WHERE ROBOTS DARE

How the Navy's New Rating is Shaping Current and Future Ops

Story and photos by MC1 Kelby Sanders

When military history enthusiasts, Hollywood producers and cooky uncles predict a distant future A.I.- driven robot war in the vein of The Terminator, don't shake your head at them. When defense industry leaders, D.C.-based think tanks and top military brass emphasize to Congress that our success in potential high-end warfare rests on the integrity of our networks and automated systems, don't roll your eyes.

The earliest recorded use of unmanned aerial vehicles in warfare dates back to 1849, and as drone technology and capability continues to develop at a rapid pace, the potential influence unmanned platforms could have on future military operations around the globe is boundless.

Depiction of the first aerial bombardment, directed against Venice by forces of the Austrian empire, came during the 1848–49 First Italian War of Independence.

Archibald Low, a British inventor, designed the first drone in 1916. Called the Ruston Proctor Aerial Target
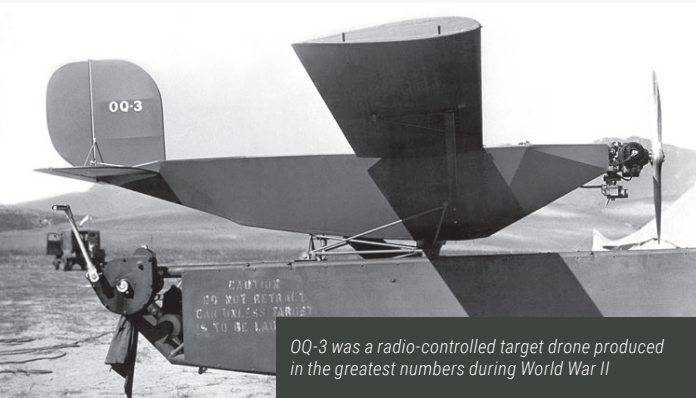
OQ-3 was a radio-controlled target drone produced in the greatest numbers during World War II

Enter the Robotics Warfare Specialist (RW). Reading the trends, the Navy announced NAVADMIN 036/24 to recruit, train and develop a corps of Sailors to operate and maintain unmanned surface, air, ground and subsurface vessels.

"The RW rating creates expertise that supports current and future advancements in technology," said Master Chief Robotics Warfare Specialist Christopher Rambert, the RW enlisted community manager. "It gives the Navy an opportunity to assess, develop, and retain an agile force of experts capable of mastering skills required to deploy robotic/unmanned systems."

Chief Robotics Warfare Specialist Christian Butler, assigned to Unmanned Surface Vessel Squadron (USVRON) 3, explains the importance of the new rating and the role they may play in future missions.

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– RWCM Christopher Rambert

"In future naval operations, I can see RWs being a part of almost every domain of operations," said Butler.

