

MATTHEW PAWLENKO

Captain, U.S. Navy (Retiring March 2027) | Geospatial Data Scientist | Oceanographer

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PROFESSIONAL SUMMARY

Retiring Naval Officer (O-6) and geospatial data scientist with 25 years of experience across oceanography, special operations support, geospatial intelligence, and national defense policy. M.S. in Spatial Data Science (Penn State, 2024) with applied research in social vulnerability indexing, coastal flood modeling, and evacuation network analysis. Earlier NPS thesis applied UAV remote sensing to operational hydrographic requirements. Consistently ranked top 2–6% of peers across career; influenced \$2.5B+ in DoD programming decisions. Active Top Secret/SCI clearance. Seeking geospatial, emergency management, or defense analytics roles in Hampton Roads and beyond.

PROFESSIONAL EXPERIENCE

Staff Oceanographer / METOC Branch Head (N37) | U.S. Fleet Forces (USFF) Command, Norfolk, VA *Feb 2025 – Present*

- Serve as principal meteorology and oceanography (METOC) advisor to United States Fleet Forces Command, Commander Task Force 80, and Naval Forces North; drives environmental decision-making across operational planning, force allocation, and force generation discussions in support of homeland defense, southern border operations, and combatant command requirements worldwide.
- Provides METOC decision support across a broad portfolio of operations and planning efforts including Atlantic and Pacific watch, anti-submarine warfare planning, Operation Epic Fury, and various global and combatant command exercises; ensures commanders have actionable environmental intelligence at every phase of the planning cycle.
- Selected as Navy representative to the White House Production Office for Navy 250 planning and celebrations; leads large scale exercise assessment efforts, enhancing USFF's ability to execute operations at the operational level of war.
- Manages high-interest survey ship asset allocation on behalf of ECH I, Program Offices, type commanders, and Fleet, directly influencing force generation decisions and ensuring hydrographic survey missions align with operational priorities across multiple areas of responsibility.

Branch Chief, Ocean Policy & Interagency Coordination | OPNAV N2N6E, Pentagon *Aug 2022 – Feb 2025*

- Led 12-person civilian and interagency branch as Naval Deputy to NOAA and Ocean Policy Branch Head; served as primary coordination conduit between NOAA, DoD, and the Navy. Ranked #5–6 of 20–22 Captains. Awarded Legion of Merit.
- Renewed Navy-NOAA MOU aligning 15+ annexes; reestablished NAVDEPNOAA offices after multi-year hiatus; secured Navy participation in MET5 international community of practice (Australia, Canada, UK, New Zealand); reestablished NATO METOC working groups; and elevated Oceanographer of the Navy to co-chair of NOMECC Council Security Group.
- Guided POM development supporting \$2.5B across FYDP; developed FY25/FY26 Division Program Proposals overseeing \$500M+ in operational oceanography, PNT, and S&T portfolios. Led Ocean Observing System Security Group balancing national security requirements with scientific exploration.

Executive Officer | Fleet Weather Center Norfolk, Norfolk, VA *Jul 2020 – Aug 2022*

- Second-in-command of 300+ Sailors and Civilians; managed \$2M+ command budget at 100% execution rate; provided administrative oversight of 2 ECH V commands and 5 detachments supporting USFF, 5 combatant commands, 4 Fleets, DHS/Coast Guard, Army, and NOAA. Ranked #1 of 5 CDRs. Awarded MSM.
- Led assimilation of 3 new Naval Oceanography ASW Detachments supporting operational commanders across multiple CCMDs and AORs with zero loss in support; guided command through record 2020 Atlantic Hurricane Season; oversaw CNMOC/Johns Hopkins APL TANG study and planning and certification of new classified Fixed Facility.

Commanding Officer | Center for Naval Aviation Technical Training Unit (CNATTU), Keesler AFB, MS *Oct 2018 – Jul 2020*

- Commanded 96 personnel delivering specialized technical training to 1,670 Navy and Marine Corps graduates in Calibration, Meteorology/Oceanography Forecasting, and Meteorological Equipment Maintenance. Ranked #2 of 9 O-5 COs. Awarded MSM.
- One of only three CNATT sites receiving Sailors directly from Recruit Training; maintained training continuity through COVID-19; achieved 40% E-7 selection rate; won CNP FY19 Retention Excellence and 4 consecutive CNRSE awards; best In-Service Training and MTS program across 28 learning sites.

