



INNOVATION AT NPS

WHY IS INNOVATION IMPORTANT?

Today, strategic competition is fundamentally an **innovation** race. To prevail, the U.S. Navy and Marine Corps must quickly develop and adopt new technologies – as well as the competencies to effectively employ them simultaneously. Key to these efforts is effectively leveraging defense education and research to empower, inform and accelerate innovation from idea to impact.

WHY IS NPS THE PLACE FOR DEFENSE INNOVATION?

While well-known for graduate education and research, NPS is inherently a hub for defense innovation. With a combination of defense-expert faculty, operationally experienced students, and a campus located near the center of technological innovation in California's Silicon Valley, NPS offers a competitive edge to accelerate innovative solutions within the Department of the Navy.



HOW NPS MAKES INNOVATION HAPPEN

NPS is a central connector in the naval innovation ecosystem, uniquely positioned to complement the Naval Research and Development Establishment (NR&DE). Thousands of mid-career naval officers studying alongside joint service partners and civilians are NPS' comparative advantage over other academic institutions, warfare centers, and applied research labs within and outside the Department of Defense. Collectively, they can focus, enhance and accelerate research and development projects in the NR&DE pipeline with critical insights rooted in their unique fleet/force experience.



OFFICE OF RESEARCH
& INNOVATION

The newly established **Office of Research and Innovation (OR&I)** supports the educational and research mission of NPS by aligning research activities towards research areas of national security and enabling excellence in defense-focused, basic and applied research and innovation, ensuring decisive advantage for the warfighter.

Also critical to NPS' innovation mission is the **Naval Warfare Studies Institute (NWSI)**, which connects innovative industry partners to NPS faculty and student researchers with the ultimate purpose of developing ideas into warfighting concepts and capabilities for the Navy, Marine Corps, and joint force.



NAVAL WARFARE
STUDIES INSTITUTE

THE INNOVATION CYCLE AT NPS: FROM CONCEPT TO CAPABILITY

NPS is reimagining the innovation cycle and creating an infrastructure and network that will move innovation forward at new speeds and scales. Innovative ideas have always sparked from the technically experienced and brilliant students and faculty at NPS, but turning military concepts into capabilities is the result of a disciplined approach that is now being cultivated and refined to the Navy's advantage. This process will fully leverage the unique nexus of operational knowledge, research expertise, and partnerships at NPS and allow the innovation process to flourish.

Key to this innovation cycle are several interdisciplinary events and organizations that leverage the unique attributes of NPS:

- The **Warfare Innovation Continuum (WIC)**, established in 2009, is a year-long campaign cycle which helps to define minimum viable concepts which meet Navy and Marine Corps capability challenges.
- **Warfare Innovation Workshops (WIW)**, run by NWSI, are short-duration, design-thinking concept generation exercises that produce concepts for further exploration.
- The newly established **Naval Innovation Exchange (NIX)** is a networked organization under OR&I that coordinates teams of faculty, students, and partners, working in research "sprints" of 2-3 years to prepare new technologies and practices for adoption into the fleet, Fleet Marine Force, and shore establishment.
- Held on a quarterly basis, the **Joint Interagency Field Experimentation (JIFX)** program provides an opportunity for NPS faculty, students, private companies, and academia to demonstrate and evaluate new technologies related to the Department of the Navy and the Department of Defense research in an operational field environment.
- The **Innovation Capstone Project (ICP)** within NPS' Department of Defense Management offers technical abilities and acquisitions knowledge to assist researchers working to turn their projects into capabilities.

STEP-BY-STEP THROUGH THE INNOVATION CYCLE

The NPS Office of Research and Innovation (OR&I) is leveraging a 5-step operating concept grounded in a process being scaled across DOD to move research concepts from idea to impact:

WHAT

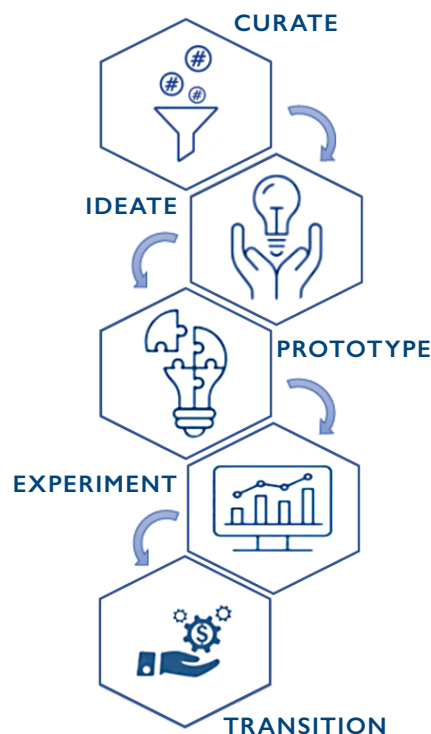
Challenges faced by the fleet and force are considered for solutions through engagement with fleet and force customers.

Potential solutions identified during the curation process are produced for further exploration.

Concepts are thoroughly researched and developed in preparation for evaluation and testing.

Developed concept prototypes are evaluated in a field or laboratory environment.

Researched and tested concepts are forwarded for acceptance and adoption by the Navy and Marine Corps.



HOW

NWSI's yearly Warfare Innovation Continuum (WIC) workshops define viable concepts that meet capability challenges.

NWSI's Warfare Innovation Workshops (WIW) explore WIC-defined concepts which are of interest to DOD stakeholders.

The Naval Innovation Exchange (NIX) coordinates teams to prepare various new technologies and practices for adoption.

NPS' Joint Interagency Field Experimentation (JIFX) program provides a venue for the testing and evaluation of new technologies.

The Innovation Capstone Project (ICP) uses acquisition knowledge to move solutions to programs of record or DOD end users.

CONTACT

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