the top plane of the snow pile (6.3. What happens if they are between the snow pile and the wall? Or between 2 snow piles? A: Bottom of the ball has to above the top of the snow pile.

Section 8.M: Q: Are teams allowed to gather the golf balls from the top of the tree? As in, are they permitted to somehow reach or suck the balls out of the top of the tree? (Without knocking the tree over, as that would be considered court damage) A: Yes. As long as it is done without damaging the tree or the court.

Section 10: Q: Can teams use mostly assembled robots like the RoboMaster EP? A: Yes, for now. New wording will be developed for future challenges.