Deputy Branch Chief / Theater GI&S Officer | HQ U.S. European Command (ECJ2), Stuttgart, Germany *Jul 2016 – Oct 2018*

- Led newly formed Intel Future Capabilities Branch, revitalizing EUCOM's ability to identify critical intelligence gaps and drive DoD/IC capability development; oversaw signals intelligence (SIGNINT), geospatial intelligence (GEOINT), and measures and signatures intelligence (MASINT) appendices to multiple high-priority OPLANs. Ranked #1–2 of 22 joint O5s. Awarded Defense MSM.
- As Theater Geospatial Information and Services (GI&S) Officer, managed 20,000+ geospatial requirements supporting OPLANs; oversaw efforts to shift low-density/high-demand National collection assets to answer Commander's Priority Intelligence Requirements; planned and executed multinational GI&S working group with 80+ participants; selected as Acting Deputy Division Chief providing oversight across four branches.

Oceanography Assignments & Placement Officer | Naval Personnel Command, Millington, TN *Apr 2013 – Mar 2016*

- Only PERS officer dual-hatted as both Detailer and Placement for Naval Oceanography; managed 350 officers and 450 billets ensuring 100% fit and fill at operational commands. Ranked top 2% of all officers regardless of designator and rank; #1 of 3 LCDRs in hand-selected detailer group.
- Mentored 380+ junior officers; served as interim O6 OCEANO Branch Head; led FY16 IDC Command and Milestone Board; developed SECNAV/CNO implementation guidance on Talent Management initiatives.

Junior Officer Assignments | U.S. Navy *2002 – 2013*

- Staff METOC Officer, Battle Watch Captain, and Future Operations Officer, Carrier Strike Group 8, USS Dwight D. Eisenhower (CVN 69) — provided environmental decision support for flight operations, strike planning, and force protection during Arabian Gulf deployment (2011–2013).
- Training & Operations Officer, Naval Oceanography Special Warfare Center | UAV Officer in Charge and Technical Special Reconnaissance OIC, Naval Special Warfare Group 1 / NSWASA-1 — deployed to Fallujah, Iraq (2007–08) in direct support of special operations forces | GI&S Officer, Fleet Survey Team (2002–2011).

EDUCATION

M.S., Spatial Data Science | Penn State University *2024*

- Capstone: SoVI validation study using Hurricane Harvey (2017) as a natural experiment along the Gulf Coast. Applied GWR, network analysis, flood modeling, and interactive web mapping using R, Python, and JavaScript. Portfolio: asop-geo.com

M.S., Meteorology and Oceanography | Naval Postgraduate School, Monterey, CA *2011*

- Thesis: Derivation of River Bathymetry Using Imagery from Unmanned Aerial Vehicles (UAV) — applied UAV remote sensing and image processing to operational hydrographic requirements in riverine environments.

B.S., Electrical Engineering Technology | Purdue University, West Lafayette, IN *2002*

- Commissioned through Naval ROTC directly into the Oceanography community upon graduation.

TECHNICAL SKILLS

Languages: R (tidyverse, sf, tidygraph, tidycensus, ggplot2) | Python | JavaScript | HTML/CSS | SQL

GIS & Spatial: ArcGIS Pro / Online | QGIS | Leaflet.js | GDAL | PostGIS | ArcGIS API for JavaScript

Methods: Spatial statistics | GWR | Network analysis | Flood inundation modeling | SoVI/SVI indexing | GEOINT | UAV remote sensing | ACS/Census data integration

Tools: RMarkdown | Jupyter | GitHub | VS Code

CLEARANCE | DECORATIONS | COMMUNITY

Clearance: Top Secret/SCI (active; eligible for continued adjudication post-retirement)

Decorations: Legion of Merit | Defense Meritorious Service Medal | Meritorious Service Medal (x3) | Navy & Marine Corps Commendation Medal (x4) | Navy & Marine Corps Achievement Medal (x3)

Community: GIS Support Volunteer, Team Rubicon (humanitarian disaster response) | Troop Committee Member, Scouting America