



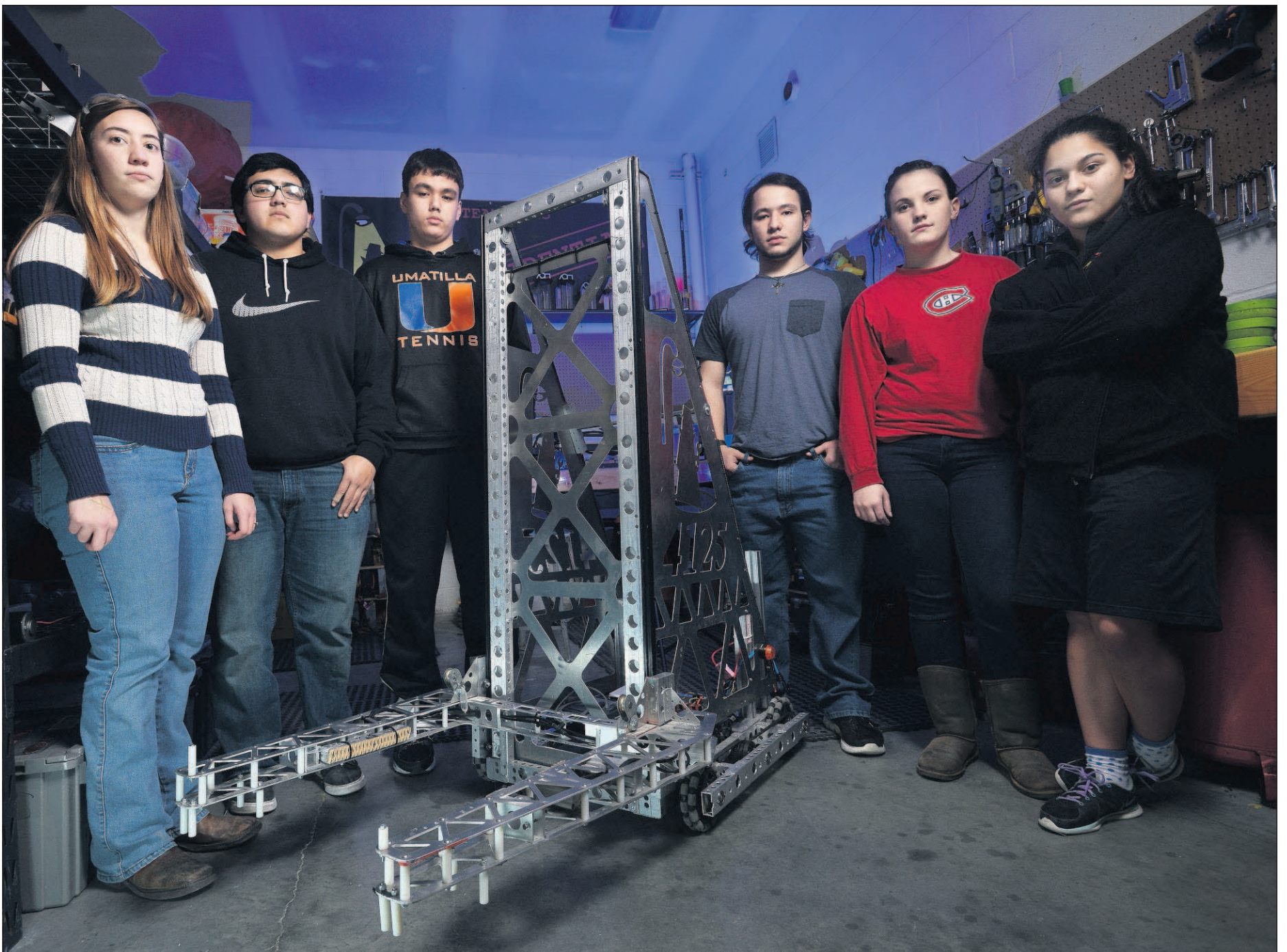
Koala Cowboys
bring 'surf country'
to Pendleton/3C



Umpqua Valley
a top wine
destination/4C



I-84 bighorns
captured and
moved/10C



Staff photo by E.J. Harris

Umatilla Robotics team members, from left, senior Megan Lorence, junior Alvin Jaime, sophomore Tristan Cole, junior Elijah Pine, junior Rebekah Potts and sophomore Maria Moreno are just six of 42 members of the Umatilla Robotics team. The team is broken into six sub-teams that all have separate roles to play in building their robot.

