

Newton LigerBots Announce Winners of 3D Printed Parts Contest

Newton, Mass. May 26, 2016 -- [The LigerBots](#), Newton's FIRST Robotics Competition (FRC) team, announced today that [FRC Team 1965, the FireBirds of Boston](#), have won the first-ever Ligerbots' run 3D Printed Parts contest. The contest was open to all FRC teams that used 3D printed parts in the 2015 or 2016 competition. This year's game, called [FIRST Stronghold](#), required robots to attempt to capture their opponents' tower by throwing dodgeballs inside goals in the tower. Last year's game, [Recycle Rush](#), required teams to stack boxes and recycling cans.

Teams from as far away as Australia submitted parts ranging from camera mounts, to plastic tank treads. A panel of LigerBots judged the entries against three key criteria: creativity in how teams solved a problem, elegance of the solution, and overall complexity.

[FRC Team #1965 FireBirds from Boston, Massachusetts](#) came in first place for creating a full tread drive using a 3D printer. The solution included the treads, sprockets and axles, all designed to help the robot traverse various obstacles. They also created a 3D-printed arm designed to hold their heavy robot three feet off the round.

In second place was [FRC Team #4613 Barker Redbacks from Sydney, Australia](#), which created a low-cost and lightweight gearbox using the standard motors given to every FRC team. The Barker Redbacks even helped teams worldwide by offering to send out these gearboxes. What impressed the judges was that the team not only solved a key problem with a 3D printer, but used the solution to help any FRC team they could.

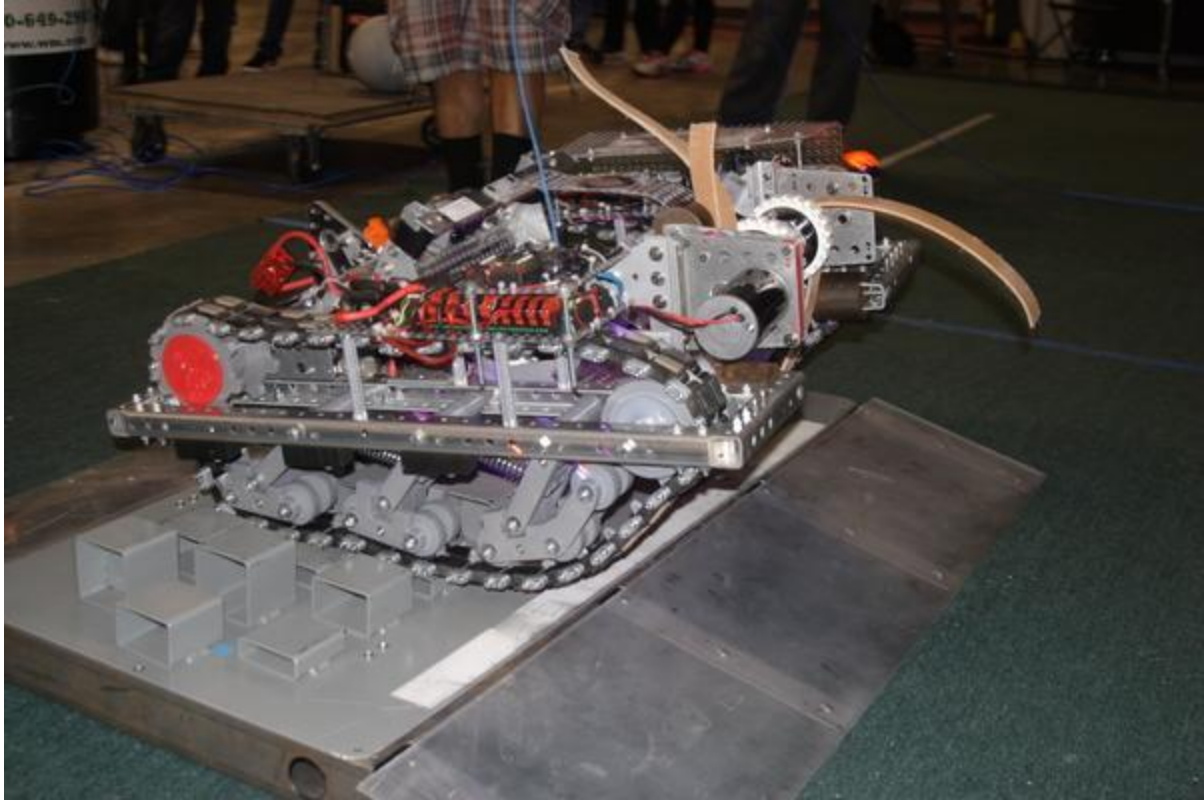
Third place went to [FRC Team #868 - TechHOUNDS from Carmel, Indiana](#). This team submitted a pair of Mecanum wheels designed to intake the eight-inch dodgeballs used in as part of this year's game. This team had an interesting dilemma: they needed two-inch diameter wheels but were unable to find a part on the web. Instead, they created it themselves. The result was a nice, smooth piece that played a vital part in this year's game: picking up balls.

