



# Mecha Mules News

Quarterly October 10 2024

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A note on this quarter's edition: This issue has many fewer photos and authors. We are struggling to bring out good issues. See page 5 for how you can help.



## **This year's competitions and seasons: 2024-2025 School Year**

Radio Club began in September, meeting every other Friday from 11am to 1pm at the "Flybox" = the upstairs room of the green concession stand on the far side of the football stadium. Competitions are:

- September 21-22 - Salmon Run
- October 21-25 - Fall School Club Roundup
- January 25-26 - Winter Field Day
- February 10-14 - Winter School Club Roundup
- April 13 - ARRL Rookie Roundup SSB
- June 21 - ARRL Kids Day
- June 28-29 - ARRL Field Day
- Contact Coach Ron Wright for info: [rwright@wahksd.k12.wa.us](mailto:rwright@wahksd.k12.wa.us)

FIRST Tech Challenge (FTC) began in September, meeting every Wednesday after school and some additional days to get projects completed on time, at the WHS Robot Room. Competitions are:

- October 26 - SW WA Shockley League #1 at Skyview HS Vancouver
- November 23 - SW WA Shockley League #2 at Skyview HS Vancouver
- December 14 - SW WA Interleague at Olympia HS
- January 11 - WA Semifinal #1 - location TBD, Seattle area
- February 1 - WA State Championships at Amazon Center Seattle
- Contact Coach Alice Poulson for info: [apoulson@wahksd.k12.wa.us](mailto:apoulson@wahksd.k12.wa.us)

SkillsUSA begins in October, meeting dates and locations TBD. Competitions are:

- Regionals are on various dates and locations are in January
- February 1 - Leadership Regionals at Vancouver HS
- March 27-29 - State Leadership and Skills Conference at Clover Park Technical College, Tacoma
- Contact Coach Kaitlyn Kincaid for info: [kkincaid@wahksd.k12.wa.us](mailto:kkincaid@wahksd.k12.wa.us)

SeaPerch begins in October, meeting dates TBD at the WHS Robot Room. Competitions are:

- March 28 - Cathlamet Qualifier
- May 31-June 1 - Seaperch International in Maryland
- Contact Coach Josh Miller for info: [jmiller@wahksd.k12.wa.us](mailto:jmiller@wahksd.k12.wa.us)

RoboBoat (new competition under consideration) may begin in October, meeting dates TBD at the WHS Robot Room. See note on page #4. Competitions are:

- January 20-27 - pre-competition deadlines
- March 3-9 - RoboBoat Challenge in Sarasota FL
- Contact Coach Josh Miller for info: [jmiller@wahksd.k12.wa.us](mailto:jmiller@wahksd.k12.wa.us)

Science Olympiad (new competition under consideration) may begin in October, meeting dates and location TBD. See note on page #4. Competitions are:

- December 7 - Camas MS Invitational at Camas WA
- March 8 - SW WA MS Regional at Lower Columbia College Longview
- April 12 - WA State Championships at Central WA Univ. Ellensburg
- Contact Coach Alice Poulson for info: [apoulson@wahksd.k12.wa.us](mailto:apoulson@wahksd.k12.wa.us)

## This year's team's assets and liabilities: 2024-2025 School Year

### General Notes:

- Travel outside of WA state by airplane is assumed to be about \$1,500/person for students and adults, 4 students/room, and requires both a male and female chaperone.
- Travel inside of WA is assumed to be via school vehicle.(if overnight 4 students/room) and requires both a male and female chaperone.
- As the school district budget gets tighter due to funding shortfalls from the state we anticipate that we will need more financial help from our community.
- We normally operate a fall tee shirt fundraiser with our local businesses but again, this may not happen this year. This fundraiser supports all of our robotics-related teams.
- We normally operate a spring fundraiser. This supports all of our robotics-related teams, but mostly goes to those teams attending national level tournaments.
- Georgia-Pacific Wauna has been a consistent generous supporter of our robotics programs for several years. We need additional similar consistent industry support.
- Wahkiakum 4-H hosts a \$3,500 3D printer in the robot room for all to use.
- Each team listed (except Radio Club) may expend funds from our ASB account, but are expected to replenish that account via fundraisers, with the same or more than they expend.
  
- Radio club
  - Assets
    - Recent \$2800 grant from ARRL for radio equipment and learning materials
    - About \$5,000 in equipment donations from N7WAH radio club members
    - The “Flybox” radio room and space in the Robot Room
  - Liabilities
    - \$4,000 projected cost to remodel the “Flybox” to include good stairwell
    - No travel expected
  - Note that Radio Club maintains a separate ASB club account from the other Mecha Mules teams.
  
