



QTR 1 2025

SWO_WTI@navy.mil



Mission:

To increase the lethality and tactical proficiency of the Surface Force across all domains



WTI
PRODUCTION



- Highly trained SWOs who specialize in one of four warfare areas – IAMD, ASW/SUW, AMW, or MIW – and enable SMWDC’s LOO

ADVANCED
TACTICAL
TRAINING



- Classroom, synthetic, and underway training evolutions for individuals, ships, and staffs to increase lethality and tactical proficiency through tactical reps and sets

OPERATIONAL
SUPPORT



- Direct, reachback, mission package, or fly away support provided to ships, squadrons, strike groups, independent deployers, and Commanders

DOCTRINE &
TACTICAL
GUIDANCE
DEVELOPMENT



- Tactical publications for the warfighter in the form of doctrine or tactics, techniques and procedures, to serve as authoritative guidance in a readable, understandable executable, and repeatable manner

CAPABILITY
ASSESSMENTS,
EXPERIMENTATION
& REQUIREMENTS



- Tactical level warfighting effectiveness assessments; capabilities assessments through the warfare improvement programs



- **DHRB not required**
- **WTIs can serve in community tours or other shore duty billets (SECNAV Industry, FSEP, NPS) if it fits into your career pipeline**
- **There are multiple opportunities for graduate education during and post WTI production tour**
- **WTI is open to SWO(N), LDO/Warrant, pilots, Marines, and Reservists (on limited basis)**



- **Professional growth**
 - Advocacy from SMWDC throughout your career
- **Job satisfaction**
 - Coordinate with industry, joint / coalition forces, participate in cutting edge tactics development
- **Travel opportunities / Communities of Focus (CoF)**
 - Participate in working groups around the world



- **WTIs continue to screen for career milestones at a higher rate than SWO overall (FY24)**
 - Major Command: 57.4% on first look vice 42%
 - CO Afloat: 47.22% vice 35.08%
- **Graduate education options:**
 - WTI Scholars, GEV, NWC (including Fleet Seminar), FSEP, LGEP



- **WTIs can complete an in-resident (accelerated curriculum) Master's Degree via NPS**
 - Post production tour opportunity
 - Graduate degree earned in 12-15 months
 - Open to LT WTIs (post-DIVO LTs must be screened for DH and sign DHRB)
 - **Nine curricula available – with WTI-relevant coursework:**
 - Applied Math
 - Applied Physics
 - Cyber Systems and Operations
 - Engineering Acoustics
 - Electrical Engineering
 - Mechanical Engineering
 - Network Operations and Technology
 - Operations Research
 - Physical Oceanography
- **Masters of Maritime Warfare (MWO)**



- **729 Active Duty WTIs**
 - (KW1) ASW/SUW: 311
 - (KW2) IAMMD: 234
 - (KW3) AMW: 153
 - (KW4) MIW: 31
- **39 Reserve Unit WTIs**
- **2024**
 - Goal 135
 - Seated 168, produced 146 WTIs
- **2025**
 - Goal increased to 145



**ALL COIs ARE 16 WEEKS, INCLUDING 14 WEEKS OF PATCH SPECIFIC CURRICULUM
EVERY WTI CANDIDATE STARTS WITH 1 WEEK OF INSTRUCTOR SKILLS TRAINING
AND CONCLUDES WITH 1 WEEK OF CAPSTONE**



ASW/SUW

- 14 Week Curriculum – KW1 AQD
 - 14 weeks in San Diego, CA



IAMMD

- 14 Week Curriculum – KW2 AQD
 - 3 weeks in Dahlgren, VA
 - 1 week in Fallon, NV



AMW

- 14 Week Curriculum – KW3 AQD
 - 1 Week in Camp Pendleton, CA
 - 1 Week in Wallop's Island, VA



MIW

- 14 Week Curriculum – KW4 AQD
 - 14 weeks in San Diego, CA
 - Supplemental training in Belgium tied to Billet Specialty Training required for the WTI Production Tour



