

REBUILT

Designed by SuperNova 4472, lead designer Julia Bredbenner

WHAT'S THE GOAL?

The goal of the game is to score points on the field by launching as much yellow FUEL into the HUB as possible, then climbing up the TOWER in either the autonomous or driver control sections of the match.

POINTS

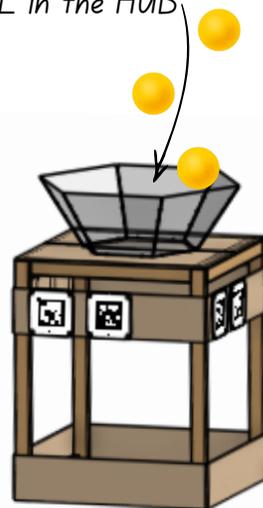
Level Three		+30 pts
Level Two		+20 pts
Level One (Lvl. One <u>auto</u>)		+10 pts (+15 pts)

For a successful climb on the TOWER

+1 for each FUEL in the HUB

GAME ELEMENTS

HUB— 6 foot box with a funnel on top; where fuel is scored when active (lights on). A net between the funnel and the neutral zone (center of field) prevents scoring directly from the neutral zone. Scored fuel is periodically released back to the neutral zone.



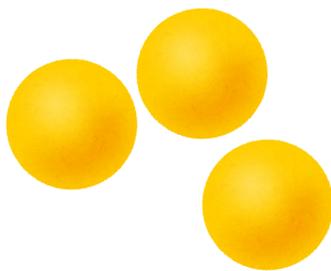
TOWER— Ladder-like structure on each alliance's back wall; can be climbed on during auton or endgame to score points. Points only count if the robot is suspended when time runs out (the buzzer).



OUTPOST— Frame/ramp in the corner of each alliance zone; where the human player can give fuel to the robots by either rolling it down, placing it on a tray, or dumping it onto the field.



FUEL— 6 inch yellow balls scored in the HUB by the robots or, occasionally, the human player. Can start the game in the OUTPOST, preloaded in a robot, or in the neutral zone. Total of 504 individual fuel on the field in these zones.



CLARIFIERS!

—The "QR codes" on many game elements are actually called April Tags, and they are there to help the robots "know" exactly where they are on the field by using cameras. This means the robots can be programmed to move to the correct position for automated procedures such as launching fuel.



DEFINITIONS

Defense= A robot going to the opposite alliance's side of the field specifically to get in the way of the robots on the opposite alliance and keep them from scoring points; can also happen in the neutral zone

Autonomous (auton)= first 20 seconds of match; preprogrammed robot actions

Driver Control= remaining 2:20 of match; robot is directly controlled by drivers (see SECTIONS below)

Endgame= last 30 seconds of match; any robots on the TOWER when time runs out earn points

Neutral Zone= Center of the field, where most of the FUEL is located

Human Player= A member of one team from each alliance who mans the OUTPOST and may attempt to throw FUEL directly into the HUB

DRIVER CONTROL SECTIONS

10 sec – Transition – Both HUBS active

25 sec – Shift One – HUB active for only the alliance that scored less FUEL during auto

25 sec – Shift Two – active and inactive HUBS switch

25 sec – Shift Three – active and inactive HUBS switch

25 sec – Shift Four – active and inactive HUBS switch

30 sec – Endgame – see above; both HUBS active

GENERAL RULES/DEFINITIONS

Alliance= a set of 3 randomly preassigned teams playing together; either red or blue

Missing Teams= If a team can't compete in a match for whatever reason (mechanical issues, doesn't show up), their alliance just has to continue without that team/robot

Forbidden Areas= places on the field where the opposing alliance may not enter:
the only one this year is the TOWER area **during** endgame

Penalties= when one alliance breaks the rules, the other alliance is awarded bonus points; this can happen when a robot enters a forbidden area, launches fuel out of the field, scores fuel from inside the neutral zone, directly catches fuel released from the HUB, reaches inside another robot's perimeter (with or without causing damage), or pins another robot for longer than 3 seconds.

RANKING POINTS (RPs)

Ranking points are how a team's overall ranking in a tournament's qualifying round is determined. Up to six can be earned by either alliance in each match. When an alliance earns an RP, all teams on that alliance earn that number of RPs (not divided or shared).

of RPs --- Requirements for RP(s) --- How Many Alliances Can Win This RP

One RP --- 50+ points scored on the TOWER between auto and endgame --- Both

One RP --- 100+ fuel scored in the HUB (referred to as "Energized") --- Both

One RP --- 360+ fuel scored in the HUB (referred to as "Supercharged") --- Both

Three RPs --- Winning the match --- One*

*In the case of a tie, both alliances receive one "Win" Ranking Point

