Immediate Impact: 276 March graduates returned prepared for the contemporary challenges ahead.

Future Advantage: NPS student Capstone Projects focused, enhanced and accelerated capability.

Enduring Leadership: The intellectual capital of defense-focused faculty enhanced student solutions.

Two student Capstone Project teams in Systems Engineering will address:

1) Viability of alternative launch methods for hypersonic missiles for existing surface ships.
2) Increased demands on the Fleet associated with at sea maintenance, re-arm, and re-supply of unmanned systems in support of Distributed Maritime Operations.

IMPACT: Each supports NPS Naval Research Program efforts and will deliver in Sept.

WHO: CDS-40, Captain Thomas E. Meyers sent a letter of appreciation to NPS citing LCDR Jermaine Armstrong and fellow Master of Systems Analysis students LCDR Joshua Meyers, and LT David Mann for their innovative work.

WHAT: The students solved a 4th Fleet logistics problem predicting and tracking PPE usage for Enhanced Counternarcotic (ECN) missions during COVID-19. Their capstone project was recognized at the March graduation as the winner of the JHU-APL Award for Excellence in Systems Analysis.

HOW: Working with data collected from over 30 ships deployed into the ECN AOR since the start of the global COVID-19 pandemic, this project team developed an analysis tool for assessing PPE consumption rates, planning pre-deployment PPE supply levels, and monitoring adequacy of remaining supply levels to sustain ECN operations. In addition, the project team developed a new data collection tool with built-in consistency and error-checking features to improve data collection accuracy for ongoing PPE stock level monitoring and forecasting, and was implemented in all ships deployed for ECN operations.

IMPACT: Allows 4th Fleet Command-and-Control Element to be forward looking and anticipate future demand--thus keeping forces on station longer without any gap in capacity and capability.
MISSION UPDATES:

DEFENSE EDUCATION

- **Wargaming**: In collaboration with the Australian Defense Force (ADF), and NPS’ Naval Warfare Studies Institute, students in the NPS resident wargaming course are evaluating ADF interoperability with the U.S. Marine Corps, Marine Littoral Regiment in future Great Power Competition scenarios. **IMPACT**: Supports Force Design solutions and outcomes.

- **Manpower**: Students in the Manpower Systems Analysis curriculum presented their thesis to CNP VADM Nowell, BGen Woodworth, SES Dr Mike Strobl, SES Dave Menzen and RADM Browne. CNP requested follow-ups, additional theses and more time with students next event. **IMPACT**: CNP staff scheduled findings/policy follow-on discussions and new studies.

- **Accreditation**: NPS reaccredited 10 years, the maximum achievable. WSCUC conducted the assessment (also accredits Stanford and Cal Tech). NPS was selected as one of eight institutions to pioneer the Thematic Pathway for Reaffirmation. **IMPACT**: Strong certification indicates high-quality education/research outcomes, attracts talented faculty and partners.

APPLIED RESEARCH

- **Counter Swarm**: Electronic Systems Engineering graduate ENS Zachary Johnson’s studies/research was selected for publishing in the peer-reviewed IEEE journal Access: “Adaptive Beamsteering Cognitive Radar with Integrated Search-and-Track of Swarm Targets” March 29, 2021: Z. W. Johnson and R. Romero. **IMPACT**: DoN needs Counter Unmanned Aircraft Systems (C-UAS) capability and this research will increase efficiency/effectiveness to locate/track target swarms.

- **COVID-19**: Major Dan Finkenstadt, alumnus and Assistant Professor in the Graduate School of Defense Management, has worked extensively on COVID-19 supply chain research, published in Milbank Quarterly and Harvard Business Review, contributed to the Joint Acquisition Task Force, FEMA, DHS, the Strategic National Stockpile and legislative proposals. **IMPACT**: Enhanced defense and national COVID-19 recovery efforts and future prevention measures.

- **MURI**: NPS will lead one of 25 FY21 DoD Multi University Research Initiatives (MURI). Professor Jamie MacMahan Associate Professor in the Oceanography Department is lead investigator for the topic “Littoral Ocean Dynamics off Rocky Coasts and Shorelines” with six other universities. **IMPACT**: Results from the $7.5M five-year grant will enable greater predication capability thereby expanding operational maneuver space for Naval forces in the littorals.

ENABLING ENGAGEMENTS

- **MOU**: NPS and Lawrence Livermore National Laboratory (LLNL) established a cooperative agreement to advance the academic and scientific capabilities of the two institutions. **IMPACT**: Provides a framework for NPS faculty and student research collaboration with LLNL and reciprocal involvement of LLNL staff in NPS research and academic activities.