- **Basic Eligibility Criteria**
 - SWO qualified or Surface LDO / CWO (usually Ops Tech, Combat Systems, or Deck designators)
- **Application Instruction (SAWSINST 1402.2)**
- **Best Practices from successful applicants**
 - Articulate how you have demonstrated the qualities of a WTI in your career – humble, credible, approachable and warrior, thinker, teacher
 - Be specific in describing your role during exercises and operations
 - Address anything in your record that could be perceived negatively
 - LOR from a current WTI
- **Submit your application (with all required enclosures) prior to slating for your next tour**
- **PERS cannot and will not slate you to a WTI tour without KWS in your record**



Selection Board Process



- **Six selection boards per year (JAN, MAR, MAY, JUL, SEP, NOV)**
 - **Application deadline is the second Friday of odd numbered months**
 - **Board procedure mirrors that used by PERS for milestone (admin) and promotion (statutory) boards**
 - **Chaired by SAWS Director or Deputy Director**
 - **Voting members are qualified WTIs with each patch type represented**
 - **All information submitted is briefed to board**
- **Results approved by SMWDC Commander**



- **WTI candidate selected by Ship's CO**
 - 1 per calendar year, per CO
- **No application required**
- **1st or 2nd tour DIVO primary candidates (SWO only)**
- **May select any WTI pipeline**
- **Must be red chipped prior to slating, not during the process**



- **Send the Red Chip candidate's information to SWO_WTI@navy.mil:**
 - **Full Name:**
 - **Email:**
 - **Personal Email:**
 - **Cell Phone:**
 - **PRD:**
 - **Desired Patch Type:**



- **The WTI MC and your detailer will work to enroll you in a COI that fits your career timing**
- **Awarded the KWS AQD (WTI Select)**
 - **Remains active for 18 months to accommodate completion of required sea tours, etc., before commencing WTI COI**
 - **Can be extended an additional 18 months if requested by submitting FITREPs received since selection**



How WTI Fits in the SWO Career Path

0 YCS	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"LEGACY" CAREER PATH														
BDOC	1DV	WTI	ADOC	2DV	WTI	POST-DIVO (WTI PT)	DH SCHOOL (ETC)	1DH	WTI	2DH	WTI	PD1 (WTI PT)	PD2	
SINGLE LONGER TOUR (SLT)														
BDOC	SINGLE LONGER DIVO TOUR		WTI	ADOC	WTI	WTI PRODUCTION TOUR	24/12 CIV GRAD ED SECNAV INDUSTRY	DH SCHOOL						
LATE DH SCHOOL START														
BDOC	1DV	WTI	ADOC	2DV	WTI	POST-DIVO (TM/GRAD ED + WTI PT)		DH SCHOOL	1DH	WTI	2DH	WTI	PD1 (WTI PT)	
EARLY DH SCHOOL START														
BDOC	1DV	WTI	ADOC	2DV	DH SCHOOL	1DH	WTI	2DH	WTI	PD1 (WTI PT)	PD2 (WTI PT)	PD3	SCC	

Increased SWO Career Flexibility = Increased WTI Opportunities

- "Legacy" Career Path
 - Between DIVO Tours, post-DIVO, or post-DH
- Single Longer Tour (SLT)
 - Opportunity to complete WTI COI en-route to post Division Officer shore duty
- Late DH School Start
 - Increased post-DIVO time ashore allows completion of Talent Management / Grad Ed + WTI COI + Production Tour prior to DH School
- Early DH School Start
 - Multiple opportunities to complete WTI COI ICW other required training, or following DH sea tours



UNCLASSIFIED

What's new in the WTI Program



- **All four schoolhouses now in BLDG 3303**
 - Across from Admiral Prout Field on NBSD dry side
- **KWC AQD when production tour complete**
 - Opportunity to return to SMWDC or specific KWC coded billets later in the career progression