Thinking broadly, proliferation of unmanned platforms can offer a high degree of operational flexibility. Among many other missions, they can act as sensors dispersed around surface action groups to locate and target enemy contacts or rapidly deliver supplies and equipment to units operating in hostile environments while minimizing risk to human life. "Why send a manned ship so close to danger, just to sense or detect something that an unmanned surface, aerial or underwater vehicle can detect," wondered Butler. "The other thing they can provide is destruction. I can be hundreds of miles away and cause devastation without putting myself at risk."
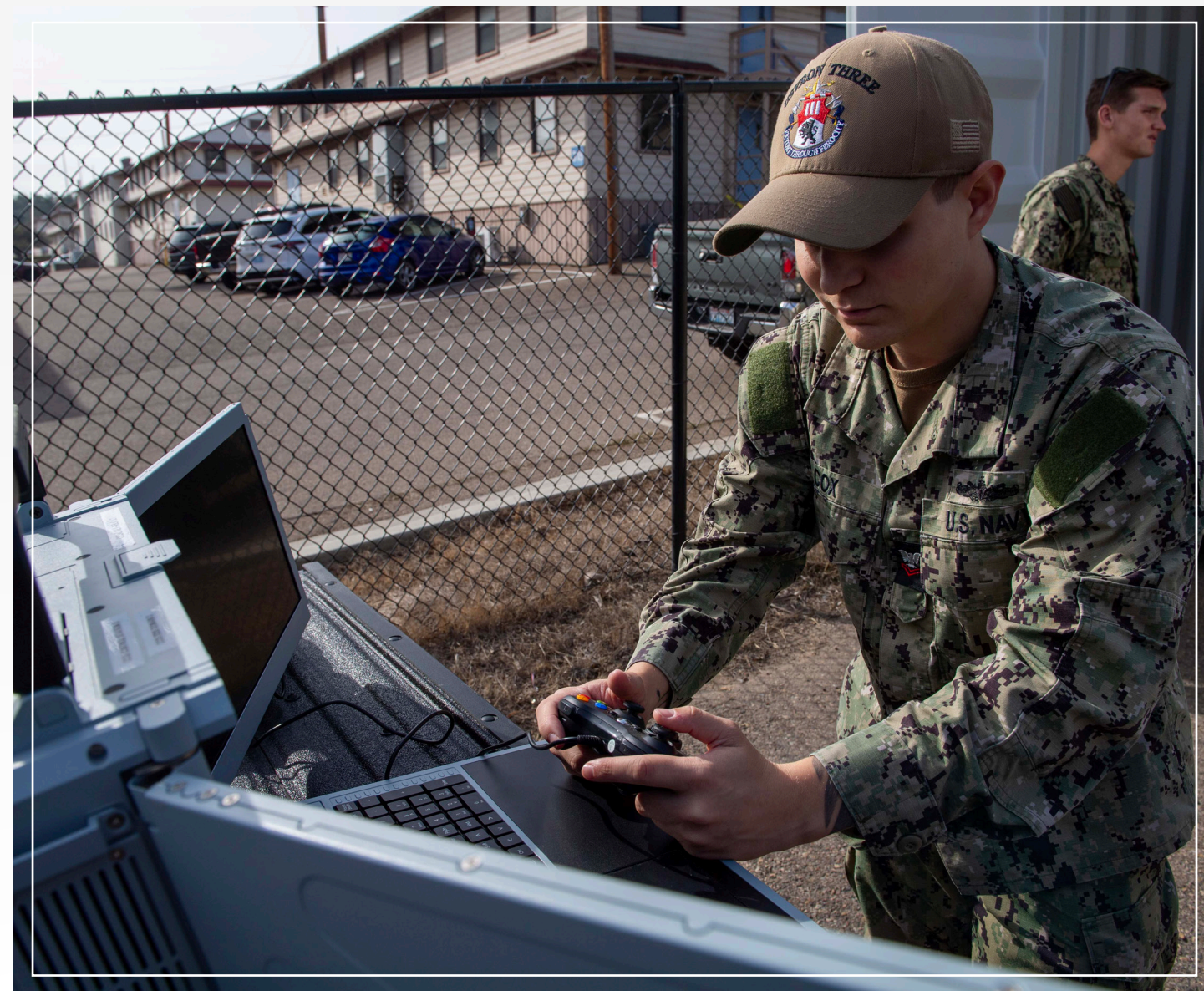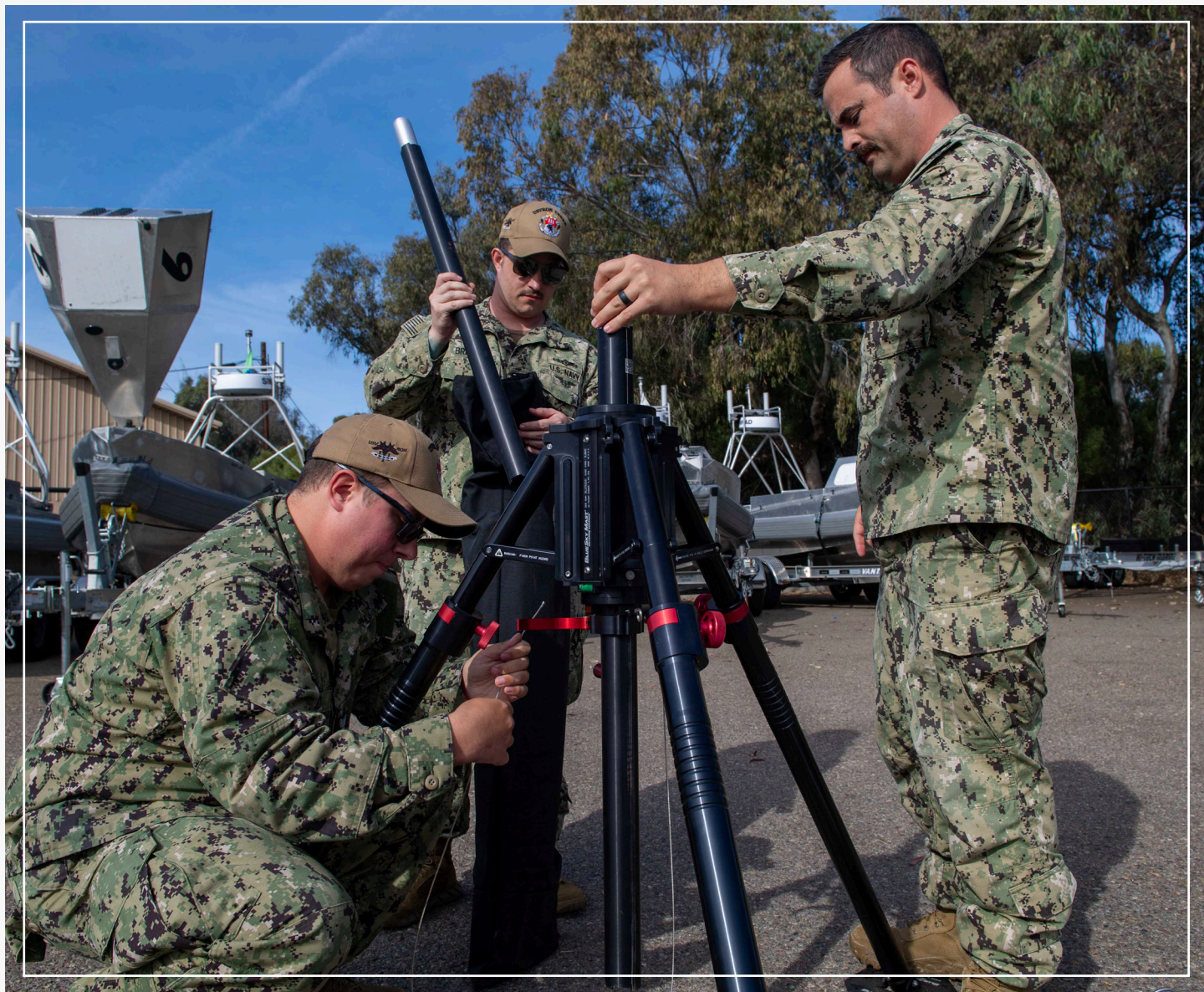
Butler, formerly an Electronics Technician (ET) prior to transitioning to RW, had a lot of relevant career experience before making the transition, but as an ET he was a technician and not necessarily an operator.

