

DILLON COOLEY

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EDUCATION

University of Staffordshire

Master of Science in Air and Space: Operations and Tactics

Stoke-on-Trent, UK

2024 – 2026

United States Naval Academy

Bachelor of Science in Aerospace Engineering

Annapolis, MD

2014 – 2018

EXPERIENCE

Helicopter Sea Combat Weapons School Pacific (HSCWSP)

San Diego, CA

MH-60S Instructor Pilot / Weapons & Tactics Instructor (WTI)

2024 – Present

- Coordinated and instructed advanced training for senior flight crews in the tactical employment of the MH-60S helicopter.
- Evaluated pilot proficiency and technical knowledge as a standardization instructor and instrument check pilot, ensuring 100% compliance with standardized operating procedures and safety protocols.

Fleet Experimentation Lead

2024 – Present

- Directed technical evaluations and rapid fielding for emerging defense technologies, including electronic warfare sensors and proliferated low earth orbit (pLEO) satellite communications integration.
- Partnered with industry to prototype, test, and deploy expanded resilient communications and data paths for the MH-60S, enhancing operational capability and command and control (C2) networks.
- Spearheaded MH-60S integration in multiple joint exercises, including Rim of the Pacific (RIMPAC), Resolute Hunter, and UNITAS, to rapidly integrate and demonstrate emerging technologies and capabilities.

Airborne Mine Countermeasures Subject Matter Expert

2024 – Present

- Optimized fleet aviation training for MH-60S airborne mine countermeasures (AMCM) systems by employing standardized tactical training for the airborne laser mine detection system (ALMDS) and the airborne mine neutralization system (AMNS).
- Led modernization projects by integrating artificial intelligence into detection software and leveraging large datasets from live sensor employment to improve aircrew training systems.

Aircraft Survivability Subject Matter Expert

2024 – Present

- Served as the primary technical authority for aircraft survivability systems, electro-optical/infrared (EO/IR) and radio frequency (RF) theory, and surface-to-air countertactics, optimizing training for high-threat environments.
- Analyzed classified threat data to update software-defined defensive systems and electronic warfare parameters across the MH-60 community.

Helicopter Sea Combat Squadron TWO ONE (HSC-21)

San Diego, CA

Mission Commander / Aircraft Commander

2020 – 2024

- Executed over 1,000 flight hours and acted as mission commander, supporting combat logistics, maritime reconnaissance, and airborne mine countermeasures.
- Qualified across all mission sets of the MH-60S and MQ-8B, including advanced qualifications as a functional check pilot, instrument check pilot, NATOPS instructor, and tactical mission lead.

Assistant Operations Officer

2022 – 2024

- Optimized unit-level operations, scheduling, and resource allocation for a squadron of 500+ personnel and 15+ aircraft, increasing operational readiness and training efficiency.

Assistant Officer in Charge, LCS Deployment

2022 – 2023

- Led a 30-person cross-functional expeditionary detachment onboard LCS-18 USS Charleston for a six-month deployment to U.S. Third and Seventh Fleet areas of responsibility.

Communications and Mission Planning Officer, LHD Deployment

2021 – 2022

- Coordinated secure tactical communications architecture for rotary wing aviation assets operating at the tactical edge during an eight-month deployment onboard LHD-2 USS Essex in U.S. Third, Fifth, and Seventh Fleet areas of responsibility.

Physical Security Officer / Anti-Terrorism Officer

2020 – 2021

- Designed and implemented comprehensive security protocols for squadron facilities and aircraft hangars.

Naval Aviation Flight School

Pensacola, FL / Corpus Christi, TX / San Diego, CA

Student Naval Aviator

2018 – 2020

- Completed an intensive technical flight training program, mastering aerodynamic principles, advanced navigation, and integrated avionics in high-performance aircraft. Achieved qualifications in multiple airframes, including the T-6B, TH-57, MH-60S, and MQ-8B, through rigorous academic study and in-flight training.

SKILLS / CERTIFICATIONS

Programming & Technical Stack: Python, MATLAB, Simulink, VS Code

Defense & Tactical Software: Maven Smart System, FADE/MIST, Thresher, Bodhi, Joint Mission Planning System (JMPS), Joint Munitions Effectiveness Weaponing System (JWS), Target Acquisition Weapons Software (TAWS), Chatsurfer, MINEnet Tactical

FAA Certifications: Part 61 Commercial Pilot License, S-70 Type Rating, Part 107 Remote Pilot License

Military Courses: Maritime ISR WTI, Mine Countermeasures WTI, High Altitude Aviation Training Site (HAATS), Survival, Evasion, Resistance, and Escape (SERE) School

Security Clearance: Top Secret / Sensitive Compartmented Information (TS/SCI)