- **WTIs support SMWDC lines of effort in addition to routine billet responsibilities**
 - Includes supporting SWATT, TTP development, and community of focus assistance
 - Locations include commands like SMWDC, SCSTCs, ATGs, SWSC, TTGP/L, CSG-4/15, SURFDEVGRU, USVRONs, and NAWDC
- **While on shore duty, WTIs have time to:**
 - Complete Masters programs and / or JPME via distant education
 - Focus on family planning
 - Enjoy a positive work life balance



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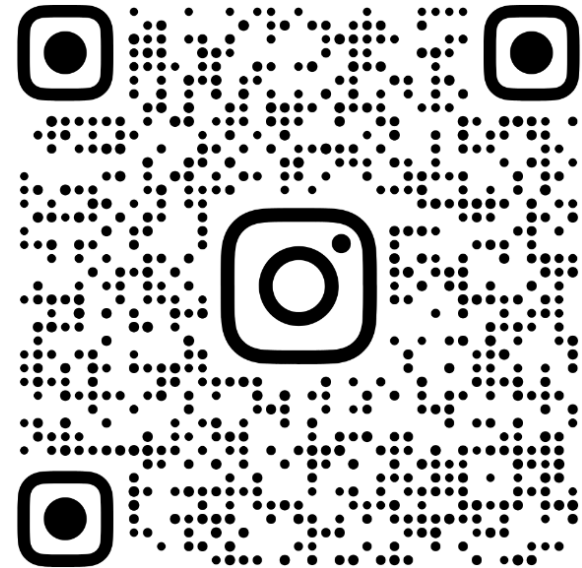
- **LCDR Joshua White (ASW/SUW WTI)**
 - WTI Program Manager
 - joshua.t.white38.mil@us.navy.mil

- **LT Amber Magno (ASW/SUW WTI)**
 - Outreach Officer
 - amber.l.magno.mil@us.navy.mil

- **LT Shelby Brueske (ASW/SUW WTI)**
 - Recruiting Officer
 - shelby.n.brueske.mil@us.navy.mil

- **LT Nathan Holcomb (MIW WTI)**
 - Placement Officer
 - nathan.m.holcomb.mil@us.navy.mil

- **LT Danny Anderson (MIW WTI)**
 - Selection & Admissions Officer
 - daniel.f.anderson15.mil@us.navy.mil



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<https://www.surfpac.navy.mil/Ships/Naval-Surface-and-Mine-Warfighting-Development-Center-SMWDC/About/WTI/>



Mission:

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SMWDC Organizational Structure

SMWDC Headquarters - San Diego, CA



WTI PRODUCTION



Highly-trained surface warfare officers who specialize in one of four warfare areas - integrated air and missile defense, anti-submarine/anti-surface warfare, amphibious warfare, or mine warfare - and enable SMWDC's lines of operation

ADVANCED TACTICAL TRAINING



Classroom, synthetic, and underway training evolutions for individuals, ships, and staffs to increase lethality and tactical proficiency through tactical reps and sets

OPERATIONAL SUPPORT



Direct, reachback, mission package, or fly away support provided to ships, squadrons, strike groups, independent deployers, Numbered Fleet Commanders, Naval Component Commanders, and Combatant Commanders

DOCTRINE & TACTICAL GUIDANCE DEVELOPMENT



Tactical publications for the warfighter in the form of doctrine or tactics, techniques and procedures, to serve as authoritative guidance in a readable, understandable, executable, and repeatable manner

CAPABILITY ASSESSMENTS, EXPERIMENTATION & REQUIREMENTS

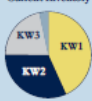


Tactical level warfighting effectiveness assessments; capability assessments through the warfare improvement program; CONOPS and CONEMPS working groups

RECENT ACCOMPLISHMENTS:

- Produced 121 WTIs in CY 2023
 - ASW/SUW - 57
 - IAMD - 31
 - AMW - 25
 - MIW - 8
- Consolidated four school houses into one at SAWS

Current Inventory



KW1 - ASW/SUW
KW2 - IAMD
KW3 - AMW
KW4 - MIW

- Executed six SWATTs in CY 2023
 - 3 CSGs
 - 3 ARGs
- Developed and implemented a close quarters maneuvering scenario
- Facilitated or supported 31 Courses of Instruction in CY23 including ISO SWATT, TYCOM Indoc, PTO, Submarine Commanders Course, etc.

