

**FY23 NRP Funded Research Projects**

List sorted by: Service > TRB ORG > Topic Sponsor ORG > IREF ID

**NAVY**

**ASN(RDA) - Research, Development, and Acquisition**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-N107-A	Measure and Assess the Effectiveness of Navy and DoD Pilot BA-8 (Software) Program Performance	Raymond D Jones	ASN(RDA)
NPS-23-N108-A	Measuring and Assessing the Effectiveness of Navy Implementation of the New Adaptive Acquisition Framework (AAF) since 2019	Raymond D Jones	ASN(RDA)
NPS-23-N256-A	Boron Nitride Nanotube (BNNT) Reinforced Non-Oxide Ceramic Matrix Composites	Troy Ansell	NAWCWD
NPS-23-N059-A	Application of Generative Adversarial Networks (GANs) to Predicting and Manipulating Adversary's Behaviors for Mobile Networked Control Systems	Jefferson Huang	NSWC Crane
NPS-23-N059-C	Modeling Naval Fleet Action Sequences and Adversary's Responses with Deep Reinforcement Learning	Armon C Barton	NSWC Crane
NPS-23-N250-A	Bi-Level Hypersonic Target Assignment Optimization	Mark Karpenko	NSWC Crane
NPS-23-N069-A	Mid-frequency Ambient Noise Characterization for Platform Detection and Improving CTDA's	Kay L Gemba	ONR
NPS-23-N091-A	Active Electromagnetic Signal De-Coherence Technologies and Techniques for Naval Tactical Applications	Ric Romero	ONR
NPS-23-N106-A	Predicting Optical Turbulence using Machine Learning Methodology	Joseph A Blau	ONR
NPS-23-N184-A	Systems Engineering Study of Future DDG Ship Design for Integrating High Energy Laser Weapons	Fotis A Papoulias	ONR
NPS-23-N161-A	Implementing Zero Trust Architecture on Tactical Edge Computing Environments	Gurminder Singh	PEO C4I
NPS-23-N073-A	Fleet Requirements for Unmanned Operation Centers (UOC)	Brian P Wood	PEO USC

**N1 - Manpower, Personnel, Training & Education**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-N093-A	Assessing the Relationship Between Diversity, Inclusion, and Navy Unit Performance	Erik Helzer	N1
NPS-23-N095-A	Risk of Food Insecurity in the U.S. Military: Definitions, Distributions, and Solutions	Jennifer A Heissel	N1
NPS-23-N102-A	Determinants of Navy Performance Evaluation Records	Sae Young Ahn	N1
NPS-23-N104-A	Integrating Knowledge Management at OPNAV N1	Mark E Nissen	N1
NPS-23-N194-A	Phase II Performance Trait Validation	Marigee Bacolod	N1
NPS-23-N226-A	Modernized Training Technologies and Distance Learning Strategies	Randy W Maule	NETC

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<b>N2/N6 - Information Warfare</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N220-A	Joint Federated Cyber Defense	Scott E Jasper	FCC/C10F
NPS-23-N168-A	Situation-Aware Adaptive Workflows Architecture at the Tactical Edge	Arkady A Godin	N2/N6
NPS-23-N002-A	Novel Warfighting Capabilities Using Formerly-Civilian Weather Satellites Already in Orbit	Timothy A Sands	N2/N6
NPS-23-N094-A	Assessing the Value of Extended-Range METOC Forecasts in Tactical Decision-Making for the Theater ASW Fight	Eva Regnier	N2/N6
NPS-23-N132-A	Design Thinking Integrated into Model-Based Systems Engineering of Operational Architectures	Ronald E Giachetti	N2/N6
NPS-23-N138-B	Cyber-Physical Control Attacks of LEO Constellations	Mark Karpenko	N2/N6
NPS-23-N227-C	Enhancing Trust in Battle-Management Systems That Use Artificial Intelligence	Neil C Rowe	N2/N6
NPS-23-N231-A	Improved Methods of Combat Identification: A Data-centric Approach	Johnathan C Mun	N2/N6
NPS-23-N268-A	Evaluating Risk of Communication Across the TACSIT Spectrum in DMO and EABO Operations	Walter A Kendall	N2/N6
NPS-23-N269-B	C2 of UxS for EMCON EABO Operations	Britta Hale	N2/N6
NPS-23-N255-A	Improving Identification of Ship Tracks Using a Data-Driven Approach	Imre L Balogh	NMIO
NPS-23-N180-A	Transformational Artificial Intelligence Applied to UUVs	Timothy A Sands	ONI
<b>N3/N5 - Plans &amp; Strategy</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N038-A	Technology, Multi-Domain Deterrence, and War at Sea	James A Russell	N3/N5
NPS-23-N067-C	Rethinking Naval Ship Force Design for Future Conflict	Jarema M Didoszak	N3/N5
NPS-23-N068-A	Russia's Strategic Recalibration After the Ukraine Conflict: Implications for the Two Near-Peer Competitors Strategic Environment	Aleksandar Matovski	N3/N5
NPS-23-N068-B	Stabilizing Trilateral Deterrence and Great Power Competition in the Wake of the Ukraine Conflict	Aleksandar Matovski	N3/N5
NPS-23-N100-A	Leveraging AI to Learn, Optimize, and Wargame Strategic Laydown and Dispersal (SLD) of U.S. Navy Operating Forces (Continuation)	Steven J Iatrou	N3/N5
NPS-23-N263-A	Impact of the Ukraine War on the Middle East	Afshon P Ostovar	N3/N5

