



Pacific Northwest Underwater Robotics SCOUT Division

Build an underwater robot. Learn real engineering. Compete. Repeat.

AUDIENCE

Elementary and middle school teachers, after-school clubs, scout/youth groups, and homeschool co-ops.

ENTRY POINT

SCOUT class, MATE's beginner-friendly Remote Operating Vehicle (ROV) level.

GET STARTED

We provide educator resources and starter kits and guidance.

What is MATE ROV?

MATE ROV is a student underwater robotics challenge where teams design, build, test, and pilot remotely operated vehicles to complete simulated real-world missions.

Students also organize as mock companies, so the learning includes teamwork, documentation, project management, presentations, and budget thinking.

Why SCOUT is the right on-ramp

SCOUT keeps the first robot approachable while preserving the delightful engineering mess: buoyancy, waterproofing, propulsion, wires, troubleshooting, driver practice, and safety.

SCOUT is open to elementary, middle school, and homeschool students.

Pacific Northwest Division / Regional Competition

The Pacific Northwest regional competition is the local MATE pathway for teams. The 2027 competition is hosted in Federal Way, Washington, in May 8th, 2027. All SCOUT teams can participate in the regional competition.

Local support available

Starter kits: [Angelfish Kits @ \\$255](#)

Guidance: Matt Gardiner, MATE Technical Manager (mgardner@marinetech.org)

Practice: 50 gal tubs to full pools, depending on location

START A TEAM IN SIX STEPS

1. Name a coach

Teacher, parent, club leader, or community mentor. Confirm who handles registration and safety supervision.

2. Recruit students

Aim for a small crew first. A three-student team gives everyone a real job.

3. Claim a kit

Use starter kits and supplement with your own parts. Inventory the frame, motors, tether, controls, and tools.

4. Build + test

Start in tubs or bins. Learn buoyancy before the pool. Let students do the work.

5. Practice missions

Rotate pilots, tether managers, builders, documenters, and presenters.

6. Compete locally

Register, bring safety documents, and join the Pacific Northwest regional event in May 2027.

Ready to launch a grade-school SCOUT team?

Contact: Erica Sampaga (ericasampaga@gmail.com)

Workshop: Oct 17th 9-5pm Marine Technology Lab, Seahurst Park

Registration: <https://forms.gle/UpvAg1YaPJFVsR6fA>

Contact us to stay informed.

Clock hours to be provided through WITEA.