"It's a little bit different as an RW. You're expected to be technically savvy and also to operate the system you just fixed," said Butler. "If you go somewhere with a small, unmanned surface vessel or unmanned aerial vehicle, you're expected to not only work on it and keep it functioning properly, but also operate that same vehicle."

The RW job description on MyNavyHR.navy.mil reads like something far more complex and science-focused than most other Navy ratings. It contains terms like oceanography, meteorology, bathymetry, aerodynamics, fluid dynamics, radio frequency theory, electrical theory, acoustics, information systems, and networking among several others.

When asked about what kind of Sailor should consider applying to become an RW Rampert said, "a motivated, tech-savvy Sailor with the desire to grow professionally in a community that we continue to define."

Being a new community still in the process of developing its training pipeline affords its early adopters opportunities to influence the rating's development and blaze the trail for future RWs.

"It's an exciting space to be in because we're surrounded by some of the brightest young Sailors in the Navy and the space is evolving and changing rapidly whether its surface, underwater, aerial or ground," said Butler.

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Information Systems Technician 1st Class Selena Ortwine, and Robotics Warfare Specialist 2nd Class Kaleb Cox, assigned to Unmanned Surface Vessel Squadron 3 (USVRON 3), set up a Global Autonomous Reconnaissance Craft (GARC) control station during a training evolution at Naval Base Point Loma.

We may not know exactly what the future holds or what a future high-end conflict would look like, but unmanned systems will be involved. If you're interested in a job that will put you in position to have a direct impact on the full spectrum of operations going far into the future, check out the Robotics Warfare Specialist Page on MyNavy HR.

"There's a scene in Terminator when they're shooting lasers or bullets at each other, right? And they're falling and it's all scorched earth. It's like a future hell, and these robots are shooting other robots and there are craters and smoke and stuff," explained Butler. "It's right around the corner. It's already happening in certain spaces. We're buckled in and ready to see it through."

Sailors assigned to Unmanned Surface Vessel Squadron 3 (USVRON 3) pose with Global Autonomous Reconnaissance Crafts (GARC) at Naval Base Point Loma, Nov. 26, 2024. Robotics Warfare Specialists enable Robotic Autonomous System (RAS) operations and maintenance at the tactical edge and are subject matter experts for computer vision, mission autonomy, navigation autonomy, data systems, artificial intelligence, and machine learning on the RAS platforms.