## HARD-HITTING TALENT: ALL-OBSERVER FOOTBALL TEAM, B3



SUNDAY, DECEMBER 28, 2014 • hometownlife.com



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PHOTOS BY JOANNE MALISZEWSKI

From left, Molane Hu, Samantha Xu and Blair Cha, all Mercy High School students, prepare parts for milling or drilling.

## MERCY HIGH JUMPS INTO FIRST ROBOTICS CONTEST

Rosie the Riveter inspires new team

## **By Joanne Maliszewski** Staff Writer

Emma Mallon loves math and has an eye on a career in biomedical engineering, while Samantha Xu is seriously considering computer science.

"It's about precision and accuracy," Mallon said.

The two Mercy High School students along with a host of others from Mercy High School and other nearby schools would make Rosie the Riveter proud. Undoubtedly so proud, that Mercy's first foray into the world of robotics competition will bear the cultural icon as the team logo.

Like many high schools around the country, Mercy High School is joining the FIRST Robotics Competition that gets under way in January. Colleen Rozman, Mercy associate principal of operations, who is serving as liaison to the team, could not be reached for comment.

In preparation for the competition, and under the guidance of mentors, including Farmington Hills resident and business owner Dan Riehl, The Riveters have been meeting, planning and building a prototype to get the hang of the process.

"Because this is Mercy's first year, other kids - sons and daughters of mentors - have come out to

help," said Riehl, owner of Articulus in Farmington Hills.

FIRST was founded in 1989 to inspire young people's interest and participation in science and technology. The annual FIRST competition draws hundreds, if not thousands, of teams from around the country, who literally design build and program robots that

40/5 THE RIVETERS 1481

THE RIVETERS The Mercy High School

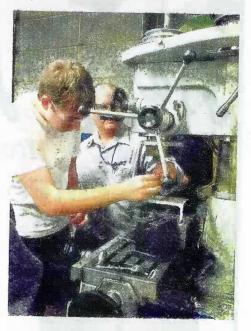
robotics team logo.

participate in competitions. According to FIRST, the competition is sports for the mind with short games that are played by the teams' robots. The Riveters are waiting to receive the challenge - expected Jan. 3 — that will tell them what the robot they build must do in competition. The team has six weeks to design and build the robot, which will be controlled by team members during competition.

The ultimate goal of the program, Riehl said, is to interest students in STEM education - science, tech-

nology, engineering, math. And just about every student who has been meeting at Riehl's company to work on the prototype after school shares those interests.

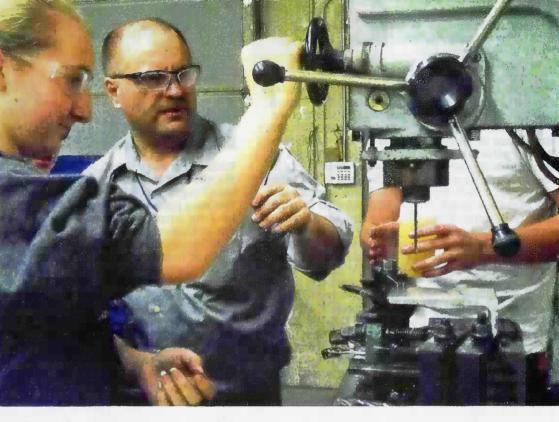
But there's more to successfully participating in the FIRST Robotics



Isaac Reed of the Frankel Jewish Academy works with mentor David Gaines, who provided some of the equipment used by students to build the prototype robot.







Mary Marquette of Mercy High School rolls up her sleeves to work the equipment.

PHOTOS BY JOANNE MALISZEWSKI

amantha Fincannon and Aaron Felsenfield worked on the electronics ortion of the prototype robot for the Mercy High School robotics team, ne Riveters.



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And just through the door to the back of Riehl's office, organized groups of students — electrical engineer David Kott of Sterling Heights.

In the adjoining room, the whir of machines continued as students practice their skills in using a mill and drill press, while Blair Cha, Samantha Xu and Molane Hu measure parts ready to be put on the machines to make way for the robot's wheels.

"You don't want to miss out



competition. Just ask Jillian Tuba, a Farmington High School student. Tuba is working on the business end of the project, including developing a mission statement. With the help of mentor Gail Alpert, the team and its competitive project includes marketing, a website and graphics.

"This is the application of all the classes," Alpert said.

In addition to Riehl, who is also a team sponsor, other mentors include: Patrick Ahern; Laurel Felsenfeld; Gordon Fincannon; Tammi Fincannon; David Gaines; Bill Hopfe; Dave Kott; Rob Reed; John Tuba. In addition to Riehl and Articulus, John Fallows of

The Riveters — have spent the past weeks designing, building and programming a prototype robot that can throw a football. "They are learning the process and the equipment," Riehl said. Other students - and mentors — serve as programmers and electrical engineers for the project. "Everyone has a

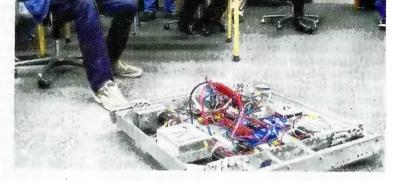
the project. "Everyone has a job," said Samantha Fincannon, a West Bloomfield High School students. "We made a base and worked on the electrical part."

Joining Fincannon is Aaron Felsenfeld, a North Farmington senior, who plans to major in mechanical/aerospace engineering. Helping and guiding the students is mentor and on any opportunities," Cha said.

Hu, who considers herself an art student, agrees, adding the experience opens up all sorts of possibilities. "It gives us tangible experience," Mallon said.

Students are learning skills on specific machinery required to build their robot. Isaac Reed of Frankel Jewish Academy, as well as Mary Marquette of Mercy, are among students learning the ins and outs of accuracy and making the machines do what is needed.

"It's about how you actually make the parts," said David Gaines, who provided the



Aaron Felsenfeld of North Farmington High School operates the base of the robot prototype for the Mercy High School team, The Riveters.

equipment. "They learn the process and the skills to build their own robot."

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