

**FY20 NRP Research - FUNDED (pending approved research proposal, PI brief and PI annual training)**

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Topic IREF ID	Title	PI FName	PI LName	TS ORG	TRB ORG	Validation Status	Funding Status
NPS-20-N017-A	Assessing the use of Plasma Discharges to Remove Coatings as a Strategy to Develop an Improved Ability to Maintain and Repair Naval Structures	Claudia	Luhrs	NAVSEA	ASN RDA	Requirement	Funded
NPS-20-N022-A	Corrosion Testing of Cold Sprayed Coatings and Deposits in Simulated Austere Marine Environments	Andy	Nieto	NAVSEA	ASN RDA	Requirement	Funded
NPS-20-N146-B	Commercial Batteries for Navy Use	Ira	Lewis	NAVSEA	ASN RDA	Requirement	Funded
NPS-20-N186-A	Decoupling the Engine from the Engine Room	Jarema	Didoszak	NAVSEA	ASN RDA	Requirement	Funded
NPS-20-N088-B	Incorporation of Operational Modeling Factors into	Fotis	Papoulias	ONR	ASN RDA	Requirement	Funded
NPS-20-N134-A	Railgun Capability on Amphibious Ships	Eugene	Paulo	ONR	ASN RDA	Requirement	Funded
NPS-20-N143-A	Effectiveness of Hypervelocity Gun Based Defense	Paul	Beery	ONR	ASN RDA	Requirement	Funded
NPS-20-N213-A	MDUSV ISR Mission Requirements, Equipment, and Force Structure	John	Audia	SPAWAR	ASN RDA	Requirement	Funded
NPS-20-M151-B	Shipboard Hydrogen Unmanned Aerial System	Anthony	Pollman	HQMC AVN	HQMC AVN	Requirement	Funded
NPS-20-M151-C	Removing Barriers to Hydrogen Use on Shipboard UAS	Alan	Howard	HQMC AVN	HQMC AVN	Requirement	Funded
NPS-20-M157-A	Objective Network for Operating with Resilience in a Contested Environment	Alex	Bordetsky	HQMC DCI	HQMC DCI	Requirement	Funded
NPS-20-M013-A	Modeling, Simulation, and Experimentation to Examine and Improve Combat Active Replacement Factors (CARF)	Alejandro	Hernandez	HQMC I&L	HQMC I&L	Requirement	Funded
NPS-20-M251-A	Data Collection and Analysis to Support a Limited	Robert	Koyak	HQMC M&RA	HQMC M&RA	Requirement	Funded
NPS-20-M009-B	Software Development Now and in the Cloud – A Case	Carl	Albing	HQMC P&R	HQMC P&R	Requirement	Funded
NPS-20-M163-A	Quantifying Enterprise Risk to Enable Portfolio Analyses	Kenneth	Doerr	HQMC P&R	HQMC P&R	Requirement	Funded

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NPS-20-M236-A	Fire Support Coordination Cognitive Assistant (FSCn CA) for MAGTF Operations	Arkady	Godin	HQMC PP&O	HQMC PP&O	Requirement	<i>Funded*</i>
NPS-20-M284-C	Context Modeling in Support of Non-lethal Weapon	Steven	Hall	JNLWD	HQMC PP&O	Requirement	Funded
NPS-20-M117-A	MARSOC SOF-MAGTF Capabilities Integrations Analysis and Operational Modeling (Continuation)	Robert	Burks	MARSOC	HQMC PP&O	Requirement	Funded
NPS-20-M124-A	Evaluating and Improving the Representation of	Curtis	Blais	MCMSO	MCCDC	Requirement	Funded
NPS-20-M129-A	Improving Physiological Modeling in Combat Simulations	Curtis	Blais	MCMSO	MCCDC	Requirement	Funded
NPS-20-M046-A	Tactical Cybersecurity Decision Matrix for COTS UAS	Douglas	Van Bossuyt	MCWL	MCCDC	Requirement	Funded
NPS-20-M183-A	MCWL Innovative Employment of the F35B in	Jeffrey	Kline	MCWL	MCCDC	Requirement	Funded
NPS-20-M041-B	Supply & Maintenance Predictive Modeling and	Ying	Zhao	MCSC	MCSC	Requirement	Funded
NPS-20-N133-A	Building Connectedness: Managing Tensions Between Individual Participation and Organizational Control in Online Workplace Communities	Kathryn	Aten	N1	N1	Requirement	Funded
NPS-20-N191-B	Social Network Analysis, Connectedness, Intrinsic	Gail	Thomas	N1	N1	Requirement	Funded
NPS-20-N333-A	Inference on Missing Information on a Social Network	Ruriko	Yoshida	N1	N1	Requirement	Funded
NPS-20-N338-A	The Effects of Minority/Female Role Models and Diversity on Retention	Jeremy	Arkes	N1	N1	Requirement	Funded
NPS-20-N351-A	Embedding a Formal Knowledge Management (KM)	Shelley	Gallup	N1	N1	Requirement	Funded
NPS-20-N319-A	Blended Training Environment	Simona	Tick	NETC	N1	Requirement	Funded
NPS-20-N326-A	Reliable Learning without Persistent Network Access	Randy	Maule	NETC	N1	Requirement	Funded
NPS-20-N038-A	Adaptive Data Flow	Randy	Maule	N2/N6	N2/N6	Requirement	Funded
NPS-20-N069-A	Testing and Refinement of Bayesian Data Analytics for	Wendell	Nuss	N2/N6	N2/N6	Requirement	Funded
NPS-20-N164-A	Shipboard Deployment Testing of Light Fidelity (LiFi) with Power Line Communications (PLC)	Weilian	Su	N2/N6	N2/N6	Requirement	Funded
NPS-20-N313-A	Data Strategies in Support of the Naval Operational	Arkady	Godin	N2/N6	N2/N6	Requirement	<i>Funded*</i>

