

# Robotics STEM Barn opens at fairgrounds

PUBLISHED AUG 8, 2016 AT 11:09 AM (UPDATED AUG 10, 2016)



*PHOTO by Newton Robotics Team vNewton Robotics Team, Picatinny STEM, Mira Plastics, and the Mechanical Mustangs Robotics Team at the ribbon-cutting for the new STEM Barn.*

BY LIAM OAKES

Newton — Saturday, August 6 marked the grand opening of the Newton Robotics Team's new permanent location at the Sussex County Fairgrounds.

The new shed, known as the "S.T.E.M. Barn," was constructed by Brodhecker Farms, which will keep the Newton High School robotics team "high and dry," according to Jim Hofmann, the team coach. Thorlabs and Mira Plastics both sponsor the location.

Those in attendance at the ribbon-cutting ceremony were Tina and Anthony Miragliotta of Mira Plastics, Colonel Ed Petersen and Maria Gonzalez of Picatinny STEM and the Mechanical Mustangs robotics team of Clifton High School.

The Newton High School robotics team, known as “Aperture,” has been exhibiting their program and their sanctioning body, FIRST (For Inspiration and Recognition of Science and Technology), at the New Jersey State Fair/Sussex County Farm & Horse Show since its initiation in 2009. The team demonstrates a series of robots that have been constructed throughout its career.

The team is demonstrating this year’s robot, called “Frank the Tank.” The robot is specifically designed to overcome the challenging obstacles that were included in the 2016 FIRST Robotics Competition, such as driving over “rough terrain,” a cheval de frise bridge, a one-way gate, and a castle with goals to shoot foam balls or “boulders” into them. The concept of the robot is similar to one the team’s robots constructed in 2012.

Throughout the day, students control the robot while it launches balls into the air for children and families to catch while strolling through the fair. The students “absolutely love seeing the amount of amazement in the children’s eyes when they play with the robot, hoping that they can inspire them to pursue a career in STEM.”

The team also uses these ten days of the fair to promote STEM (Science, Technology, Engineering, and Mathematics).

“We are here because we are spreading the message of FIRST and STEM to our community. We help other teams in need, we encourage kids to join a FIRST team, we encourage and help other people start their own FIRST team, and we make great connections with other people who could potentially become our sponsors or mentors for our team,” stated the team as a whole.

“But really, we are here because we want to inspire others to pursue a career and/or take an interest in the STEM field, which really is an important part of our society.”

On Monday, the team and their robots were visited by New Jersey Lt. Gov. Kim Guadagno, U.S. Rep. Scott Garrett (R-NJ) and State Sen. Steven Oroho (R-Sussex).

The team also hosts Kids Come FIRST activities at the shed, which includes crafting robot arts and playing games for prizes, as well as Ultimaker 3-D Printing sessions.

The Newton Robotics Team will be running the S.T.E.M. Barn for all ten days of the fair, 10 a.m. to 10 p.m.