

Mecha Mules News

Quarterly Issue 3-April 2023

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FTC Trip to State

By Seojin Hwang

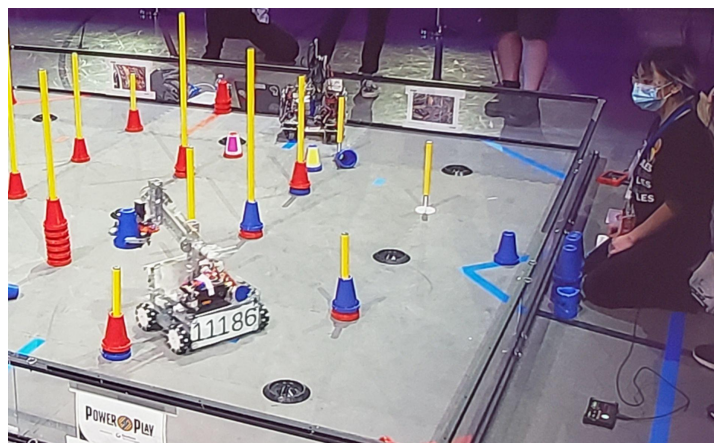




Seattle Pacific University Campus Tour The Museum of Flight January 28,2023

A day before competition, our team visited Seattle Pacific University to view a post high school campus. We toured the school with the ambassador and she explained every building, dormitory, and the school programs. That tour made me think about my future more clearly and definitely. After the tour, we visited the Museum of Flight. There were models displayed from the oldest to the latest and a building for the history of Boeing flights. It was an impressive museum for me to learn about flights.

Mecha Mules' robot #11186 about to place a cone on a junction. The students in the black t-shirts, the Mules, look upon their robot that was pushed: causing it to tip over.





The Mecha Mules collect a 1st place trophy for the Connect Award. This is all thanks to the community connection the team has with you all. This is your trophy as well!



Competition day, I learned many things from 32 unique and talented teams. I could see more teams and complex robots than last competition, and thought about which advantages could we use to our team and robots. As a result of everyone's efforts, we got 13th place which is higher than before. Though we couldn't be one of the allies and play in the semi-final, we were proud to get the 1st place trophy for the Connect Award.



January-March



First Place-Wahkiakum, Second Place-Naselle, Third Place-Ilwaco

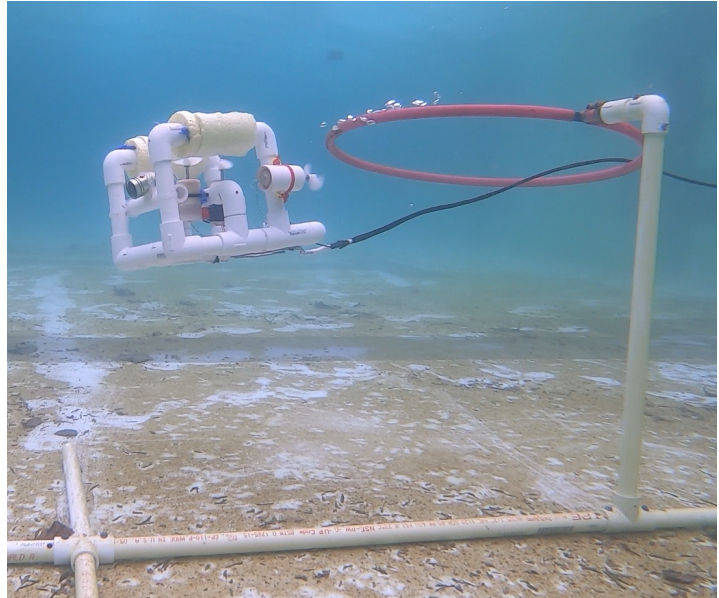
SkillsUSA Competition

By Reagen Hoogendoorn

Members of both the Mecha Mules and taking part of an engineering class at Wahkiakum High School are participating in a competition called SkillsUSA. There are two teams, one consists of Elijah Thompson, and the other team consists of Cor Hoogendoorn and Reagen Hoogendoorn. Both teams are on to state after both doing well in the regional competition. The regional competition was different from the state competition in that the goals are different. In the regional competition the way to score points was placing large foam blocks, moving cups, and balls. Outside of engineering, there was also a report and a video. In the state competition there is still a requirement of a report, but not a video. In place of the video there will be presentations to judges. The goal on the field of state is to either shoot discs into a basket or move discs to a designated zone. There's a lot of excitement over this competition with these three students going all in and learning as much as they are. Something different about the competition compared to other ones the Mecha Mules have done, is it requires VEX parts. We have not used VEX parts in the past and are currently learning their advantages and disadvantages. We are excited to learn more about the different parts and their uses and possibly use them for future competitions and/or projects.