**FY23 NRP Funded Research Projects**

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<b>N4 - Material Readiness &amp; Logistics</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N137-A	Naval Logistic Network for GPC and Operation in Contested Environment - (Continuation)	Geraldo Ferrer	N4
NPS-23-N139-A	Warfare Analysis of Logistics Agility in a Contested Environment	Robert E Burks	N4
NPS-23-N182-A	AI/ML Data Science in Aircraft Maintenance for Forward Deployed Combat Repair Teams	Randy W Maule	N4
NPS-23-N218-B	Fuel Logistics Platform Requirements to Support Expeditionary Advanced Base and Surface Warfare Ops in INDOPACOM AOR	Geraldo Ferrer	N4
NPS-23-N224-A	Comparison of Operational Availability and Endurance Supply Metrics for Naval Aviation Readiness-Based Sparing	Javier Salmeron-Medrano	N4
<b>N7 - Warfighting Development</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N039-A	Long Range Planning and Navy Strategy	James A Russell	N7
NPS-23-N039-B	Strategy For the Long Term, Long Range Planning and Force Design	James J Wirtz	N7
NPS-23-N186-A	Designing Education Programs based on Competencies using Advanced Analytical Methods	Miriam Bergue Alves	N7
NPS-23-N244-A	Interdisciplinary Research on Hybrid Threats Post Russo-Ukrainian War	Tahmina T Karimova	N7
NPS-23-N127-A	Further Developing the Sea Archer Concept	Simon Veronneau	NAVSPECWARCOM
NPS-23-N128-B	Micro-EMP Weapon System Development and Integration for Autonomous-Vehicle Delivered, Scalable Disruptive Effects	Ross A Eldred	NAVSPECWARCOM
NPS-23-N260-A	Assessing NATO Partners Undersea Asset Partnership Possibilities	Simon Veronneau	NAVSPECWARCOM

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<b>N8 - Integration of Capabilities &amp; Resources</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N007-A	IAMD Missile Mix and Firing Policies against Heterogeneous Red Raids	Michael P Atkinson	N8
NPS-23-N074-A	Time-critical Cooperative Path Planning for Clandestine Mine Countermeasures (MCM)	Sean P Kragelund	N8
NPS-23-N195-A	Inventory and Industrial Base Capacity for Future Surface Launched VLS Missiles	Douglas J MacKinnon	N8
NPS-23-N202-A	Game Theory and the Navy Budget	Johnathan C Mun	N8
NPS-23-N208-A	A Methodology for Evaluating Decisions in the Navy's POM Process	Moshe Kress	N8
NPS-23-N208-B	Decision Science in the Navy Budget	Simona L Tick	N8
NPS-23-N216-A	Using AI and ML to Assess Submarine Critical Platforms Operational Availability	Robert A Koyak	N8
NPS-23-N251-A	Navy Expeditionary Readiness Model (Continuation)	Douglas J MacKinnon	N8
<b>N9 - Warfare Systems</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-N006-A	Optimal Payload for Multi-Mission Systems	Moshe Kress	N9
NPS-23-N072-B	Concept Employment of Navy Rotary-Wing Air Launched Effects	Bonnie W Johnson	N9
NPS-23-N081-A	Additive Manufacturing of Graphene Infused Metal using Cold Spray and Selective Laser Melting	Troy Ansell	N9
NPS-23-N083-A	High Value Unit (HVU) Self-Escort against Autonomous Aerial Threats	Britta Hale	N9
NPS-23-N083-B	Self-Escort Protection Concepts Study for High Value Units	Jarema M Didoszak	N9
NPS-23-N131-A	Advancing Pathways to Net Zero for the Operational Navy	Kristen Fletcher	N9
NPS-23-N134-A	Employment CONOPS for Hybrid (crewed and highly autonomous) Light Destroyer and MUSV Flotilla in Second and First Island Chain Operations	Shelley P Gallup	N9
NPS-23-N136-A	Develop/Define the Systemic Changes Necessary to Implement Cyber Requirements Throughout a Programs Lifecycle	Victor R Garza	N9
NPS-23-N273-A	Mobile Fuel Generation in Contested Environments	Paul T Beery	N9