- Supported 12 named exercises
 - 6 in C7F
 - 2 in C5F
- Provided 24/7 reachback support to the fleet from IAMD and civilian missile defense specialists at the inflection point of the Red Sea crisis
- Filled WTI LNO billet at C6F (USNR LT)

- Updated 20 pubs within the TTP library
- Completed and published 9 new pubs
 - 2 Tactical Bulletins
 - 5 Tactical Memorandum
 - 1 Tactical Note
 - 1 NTTP
- Revised 4 pubs (3 - NTTP, 1 - TM)
- Cancelled 7 publications due to updates and revisions

- Successfully developed and executed inaugural SURFRG Cycle in FY23 identify tactical priorities and technical solutions to advise resourcing process
 - 15 tactical priorities identified
 - Outbriefed to industry partners at SNA West
- Developed initial POM requirements for West Coast Training Facility
- Conducted 7 experimentation events, 2 SHAREM, 5 MIREM

2024 GOALS:

- Produce 135 WTIs
- Seat 80% of COI Capacity
- One KW2 aboard all AMDC Platforms
- Fill WTI Production Tours to 80%
- At least one DH ABoat WTI aboard every ship
- Revitalization of WTI Communities of Focus
- WTI Billets at OPNAV N9X
- WTI Red Chip Program
- WTI Fleet Outreach
- IW Integration into WTI COIs

- Integrate and standardize Information Warfare into SWATT through IWEX events
- Increase the complexity in presentation for LFAP
- Incorporate HEPs tactics in SWAP
- Increase EA/EP/DE in SWATT serials
- Increase joint participation through long-range fires
- Standardize USV employment
- Develop and execute an LCS MCM Mission Package SWATT
- Increase relevance and presentation of eUAS serials
- Quantify the value of SWATT through PA Cell

- Increase analytic capability of SWTD in ASW/SUW mission areas
- Establish LNO billets with NSW and C5F
- Expand analytic capability partnerships through contracts with university affiliated research centers and federally funded R&D centers
- Further engagement with NATO and C6F partners in support of MIWC Battle Staff Certification during BALTOPs and Black Sea operations
- Support stand up of C6F MCM CTF (MCMGRU 6)

- Reduce the average age of the TTP library to under 5 years
- Maximize releasability of TTP to partner nations
- 24 publications: under creation, revision, or consolidation
- Refine PAC3 MSE roadmap, SPEIR, NSM, and SEWIP
- Develop capability roadmaps for SM6 IAU, HPM, NSM, ESSM BLKII, PAC3 MSE
- Support future fight initiatives (NCIP, Virtual Warfare Center), representing surface enterprise operational objectives and tactical priorities

- Expand SURFRG
 - Add additional PEOs, industry touch points, resource sponsors
- Create SURFREM program in collaboration with OPNAV N96
 - Leverage ATLANTIC THUNDER for data collection
- Execute Integrated Warfare WIP cycle at the REL FVEY classification level

Tactical Excellence by Design





SUPPORTING THE FLEET



- Task Group Greyhound
- Global Maritime Response Plan
- Warfare Commander Courses of Instruction
- IW Integration in Surface Warfare
- Project OVERMATCH
- Red Sea
- TYCOM Indoc
- PTO Course
- GARC
- HELIOS
- Directed Energy
- PAC3