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Coaches Corner



SeaPerch Qualifier

By Amanda Heston, Mecha Mules-Water Damage Coach

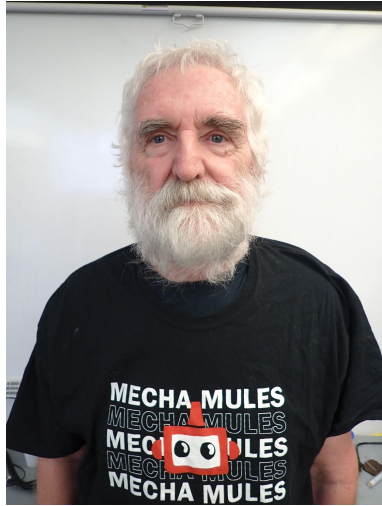
It was a cold and windy Washington day but eight teams from the surrounding area came to compete harder than the rain could fall in the Cathlamet Pool. Loyal supporters also braved the elements to cheer on their teams. Teams came from as far away as Renton for a chance to compete and run their skillfully made ROVs in the second annual Seaperch Cathlamet Qualifier. The middle schoolers from several schools were fearless among their older, more experienced high school peers. I was so impressed with their perseverance even when one team's robot split into three parts, with two having their own motor. They remained calm and tried their best. That's all we can ask of these kids. You could see the hard work that went into each and every robot. Our team, The Mecha Mules - Water Damage, showcased our robot (above) which was a combination of last year's winning robot with a few new bells and whistles. The team added a camera after experiencing difficulty with seeing the courses in the wind and rain. Our drivers, Nathan Garrett and Peter Vik, loved having the option to have a new view in which to complete the tasks in a timely manner. The obstacle course challenge was the same as last year. However, with a combination of improvements to the ROV and another season of experience for our driver, Peter we cut our time down from 47 seconds to 39 seconds. Nathan, the driver for the mission course, in which one accomplishes a series of tasks in the fastest time possible,

also showed amazing improvements over last year. The mission course is different every year so comparing times and points year to year isn't really an accurate assessment of improvement,



Team Water Damage: Left to Right-Assistant Coach Josh Miller, Arwynn Haney, Peter Vik, Nathan Garrett, Alan Smith, Jamey Heston, Micha Johnson, Annelise Vik and Coach Amanda Heston.

but he earned the max points possible in record time! Behind the scenes of the big day, we had incredible leadership from Arwynn Haney on the technical report and Annelise Vik for the team video. Each counts the same as our performance in the water to determine the champion. After all the teams competed, points were tallied and our neighbors in Naselle, the Bubbleheads, received second place and the hometown Mecha Mules Water Damage took home 1st! This qualifies us to compete again at the International level in Maryland in May. It's a steep task to improve over last year's second place, but I truly believe our team has what it takes to pull off a first place win! Last year's trip included touring Washington D.C. which was a great educational opportunity and created valuable bonding time for our team. I am so looking forward to traveling again with these great kids. We plan to visit a few more sites in Washington D.C.; one can spend weeks there and still not see all it has to offer. It's an exciting time to be a coach and an exciting time to represent Wahkiakum High School on an International level.



Fundraising

By Ron Wright, Skills USA and Robotic Tech Club Advisor

Hello Folks, to modify an old saying: it takes the entire community to create a robot: students, parents, coaches and mentors, school and community all come together to result in the success we have seen. Thank you current 2023 sponsors: Georgia Pacific, Cathlamet Building Materials, Wahkiakum Chamber of Commerce, Jimmy Johns of Longview, Black Rabbit Labels, The Video Store, Norse Hall, N7WAH Amateur Radio Club, The Pizza Mill, BackRoadz, Maria's Place, and Jabber Shack.

