

Trey Pennington's left index finger was a fraction of an inch above the firing button of his ship's 5-inch, 62 Caliber gun.

Every few seconds, he lifted the finger slightly, curling it toward his palm, then quickly replaced it over the firing button on the touchscreen display of his console.

A fire controlman (FC) 2nd Class aboard the Arleigh Burke-class guided-missile destroyer USS Sterett (DDG 104), Pennington and his shipmate, FC3 Sonny Murray-Davis, were intently tracking an incoming hostile aircraft in an exercise scenario. Their job: shoot the intruders out of the sky if they get too close.

With the targets closing in, tensions were rising. The darkness inside the ship's Combat Information Center (CIC) was punctuated only by the blue light of the warfare consoles illuminating the faces of the operators.

Murray-Davis' right hand gripped a joystick, keeping the large gun trained on the target. The order came for Pennington to shoot, and his finger finally touched the screen. The sound and feel of the weapon's bark were unmistakable, heard, and felt throughout the ship.

Within minutes, the pair dispatched ten warheads into the sky, splashing two unmanned aircraft.

"It's a hit," Pennington said, as cheers rose from those watching the action.

This wasn't a video game or static simulation. It was a live fire exercise in countering unmanned aerial vehicles and the Sterett team had won this fight.

The scenario was one of many dished out over two weeks aboard Sterett and seven other ships from the Carl Vinson Carrier Strike Group participating in Surface Warfare Advanced Tactical Training, known in the fleet as SWATT.





Established in 2013, the Naval Surface and Mine Warfighting Development Center (SMWDC) officially started training ships and strike groups through SWATT in 2015. Today it's considered the premiere advanced tactical training event for surface ships and a key milestone during the advanced phase of the pre-deployment training cycle, known as the Optimized Fleet Response Plan (OFRP), for carrier strike groups (CSGs), amphibious ready groups (ARGs), and littoral combat ships (LCS).

While it's not a pass-or-fail event, it is required training for deployment. This event has proven to increase unit tactical proficiency, readiness and the ability to integrate into multiple ships task groups.

After completing SWATT, units get feedback on their overall warfighting ability. This can serve as a punch list of what they need to improve before they reach their Composite Training Unit Exercise (COMPTUEX) — the graduation exercise at the end of the OFRP certifying them for deployment.

It was the need to better prepare units for COMPTUEX and the subsequent deployment that led to the creation of SWATT, said Capt. Gil Clark, SMWDC deputy commander and the senior mentor for the Carl Vinson CSG SWATT.

"There was a pretty steep learning curve during that certification — for ships not doing well in working together and communicating with each other," said Clark. "It became evident that we needed a training event that bridged the basic and integrated phases of the OFRP."

In December 2014, the Navy added an "advanced" phase to the OFRP introducing SWATT as a critical milestone helping commands kick their warfighting planning and tactical skills into high gear.

In the process, SMWDC was given another critical role as the keeper of the tactical standards and publications for the Surface Force. Up-to-date standards are necessary to set the baselines of tactical performance they must train to. These are now all living documents, updated constantly. The result has made SMWDC the hub of warfighting tactics and doctrine of the Surface Force.



## TACTICAL HEAVYWEIGHTS



The key to the process is Clark's team of tactical heavyweights, a cadre of surface warfare officers (SWOs) who are specially trained in one of four tactical areas. It's these experts who plan and execute SWATT at sea as both evaluators and mentors.

The idea they chose to emulate was naval aviation's "top gun" tactical training process made famous by two Hollywood movies, now adapted to fit the surface community.

These top SWOs are called warfare tactics instructors or WTIs. These WTIs come in four flavors: Anti-Submarine and Surface Warfare (ASW/SUW), Integrated Air and Missile Defense (IAMD), Amphibious Warfare (AMW) and Mine Warfare (MIW).

"It's about pulling the best of the best from the fleet and giving them specialized training to become tactical experts who first become instructors," Clark said. "These experts are raising the collective tactical IQ of the force, as these officers migrate back to ships as department heads."

"Developing WTIs starts with giving them the schoolhouse knowledge to be that expert, then you put them in the fleet around their peers to raise their level of knowledge," said Clark.