LINE OF OPERATION



	SMWDC STAND-UP (2015)	SMWDC TODAY	FUTURE OF SMWDC
WARFIGHTING READINESS	<ul style="list-style-type: none"> Re-established SUWIP process to identify warfighting gaps and solutions Fleet operational support initiatives Lack of SAP resources: limited classification level of tactics development for emerging capabilities Minimal Special Programs: Office (SPO) involvement 	<ul style="list-style-type: none"> Coordinated WARCOCM conference to encourage integration between the Warfare Development Centers (WDC) and cross-coordination across warfighting domains Established SURFRG process to integrate warfighters into the development process to influence the acquisition of near-term solutions to warfighting gaps Implementing vision for Surface Warfare Training Continuum (SWCTC) program 24/7 on-demand reachback cell established to maximize support to ships conducting combat operations in CSF and C6F Increased classification certification to the SAP-F level at SMWDC HQ Increased Surface Warfare Integration Office (SWIO) WDC Coordination 	<ul style="list-style-type: none"> Increasing classification and capability to the fully-informed level for WARCOCM Matured SURFRG process Transition SWCTC to full execution Increase multi-warfare, multi-domain reachback support for the Fleet San Diego SAP Campus Fully staffed SWIO team
TACTICAL PROFICIENCY	<ul style="list-style-type: none"> Established the WTI program <ul style="list-style-type: none"> • Two warfare areas: (ASW/SUW, IAMD) • 64 WTI's produced/CY Executed four SWATT's per year with LFWAP Offered courses for AASWO and Sea Combat Commander Provided fleet guidance through Tactical P4's and Fleet Advisories 	<ul style="list-style-type: none"> Expansion of the WTI program - consolidated under the Surface Advanced Warfighting School (SAWS) <ul style="list-style-type: none"> • Four warfare areas offerings: (ASW/SUW, IAMD, AMW, MIW) 6-10 SWATT's per year with LFWAP, CSI Fast Cruise, OPTASK VI, Information Warfare, real-world threat integration, and expanded TTP testing and experimentation Expanded course offerings to include FADO, IADC, TYCOM Indoc, CT5 Leverage MMTT and ASW VOTT trainers to improve the tactical interoperability of AASWO and ASW/SUW WTI COIs Refined SMWDC CAS SITE (www.nar.cas.navy.smil.mil/secret/navy/45/site.nsf/Main.html?OpenPage) into an interactive, user-friendly site 	<ul style="list-style-type: none"> An IAMD WTI aboard every IADC ship and a DH WTI aboard every ship Increased LFWAP complexity, joint long range fires: integration, DE, Ux5 in SWATT MWPT5 and CV/TSC trainers to improve COI, TTP development, and watchstander training Provide the Fleet a Surface Warfighting "One-Stop Shop"
TACTICAL DEVELOPMENT	<ul style="list-style-type: none"> Assumed ownership of the Ship Anti-Submarine Warfare Readiness Effectiveness Measuring (SHAREM) process and program Re-established the development of surface warfare and surface platform tactics, techniques, and procedures (TTP) 	<ul style="list-style-type: none"> Responsible for the execution of both SHAREM and Mine Warfare Readiness Effectiveness Measuring (MIREM) process and program Developing concepts of employment for unmanned and manned surface combatant and integrated combat systems through MS&A through Naval Capabilities Based Assessment Integrated Process (NC) Develops and manages a tactical library of 111 publications under SMWDC's primary review authority <ul style="list-style-type: none"> • Average age of the library at the start of 2024 was 5.5 years with a median age of 3 years Integral involvement in the development of several multi-domain and multi-warfare capability roadmaps for shared systems 	<ul style="list-style-type: none"> Expand SHAREM and MIREM TTP testing and experimentation Execute SURFREM program to meet current and emerging warfighting requirements for SUW Develop, test, and publish ready and relevant TTP against ALL current and emerging threats Develop future systems and emerging technology capability road maps

LETHALITY



- **Array Theory and Beamforming**
- **SQQ-89 System**
- **USW DSS**
- **SUW Passive Localization**
- **Time Frequency Analysis**
- **Target Motion Analysis**
- **ASW Weapons**
- **ASW Attack**
- **ASW Countermeasures**
- **WSM & PMI**
- **AOMSW**
- **Mission Planning**
- **Gunfire Tactics**
- **OTHT**
- **SAG Operations**
- **FAC/FIAC**
- **SUW Missiles**
- **CDAG**
- **Tactical use of MPRA**
- **SUW Fundamentals**
- **Link**
- **SUW Targeting**