Students in our robotics technology club (picture of the robot tech room above) form into smaller group teams to prepare for several competitions. In early September 10 to 15 team members begin with FIRST Tech Challenge and end in late January at the State tournament if we qualify. Several SkillsUSA challenges for two-member teams begin in October and end in April at State if we qualify. SeaPerch begins in late January with three to eight person teams and ends in May at the International tournament, again, if we qualify. Some students enter only one of the competitions and might prepare for it only during its season or perhaps all year around. Others might work in all three. This is their choice and depends on commitments to their other interests. Unlike sports, there are no class divisions. Our teams compete with teams from all sizes of schools, with all levels of school financial support, equipment, and facilities.

We annually apply for and receive (for seven years in a row so far) a competitive robotics grant from OSPI which helps with some equipment and the \$1200 registration fee for FIRST Tech Challenge. The other competitions cost less to get started with, but expenses quickly add up

purchasing the required equipment, and when our student teams are as successful as we have been. Wahkiakum School District provides our robot room to work and practice in, most of our western Washington (Regional competitions) travel expenses, copying, computers and other costs that make any small business run. State, national, and international tournaments are added expenses that we need community help with. For example, this May we are going to DC again with seven students, two coaches, and one technical support person. We will need to raise about \$8,000 to cover the costs not covered by the district. Additionally there are three more adults going along to help out, who are each paying their own travel expenses to DC. We had three other adult mentors volunteer time and donate equipment (another \$500+) to prepare our teams. This April we are going to Tacoma for the State SkillsUSA, this costs \$640 for registration, has donated travel costs, but requires us to purchase all new electronics controller packages for our state-bound teams to be competitive (\$1,200 plus another \$600 donated). Our coaches are not paid, except some years for one person to cover some travel costs. This needs to change as we settle into an established competitive program. All of this adds up. In the fall we run our t-shirt fundraiser to usually earn about \$500, and in the spring we run our carwash fundraiser and we are initiating a new fundraiser this year: The Robot Expo (see the below for details). Our goal this spring is to raise \$12,000 to cover this spring's costs and prepare us for next fall.

In addition to our three competition teams, we have our Outreach team. This consists of coaches, mentors and team students. They oversee the Wahkiakum Wohbot Wohundup for elementary level students, team with Naselle HS students host the KM Cup each semester for MS students, sponsor our Bald Eagle Days booth, team with Cathlamet Town and the WHS Leadership group to host the Cathlamet SeaPerch Qualifier, and host a Norse Hall Tech event. They also coordinate our fundraisers and are available for presentations and demonstrations for other organizations. To become a sponsor, or to schedule a presentation, or to enquire about becoming a mentor, or if you have any questions, please contact us at the school district office or via our email at: info@mechamules.com.

WAHKIAKUM
MECHA MULES
ROBOTICS CLUB
 IS ON TO
Internationals!



Help send us to
**Washington DC
 & Maryland**
 for the **SeaPerch**
 International Underwater
 Robotics Competition,
 as well as **SkillsUSA** and
FIRST Tech Challenge competitions

CAR WASH Saturday, April 22 12-5pm
 Bank of the Pacific, 56 Main St, Cathlamet

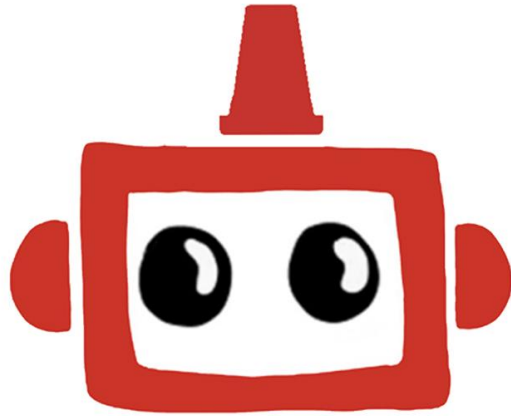
ROBOT EXPO Friday, April 28, 3:30-8pm
 Cathlamet Pool & HS Robotics Room
 Demos of our underwater & land robots, Race your own underwater ROV, Duct Tape-the-Driver, FUN, concessions, and games for prizes! \$15 entry fee: Exposition, Games, Hot Dog, Water, Hot Cocoa

Your Support means SO much!

We accept donations anytime and recognize our sponsors on our shirts, our banners, and promotions. Please contact us at info@mechamules.com for more info, or make checks out to:

"Wahkiakum ASB" memo: MechaMules

Wahkiakum School District
 500 South Third Street, PO Box 398, Cathlamet, WA 98612



Donations can be made to: "Wahkiakum ASB" Memo: Mecha Mules

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