A WELL-OILED MACHINE

Umatilla team building new robot, featured in documentary

By JADE MCDOWELL
East Oregonian

It's 5 p.m. on a Wednesday and while most of their parents are leaving the office, members of Umatilla High School's robotics team are just getting to work.

Technically, it's an extracurricular activity and not a job, but Confidential 4125 often resembles a corporation more than a school group.

The team's 43 students and nine middle school interns are divided into six sub-teams: building, programming, electrical, marketing, logistics and scouting. Each group member reports to their team leader, who reports to the junior project manager and senior project manager.

Students don't just build the robot. They also book hotel rooms, order custom parts, send newsletters to sponsors and anything else that might need done to keep the team moving toward another appearance at the national competition.

"If you need something you're responsible to figure it out yourself," junior project manager Cameron Sipe said.

Sipe, a junior, started out with the team as an eighth grade intern, back when there were only nine team members. She almost didn't join because robotics was for "nerds" and she was an athlete, but said she has found the stereotype isn't true at all.

Cameron's father Kyle Sipe is the teacher who supervises the program. He said the team has not only grown in numbers over the past few years, but also in skill. After studying hard in the offseason, the programming team just made the jump from using C++ to Java as their programming language of choice.

"They're the most prepared group," he said.

As programmers, builders and electricians work on the robot, the marketing team gathers sponsors and the logistics team handles travel arrangements and scheduling. At matches the



Staff photo by E.J. Harris

Members of the marketing team, from left, freshman Anthony Ibarra, freshman Justin Johannbroer and freshman Alexander Gutierrez discuss making a Facebook post for the robotics team on Wednesday at Umatilla High School.



Staff photo by E.J. Harris

Junior Capriana Meinke drills a hole into a motor mount for a prototype ball grabber/shooter while working with other members of the Umatilla High School robotics team on Wednesday in Umatilla.

scouting team will scope out the competition and work to recruit the best teams into alliances with Confidential 4125.

Kyle Sipe said the team already has a "tremendous" amount of community support, but they are expecting even more attention after Blue Chalk Media, a film-making company out of New York, finishes filming

and editing a documentary about the team's 2016 season. Past projects by the company have been picked up by the *New York Times*, BBC World News, the Weather Channel and Discovery Education.

Giving interviews for a documentary is a new task on what is already a very full plate for team members.

"building capacity in others." Being involved in robotics has also prepared her for being a teacher someday.

"I'm going into elementary education, so it has given me an opportunity to teach for the after school program. I design all the curriculum and lesson planning myself," she said.

This year's FIRST Robotics challenge has a medieval theme. Teams will work in alliances of three during competitions to storm the other alliance's "castle." To do so, robots must defeat the castle's defenses by dismantling a series of obstacles and throwing eight "boulders" (represented by dodge balls) into the other alliance's castle before climbing the wall to get inside.

On Wednesday Ryan Wheeler, a sophomore, was helping the rest of the build team design a prototype for launching boulders. He said he joined the team because it sounded like fun and he likes to build things. As a junior team member he still has a lot to learn.

"The hardest challenge is probably learning all of the components of the robot," he said. "It's all stuff you don't see in the real world. You know it's there but you don't see it."

Capriana Meinke, a junior on the electrical team, joined because her father is an electrician and she has always been interested in his work. She said when she recently took the Armed Services Vocational Aptitude Battery test she realized how much wiring robots had taught her.

"The last sections are engineering, mechanical and electrical," she said. "So many of the questions were pictures of tools that we use and things that I knew from robotics."

Details of this year's challenge were released on Jan. 9. The team's first competition is Feb. 23. There are a lot of late nights and long weekends ahead.

"The hardest challenge is probably learning all of the components of the robot."

— Ryan Wheeler, sophomore

Like many of the students, senior project manager Megan Lorence spends almost three hours after school every day teaching elementary school students in the school district's STEM program about robotics. During competition season she then heads to the robotics shop at the high school for another three hours of work with Confidential 4125. Saturdays mean eight more hours in the shop. And in the off-season she helps with fundraising and writes lesson plans for her STEM group.

She said the experience of being senior project manager has taught her about teamwork and

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