- **AD Overview / Single Ship AD**
- **AWS**
- **SSDS**
- **BMD**
- **TCP / Weapon Doctrine Development**
- **Force AD: AMDC / FAAWC / Air-to-Air Tactics**
- **EW**
- **Networks**
- **IWIC / NAWDC Integration**
- **Adversary Tactics**





- **Amphibious Planning**
- **Amphibious Embarkation**
- **Landing Plan Development**
- **Shaping Operations**
- **Maritime Prepositioning Force**
- **Seabasing**
- **C2 and Fleet Organization**
- **MAGTF Organization**
- **Forward Deployed C2**
- **Combat Cargo**
- **Fleet Immersion**
- **Tactical Air Control Squadron**
- **Air C2 Coordination**
- **Amphibious Fires Organization**
- **Fire Support Planning**
- **Targeting**
- **Ground Fire Support Assets**
- **Naval Beach Group**
- **Defense Support of Civil Authorities**
- **SSDS Engagement Process**





- **Mechanical Sweeping Systems and Tactics**
- **Acoustic Sweeping Systems and Tactics**
- **Magnetic Sweeping Systems and Tactics**
- **UUV and USV Systems and Tactics**
- **Minehunting Systems and Tactics**
- **NATO 7-Question Model / Navy Planning Process in MIW Staff and Crisis Action Planning**
- **Surface Mine Counter Measures (SMCM)**
- **Aviation MCM (AMCM)**
- **Underwater MCM (UMCM)**
- **Expeditionary MCM (ExMCM)**
- **MCM in AMW Operations**
- **Mining Operations and Tactics**
- **MINEnet Tactical / MCM Expert / Minefield Planning Program**
- **Post Mission Analysis (PMA)**





SMWDC Production Tours



Internal SMWDC Production Tours						
	KW1	KW2	KW3	KW4	KWC	Total
SAWS	6	6	3	3	5	18
SAWS-N7	20	15	11	4	0	50
Fleet Training - Pacific	3	5	2	0	2	10
Fleet Training - Pacific SWATT Planning Cells	15	8	7	0	0	30
Fleet Training - Atlantic	1	3	2	0	4	6
Fleet Training - Atlantic SWATT Planning Cells	13	11	9	0	0	33
Surface Warfare - Tech Division	1	2	0	0	1	3
Mine Countermeasure - Tech Division	0	0	0	4	0	4
Commanders Action Group	3	1	0	0	0	4
N8 / N9	4	3	3	2	0	12
Det Fallon	0	3	0	0	0	3
Total	66	57	37	13	12	173



External Production Tours



External non-SMWDC Production Tours					
	KW1	KW2	KW3	KW4	Total
NAWDC	1	1	0	0	2
CSG-4	2	1	1	0	4
CSG-15	2	1	1	0	4
NIWDC	1	1	0	0	2
LCSRON ONE	0	0	0	2	2
MWTC	0	0	0	1	1
NEXWDC	0	0	1	0	1
UWDC Det San Diego	4	0	0	0	4
UWDC Det Norfolk	4	0	0	0	4
ATG San Diego	1	1	1	3	6
ATG Norfolk	1	1	1	0	3
EWTG Atlantic	0	0	2	0	2
EWTG Pacific	0	0	2	0	2
SCSTC Dahlgren (ATRC School House)	0	6	0	0	6
SCSTC Fleet ASW (Det Southwest)	2	0	0	0	2
SCSTC Mayport (Det Southeast)	1	1	0	0	2
SCSTC Pearl Harbor (MIDPAC)	1	1	0	0	2
SCSTC Yokosuka (WESTPAC)	1	1	0	0	2
TACTRAGRULANT	1	1	1	0	3
TACTRAGRUPAC	1	1	1	0	3
SWSC	1	1	1	0	3
SURFDEVRON ONE	1	0	0	0	1
USVRON ONE	3	0	0	0	3
USVRON THREE	3	0	0	0	3
Nimitz OPINTEL Center DC (Warfare Analysis Center, DC)	1	1	0	0	2
	32	19	12	6	69