Eligible officers are those qualified surface warfare officers in pay grades 0-1 through 0-4 in the 1110 and 1117 designators. Surface nuclear officers, surface limited duty and warrant officers can apply as well.

There's also flexibility in deciding the entry point into the WTI cadre. While the primary candidates are SWOs on their first or second division officer tours, entry is allowed even after completing both department head tours. Complete details are available by emailing the WTI Management Cell at SWO\_WTI@navy.mil.

Training pipelines range from 15 to 31 weeks, and by the end of 2024, all the training will happen on the "dry side" of Naval Base San Diego, Clark said.

"We're building what we're calling the WTI University to further align the presentation and standardization of the courses of instruction," he said. "We're hoping for construction to wrap up later this year so we can start teaching in San Diego early next year."

Once qualified, WTIs receive an additional qualification designator (AQD) and a patch to wear on the right breast pocket of their Navy Working Uniforms. Each specialty area has a unique patch and AQD. Most WTIs then go on to "production tours" in the fleet.





Since the program started, 662 WTIs have qualified, with 230 graduates currently serving on their production tours, and 265 WTIs have returned to the fleet as department heads.

Most WTIs serve their initial production tour at SMWDC. In their day jobs, they update tactical publications and procedures and teach prospective WTIs in training.

"Most importantly, they run SWATT," Clark said.

Other WTIs are at the training strike groups responsible for executing COMPUTEX, in the Pentagon with the Program Executive Office Integrated Warfare Systems (PEO IWS), and fill a few key liaison billets around the fleet.

"The expectation is WTIs at SMWDC will participate in two SWATTs a year, while those not in organic

billets will participate in at least one," Clark said.

Perhaps the lasting benefit of the WTI career path is what they do once they head back to the fleet, where their knowledge, experience, and tactical know-how get reused.

"And the goal we have right now is every ship has at least one department head who is a WTI," Clark said. "We're not there yet."

When the new schoolhouse comes online, he said, they'll be able to regularly produce 115 WTIs a year, up from just over the roughly 90 graduates each year. This year, Clark said, they'll reach their target number of 115 graduates for the first time, setting the stage for achieving the one WTI per ship goal he's seeking.



## RAISING THE FLEET'S TACTICAL IQ



"Eventually, within every wardroom, you'll have at least one WTI expert as a department head who can bring that expertise to bear as that ship goes through the entire training cycle and deployment," said Clark.

As the program matures, he said, WTIs will begin to select for executive and commanding officer tours, bringing their tactical expertise to higher levels of command.

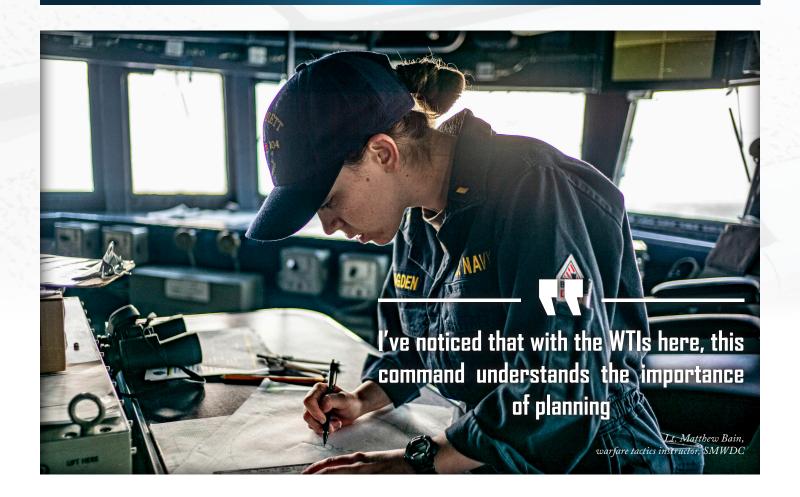
Sterett's wardroom has an embarrassment of riches, with four WTIs serving aboard. Lt. Cmdr. Amanda English and Lt. Jason White are department heads and the ship's chief engineer and operations officer, respectively. Also qualified WTIs are Lt. Rob Lombardo, the weapons officer and Lt.j.g. Jason Dam the ship's anti-submarine warfare officer.