- FTC
  - Assets
    - Robot Room, upstairs practice room, and other classrooms and some practice during some class times
    - About \$10,000 in robotics related equipment gathered via grants over the past ten years.
    - Applied for a \$3,000 grant from State, not yet notified
  - Liabilities
    - Travel costs
      - League and Interleague events: \$300 each for three events
      - SemiFinals: \$500 if we qualify
      - State: \$1500 for travel and one overnight, if we qualify
    - Expected equipment and registration costs
      - \$900 for required new categories of equipment
      - \$1200 for registrations
  
- SkillsUSA
  - Assets
    - Robot Room and other classrooms and some practice during some class times



## **Radio Club update**

Our official FCC callsign is W7WSD ... standing for: "Washington Seven Wahkiakum School District". The results finally came in from ARRL about our place in last February's School Club Roundup, where schools talk to other schools via HF radio. We placed 2nd overall in the High School Division, nationally. Our previous best was 12th. Two other results of note:

- Only one other school or club or individual spoke with more stations in more states than we did: Purdue University. We had 49 (missing Mississippi), they had all 50.
- By using our Flybox station at the high school, and doing so well, we proved beyond a doubt that we will be able to communicate outside of our county in the event of a significant natural disaster that wipes out all SW WA internet, cell phones, and landlines.

Last summer we received a large grant, \$2,800, from ARRL for radio equipment and learning materials. We put that radio to good use in the recent Washington State QSO Party, called the "Salmon Run" where we contact all counties in our state. The competition gives us both Saturday and Sunday to complete the task ... We did it in only 6 hours on the first day. Good equipment, good people, great antenna, and an excellent room to work from.

We are currently hosting on Wednesday evenings, jointly with N7WAH, a training class to prepare folks to get their Technician Amateur Radio license from the FCC. We have 12 students in the class and hope to "pass" them all when we give the test in November.

October 21-25 is the next School Club Roundup. We will have a very tough time beating our score from last February, but we will be giving it a go. If you would like to see our team in action, give our mentor, Ron W7ERY, an email at [rwright@wahksd.k12.wa.us](mailto:rwright@wahksd.k12.wa.us)

## **Two new proposed teams**

### **RoboBoats**

This competition is for advanced robotics and engineering students. Because of our success in Seaperch we have been invited to compete with college students in Sarasota Florida at their annual competition. This is an incredible opportunity for our students to mingle with top engineering schools from around the world. In this event, teams build a surface boat that operates entirely via programmed control to navigate obstacle courses, park and go on missions, and to deliver "water payloads" to remote sites. This is partly judged and funded by the Office of Naval Research and the Department of Defense.

### **Science Olympiad**

This competition is for middle school students and possibly ninth graders. Students compete in pairs in 24 different events covering most Science disciplines. Some events test students' knowledge, some test their ability to pre-build devices and bring them to the competition, and some test their ability to complete tasks given on-site. This competition is inexpensive to get started in, but takes a lot of focused practice time to do well.

## **Publication help needed**

We would really like to publish this newsletter quarterly. Jessica Vik has done a great job of getting us going over the past three years, but is now moving on to other projects. We need someone to gather the stories and photos from the team coaches and students, put them together into a newsletter format, and send it out to our roughly 150 subscribers. Each newsletter is also posted onto our website at: <https://www.mechamules.com/>

You may modify the format to fit your strengths.

You may modify how the newsletter is sent to our subscribers.

You may add (school appropriate) ending promotional advertising.

Far and away, the most difficult task of this project is to get the coaches and students to send you articles and photos in a timely manner. Good people skills are necessary.

Any questions, or if you would like to take this project on, please contact Ron Wright at [rwright@wahksd.k12.wa.us](mailto:rwright@wahksd.k12.wa.us) or Stephanie Leitz at [sleitz@wahksd.k12.wa.us](mailto:sleitz@wahksd.k12.wa.us).

## **Volunteer help wanted**

All of our team coaches would like to encourage community members to come assist their teams. Some folks are needed in specialty areas like programming and CAD. More folks are needed as generalists ... just to be the caring adult in the room when the coach is working with a small team, or helping with snacks, helping students to prepare documentation, or assisting with practices by being (very) stern judges and scorekeepers, or inventory management of our equipment.

Any questions, or if you would like to help, please contact any of the coaches at their email address on page #2 or Stephanie Leitz at [sleitz@wahksd.k12.wa.us](mailto:sleitz@wahksd.k12.wa.us).

We need to get a "Club Sponsor Program" running so that we can have a dependable base of funding. For example, Georgia Pacific would be considered our first (and our only) "Gold Sponsor". If interested in this project. Please contact Stephanie Leitz [sleitz@wahksd.k12.wa.us](mailto:sleitz@wahksd.k12.wa.us).

## **Donations**

Anyone may make donations to the Mecha Mules. Make out checks to "Wahkiakum School District ASB" with "Mecha Mules" or "Robotics" in the memo line. Drop them off in the HS office.

Similarly, donations to the Radio Club should be made out to "Wahkiakum School District ASB", with "Radio Club" or "W7WSD" in the memo line.

## **Possible last issue note**

I saved this sad note for last. There is a chance that this is our last quarterly newsletter. We currently don't have a Mecha Mules "head coach". I retired from this position last spring and a replacement is yet to be chosen. Thus, club-wide tasks like making sure we keep folks informed about all of our activities are open. Hopefully someone or some organization will take on this newsletter publishing task, and do a much better job than I do ( more photos please !!! ) - Ron Wright