- **Tech Bridge**: Talent Education and Assessment Marketplace (TEAM) pilot sponsored by the National Artificial Intelligence Institute with NavaX will develop a digital federal talent marketplace and training certification program focused initially on AI/ML. **NPS’ C2 Tech Bridge** will lead the interagency approach (VA, ODNI, GSA, DoE, HHS) and the productization of CHUNK Learning with NPS, partner universities and industry. **IMPACT**: Improved management-retention of critical technology talent.

- **CRADA**: A new Cooperative Research and Development Agreement (CRADA) between NPS with BNNano provides access to revolutionary Boron Nitride Nanotubes with high thermal conductivity, electrical resistivity and high thermal stability, strength and stiffness. **IMPACT**: Applications include electric insulation, fire retardants, radiation shielding, metal lightening, and corrosion resistance to increase capability and readiness of naval systems.
SUPPORTING UPDATES:

GRADUATES IN ACTION

- **VADM Samuel J. Paparo** will promote to Admiral, and takeover as commander, U.S. Pacific Fleet, Pearl Harbor, Hawaii, earned a Master of Science in Systems Analysis from NPS.

- **Michael López-Alegría** is currently the Vice President of Business Development for Axiom Space, was selected to command the crew of *Ax-1, the first fully private orbital space mission* in human history. López-Alegría completed his Masters in Aeronautical Engineering and designation as test pilot after a year of study at NPS and [Naval Test Pilot School](https://www.nps.navy.mil/).  

- Admiral Almier Garnier Santos, 1993 NPS graduate and NPS Distinguished Alumnus since 2014, was promoted to be Chief of Naval Operations of the Brazilian Navy.

- MGEN Ariel R Caculitan, ‘05 NPS graduate was appointed the new [Commandant of the Philippine Marine Corps](https://www.nps.navy.mil/).

NPS IN THE NEWS ([More News](https://www.nps.navy.mil/))

- “Xerox and NPS Announce Collaboration to Advance Solutions with 3D Printing Research”

- “Navy Unveils Updated Plan to Help Ship Watchstanders Get Better Sleep”

- “Naval Postgraduate School To Study Surprise Climate Issues In $2.4M Award”

- “A Unique Take on NPS: Important Then, Critical Today”

- “Panetta Offers Beltway Perspective on Budget Policy During Guest Lecture”

IMPACTFUL EVENTS ([More Events](https://www.nps.navy.mil/))

- **HELD:**

  - SECNAV Guest Lectures: 
    1) NPS distinguished alumnus retired U.S. Navy Adm. Cecil D. Haney, former Commander, U.S. Strategic Command, spoke virtually in January and engaged in student-led Q&A on the topic of “Great Power Competition in the Cognitive Age” followed by; 
    2) Nobel Prize recipient Dr. William Phillips, a pioneer of atomic timekeeping used by the Navy, spoke in February on “Quantum Reform of the Metric System” and how the frontiers of metrology are important to the Navy (see also “Seapower Conversations on Quantum”)

  - Visit: [Sgt. Maj. of the U.S. Marine Corps Troy E. Black](https://www.nps.navy.mil/) explored options and possibilities with faculty and students on 9 March seeking ways to provide more educational opportunities for senior enlisted.

- **UPCOMING:**

  - 7-8 April: Visit by Navy CIO Aaron Wies and Chris Cleary, Principal Cyber Advisor

  - 12 April: Visit by Chief of Naval Research, RADM Lorin Selby

  - 13 April: SECNAV Guest Lecture -- VADM Jon A. Hill, 11th Director of the [Missile Defense Agency](https://www.mda.mil/) will speak on the topic of “Missile Defense and Technology Warriors.” Students from the [Meyer Scholar program](https://www.nps.navy.mil/) will lead Q&A.

  - 20-22 April: The [Naval Research Program (NRP)](https://www.nps.navy.mil/) will host a virtual Naval Research Working Group April 20-22, 2021. This activity is an essential to the success of the NPS NRP by aligning research sponsors requests from the Fleet and proposals to DoN priorities. Funding is limited, requests are often 4x more than what is selected.

  - 03-05 May: Visit by OPNAV N3/N5 VADM Phillip Sawyer

  - 11-12 May: [18th Annual Acquisition Research Symposium](https://www.nps.navy.mil/).