The LigerBots plan to run more contests like this in the future.

About the LigerBots

LigerBots is a student-run FIRST Robotics Competition (FRC) team composed of members from both Newton North and Newton South High Schools. Each year, students participating in LigerBots design, build, and fundraise for a complex robot that plays a new game. The LigerBots are also actively involved in community outreach and service with a particular focus on STEAM education. The LigerBots are sponsored by PTC, Raytheon, Google, Dunkin Donuts, BAE Systems, Village bank, Whole Foods, Bose, At Once, Inc., McVittie Tax Advisors, The Newton Schools Foundation and Newton Public Schools, and can be found online at <http://ligerbots.org/>

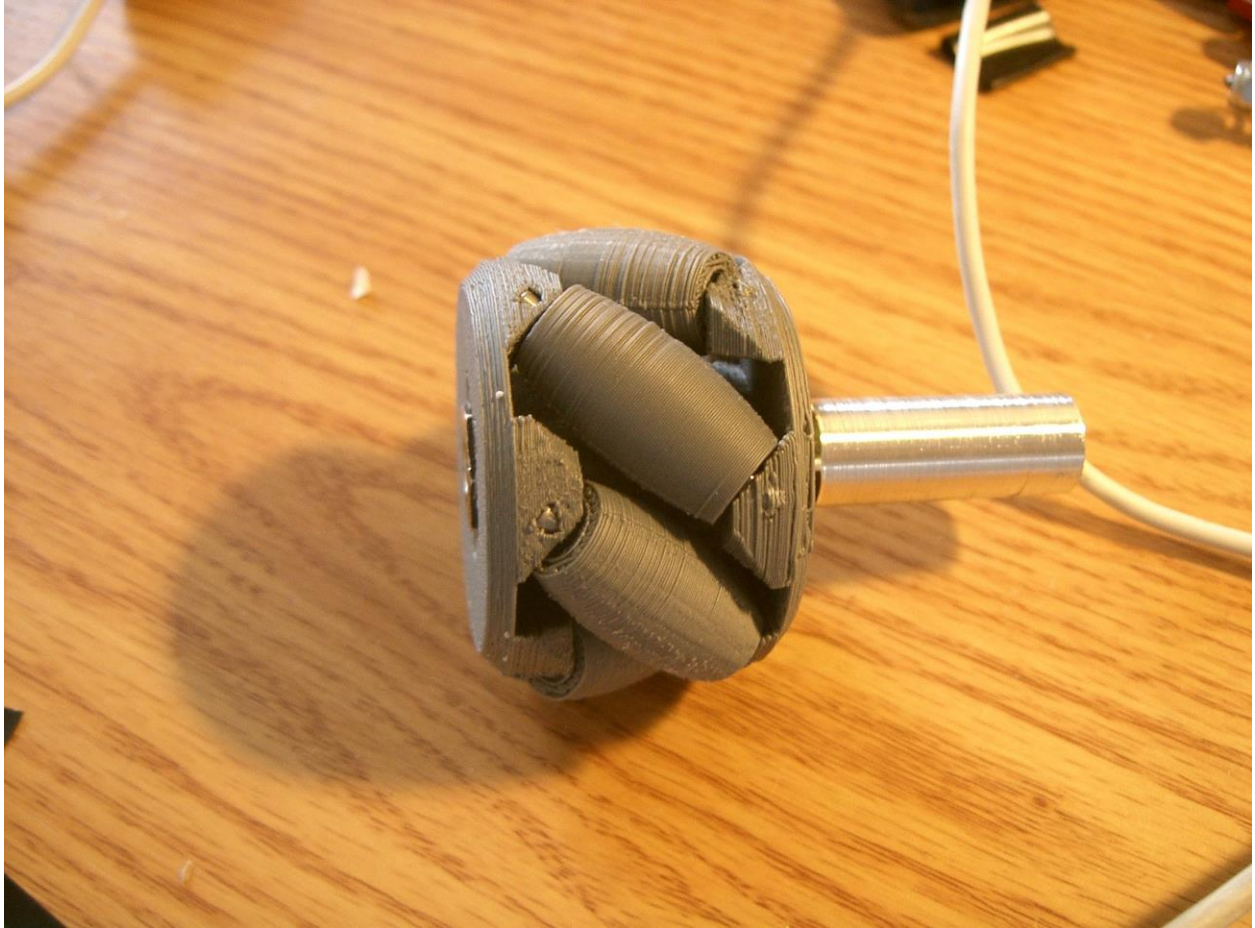
Photos:



A picture of Team 1965's robot with a view of their tread drive chain.



A render of team 4613's gearbox.



Team 868's 3D Printed Mecanum Wheel.