The benefit of their experience and expertise aboard the ship is evident in how the crew approached and performed during SWATT, according to the WTIs embarked to support SWATT execution and provide mentorship to the ship's crew.

"I've noticed that with the WTIs here, this command understands the importance of planning," said Lt. Matthew Bain, an ASW/SUW WTI from SMWDC.

"It's not that non-WTIs don't think planning is important, but I think the level of detail these two were exposed to at SMWDC for operational mission planning benefits the ship."

Also, he said the WTI community is a network of professionals ready to help their shipboard counterparts when needed.



"You meet so many people during your time at SMWDC," Bain said. "You can reach out by phone or email, and though they might not know the answer, they probably know someone who does, and they're going to email you back right away — that ability is priceless."

Bain believes in the WTI's role is improving crews' ability to fight their ships as they move from an inside the lifelines focus to working with other ships ultimately improving their readiness to deploy.

"In the basic phase, the Afloat Training Group does a good job getting their crew comfortable as a team and the equipment they operate," Bain said. "We are the connective tissue in that crawl, walk, run approach to get you to the integrated phase."

In a nutshell, SWATT is a microcosm of that approach, he said.

"Okay, first event, drive together and report contacts; second event, drive together, but we're going to push you toward a more combative scenario with the third event being all-out war," he said. "Then we follow that up with having you go through your procedures and conduct a live fire coordinated with one other ship."

A WTI gets their job satisfaction by seeing those teams they're testing come together and succeed. All through SWATT, these WTIs are "over the shoulder" of watchstanders of all levels sharing their knowledge and providing mentorship.

"I think removing obstacles in front of teams is just so important as sometimes they can't see the forest for the trees," Bain said. "I feel like we can accelerate the progression by sharing best practices that we've seen work well or provide a template to start with that removes that ambiguity of mission planning going into an event where you really don't know what's happening, yet."

Ultimately, Bain and his fellow WTIs were impressed with Sterett's SWATT performance from the start.

"I was satisfied, and it goes to show that if you have a good planning process in place early, that usually results in better execution," said Lt. Hayden Marsh, an IAMD WTI who traveled to San Diego from the Aegis Training Center in Dahlgren, Virginia, for this SWATT.

"We've been embedded with the planning team here, helping them out, and saw a cohesive watch team throughout these events. Usually, the early events can be rough, but this ship has been well put together from the start," he said.







## GETTING RESULTS

Scenarios thrown at his crew ranged from executing a simple strait transit to complex wartime situations involving multiple enemy and friendly ships. They crossed naval warfighting areas of surface, subsurface, and air defense combat, with live fire thrown into the mix where possible.

The curriculum also isn't static; each SWATT is custom-built to reflect the current reality of what these ships might face on deployment, with as much realism as possible thrown in for good measure.

"Each group that goes through this course gets instruction based on the fleet commander's desires at that time," Clark said. "It's very likely that some of these ships soon be in the middle of near-peer competition."







The margin for error on the tip of the spear, he said, is razor-thin and shrinks more as tensions rise.

"Our adversaries are getting, at times, a little more aggressive than we've seen in the past," he said. "So, we put in a freedom of navigation scenario and brought another big grey ship as the opposing force."

A live close-quarters maneuvering scenario was conducted for the first time in any SWATT exercise, mimicking a dangerously close high-seas encounter with an adversary. Clark said it involved navigation with another ship closer than the US Navy allows typically.

"It was a great event and will allow commanding officers to carry out their obligation to defend the ship in a way that we haven't trained to in the past," he said. "If it happens on deployment, they will already have seen it and know how to handle it."

What SWATT did for the Sterett crew was validate the skills they'd developed through hard work in the basic phase of training, Descovich said.

"This ship went through a longer maintenance phase than usual and came out working hard to get up to speed," he said. "Our goal is to win and keep winning because when you win, you build confidence."

Cmdr. Christopher M. Descovich Commanding Officer, USS Sterett (DDG 104) has one department head whose primary responsibility is planning and tactics, something he feels was a big part of their success, along with rigorous self-evaluation in the command.

"We've learned that we must always treat ego like the enemy and take responsibility for what we did right and wrong — we'll fix the wrong and keep on winning."  $\$ 

