

IMPACTS



Above:
NPS develops leaders and solutions for the
Future Force.

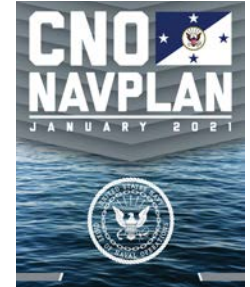
Impacts

Example Fleet and Force Outcomes



Applied Education and Research

Autonomy: The Naval Warfare Studies Institute (NWSI) launched the Warfare Innovation Continuum in September on a critical naval priority: Hybrid Force 2045. Nearly 130 participants, including, panelists, industry, observers and students, with participation from six allied nations looked at the interdisciplinary challenges from different perspectives and at all security levels. **IMPACT:** Throughout the year, the WIC will leverage classroom projects, theses and research to deliver results and advance naval concepts, assessing new technologies and developing tactics while enhancing student knowledge and DON technological leadership.



DevSecOps: LT Bridger Smith's thesis designed an AI-based DevSecOps tool to support maintenance planning and execution for SSBNs. Working with Project Blue and industry, he developed a 3D model and "Digital Twin" viewer that provides a common interface to address inefficiencies that lead to delays. **IMPACT:** Improved strategic deterrence. Provides shipyards, Trident Refit Facilities, and submarines with a shared, modern, open-sourced, DOD created, DISA approved maintenance planning and execution tool.

Radar: Surface Warfare Officer LT Jonathan Shepherd was recognized by Summer Quarter commencement speaker VADM Roy Kitchener, Commander, Naval Surface Forces, for his classified research on the SPY-6 radar. For his work, Shepherd received both the Military Operations Research Society (MORS) Tisdale Award and the Surface Navy Association Award for Excellence. **IMPACT:** Shepherd's classified research accurately quantified factors affecting the new radar's performance, which was provided to PEO IWS 2.0.

Hypersonics: The hypersonic glide body capability in the Conventional Prompt Strike Program is not due to reach IOC until 2025. Equipped with All Up Rounds (AUR) canisters, a student team's Systems Engineering capstone project solution utilized the San Antonio Class LPD to provide an affordable, viable interim maritime hypersonic glide body capability. **IMPACT:** The project team developed the candidate systems integrating the Army's vehicle mounted Long Range Hypersonic Weapon (LRHW).

Aviation: CDR Michael Hooten's applied research thesis performed a cost-effectiveness analysis for the U.S. F/A-18E/F Super Hornet squadrons as it relates to the DOD required combat Readiness Standards. **IMPACT:** Provided to OPNAV N8 and the NAE, the thesis identified options that can produce a marginal increase in overall Carrier Air Wing combat readiness while reducing fleetwide F/A-18E/F Super Hornet squadron operating costs by \$107 million per year.

Training: Capt. Michael Gannon, USMC, used commercial-off-the-shelf technology in his capstone project to design/replicate high-end training systems for field use. \$300 in 3D printing, a Raspberry Pi and open-source software replaced current \$20k designs. **IMPACT:** Increases effectiveness at greatly reduced costs. It's deployable, scalable and adaptable. The computer-aided instruction integrated with training simulators, provides real-time data collection and feedback on student performance.



IMMEDIATE IMPACT FUTURE ADVANTAGE ENDURING LEADERSHIP



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