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<b>Fleet Force Support</b>			
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NPS-23-N055-A	Standardized Protocol for Tailoring IWE Watch Sections for Optimized Human Performance	Darian Lawrence-Sidebottom	NAVIFOR
NPS-23-N041-A	Antenna Concepts and Technology for Navy High Frequency Shore Sites	David C Jenn	NIWDC
NPS-23-N005-B	Stochastic Optimization of ISRT Information Systems	Isaac M Ross	PACFLT
NPS-23-N061-A	Coalition Contributions to Theater ASW Analysis Campaign	Jeffrey E Kline	PACFLT
NPS-23-N257-A	Enhancing COMPACFLT Operating Requirements for Joint Fires	Scot A Miller	PACFLT
NPS-23-N257-B	Enhancing COMPACFLT Operating Requirements for Joint Fires	Paul T Beery	PACFLT
NPS-23-N158-A	Analysis of Rotating Radars on CVNs, L-Class, and LCS Ships Against Hypersonic ASCMs and ASBMs	Ric Romero	SMWDC
NPS-23-N163-A	LSD-41/49 Class Conversion to Special Operations Forces Support Vessel	Erick S Alley	SMWDC
NPS-23-N164-A	Ship Hardening for Arctic Operations	Young W Kwon	SMWDC
NPS-23-N008-A	Operationalizing UAS Aboard Navy and USCG Ships	Douglas Van Bossuyt	USNAVSO/FOURTHFLT
NPS-23-N008-B	Ship-Based Unmanned Aircraft System (UAS)	Brian P Wood	USNAVSO/FOURTHFLT
NPS-23-N133-A	Panama Canal Criticality and Security	Jeffrey E Kline	USNAVSO/FOURTHFLT
NPS-23-N140-A	Distributed Maritime Logistics for Theater Undersea Warfare (Cont'd)	Shelley P Gallup	UWDC
NPS-23-N165-B	Through-the-ice Arctic ASW	Davis B Reeder	UWDC
NPS-23-N238-A	Commercial Communications Data Fusion Analysis (Continuation)	Arijit Das	UWDC

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**Marine Corps**

**HQMC Aviation (AVN)**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-M197-A	Enhancing the USMC VTOL Family of Systems	Scot A Miller	HQMC AVN

**HQMC Combat Development and Integration (CD&I)**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-M265-A	Too Small to Target, Too Big to Ignore: Ellis Class MMRC Surface Squadrons in Competition and Conflict	Eugene P Paulo	HQMC CD&I
NPS-23-M181-A	Evaluating Representation of Tactical Logistics in COMBATXXI Simulation	Curtis L Blais	OAD
NPS-23-M176-A	Increasing Accuracy and Realism of Simulated Naval Tactics with Monterey Phoenix Behavior Models	Kristin M Giammarco	TECOM
NPS-23-M178-A	Developing Cyber and EW Ranges to Train 21st Century MAGTF	Victor R Garza	TECOM

**HQMC Deputy Commandant Information (DCI)**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-M003-A	Acquisition Decision Support with Monterey Phoenix	Kristin M Giammarco	MARFORCYBER

**HQMC Manpower and Reserve Affairs (M&RA)**

<u>IREF ID</u>	<u>Project Title</u>	<u>Researcher (PI)</u>	<u>Topic Sponsor ORG</u>
NPS-23-M058-A	Data-Driven Enlisted Retention Decision Making	Robert A Koyak	M&RA
NPS-23-M062-A	M&RA Models Modernization II	Chad W Seagren	M&RA

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<b>HQMC Plans, Policies &amp; Operations (PP&amp;O)</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-M101-B	Effectiveness of AI-Enhanced Autonomous Systems Augmented with Intermediate Force Capabilities	Sharon M Runde	PP&O
NPS-23-M115-A	Improving the Fidelity of Modeling IFC and ROE Use by Security Forces in a Crowd Control Context	Susan K Aros	PP&O
<b>Marine Corps Forces Command (MARFORCOM)</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-M222-A	MARSOC SOF-MAGTF Capabilities Integrations Analysis and Operational Modeling of SSR	Robert E Burks	MARSOC
<b>Marine Corps Systems Command (MARCORSYSCOM)</b>			
<b><u>IREF ID</u></b>	<b><u>Project Title</u></b>	<b><u>Researcher (PI)</u></b>	<b><u>Topic Sponsor ORG</u></b>
NPS-23-M071-A	Implementing a Model-Based Systems Engineering (MBSE) Land Construct for the Marine Corps	Warren Vaneman	MARCORSYSCOM
NPS-23-M079-A	Logistics Models for the Ground Based Anti-Ship Missile Battery	Michael P Atkinson	MARCORSYSCOM
NPS-23-M070-B	Use AI/ML/Automation to Improve C4ISR Interoperability Mapping and Testing Capabilities	Arijit Das	MCTSSA