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NPS-20-N349-B	Leveraging Blockchain as an Autonomous Unclass Software Distribution Support	Peter	Ateshian	N2/N6	N2/N6	Requirement	Funded
NPS-20-N214-A	Cyber Warfighting System for Resilience and Response	Scott	Jasper	USFCC/C10F	N2/N6	Requirement	Funded
NPS-20-N238-A /	Using Virtual Environments and 3D to Assess Issues	Scott/Eugene	Miller/Paulo	N2/N6, N9	N2/N6, N9	Requirement	Funded*
NPS-20-N068-A	Great Power Competition and Strategic Deterrence –	Mikhail	Tsyppkin	N3/N5	N3/N5	Requirement	Funded*
NPS-20-N084-A	Mitigating the Impact of China’s BRI on U.S. Interests and Access in the Indo-Pacific	Michael	Glosny	N3/N5	N3/N5	Requirement	Funded*
NPS-20-N269-A	21st Century Naval Revolutions	James	Russell	N3/N5	N3/N5	Requirement	Funded
NPS-20-N271-A	Russian Federation A2AD Posture: Global Impact on USN	Donald	Abenheim	N3/N5	N3/N5	Requirement	Funded
NPS-20-N307-A	China's Strategic Modernization in a Post-INF Treaty World	Michael	Glosny	N3/N5	N3/N5	Requirement	Funded
NPS-20-N005-A	New concepts for In Theater Ship Repair	Simon	Veronneau	N4	N4	Requirement	Funded
NPS-20-N215-A	Applying Big Data Analytics to Improve Naval Aviation Sustainment	Douglas	MacKinnon	N4	N4	Requirement	Funded
NPS-20-N225-B	NAVEUR implications of the current EUCOM’s POL Capability & Capacity	Geraldo	Ferrer	N4	N4	Requirement	Funded
NPS-20-N247-A	Optimal Pre-Positioning of Bulk Fuel Resources	Jefferson	Huang	N4	N4	Requirement	Funded
NPS-20-N250-A	Sustaining our Submarine Forces for Phase 0 and Phase II in a Contested Environment Against Peer and Near Peer Countries	Simon	Veronneau	N4	N4	Requirement	Funded
NPS-20-N290-B	Navy Additive Manufacturing Afloat Capability Analysis	Douglas	Van Bossuyt	N4	N4	Requirement	Funded
NPS-20-N362-A	Blockchain Technology in Support of Navy Logistics and Global Supply Chains	Walter	Kendall	N4	N4	Requirement	Funded
NPS-20-N362-B	Reconditioning Blockchain to Enable Global Supply Chain Assurance	Britta	Hale	N4	N4	Requirement	Funded
NPS-20-N033-A	Network Traffic Covert Channel Detection and	John	Monaco	N8	N8	Requirement	Funded
NPS-20-N033-B	Identifying Anomalous Network Flow Activity Using Cloud Honeypots	Neil	Rowe	N8	N8	Requirement	Funded
NPS-20-N033-D	Machine Learning Techniques for Identifying Anomalous Network Traffic	Victor	Garza	N8	N8	Requirement	Funded

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NPS-20-N052-A	Naval Aviation Readiness Performance Pricing Model Integration (Phase 2) (Continuation)	Douglas	MacKinnon	N8	N8	Requirement	Funded
NPS-20-N053-A	Maritime Readiness Performance/Pricing Model	Paul	Beery	N8	N8	Requirement	Funded
NPS-20-N109-B	Development Time of Zero-Day Cyber Exploits in Support of Offensive Cyber Operations	Gurminder	Singh	N8	N8	Requirement	Funded
NPS-20-N152-A	Optimizing Distributed, Collaborative MCM Missions with Unmanned Maritime Vehicles	Sean	Kragelund	N8	N8	Requirement	Funded*
NPS-20-N101-A	Optimizing Naval TACAIR Training & Readiness Requirements Generation	Robert	Semmens	N9	N9	Requirement	Funded
NPS-20-N113-B	Modeling and Simulation of Naval Directed Energy Weapons Engagements	Bonnie	Johnson	N9	N9	Requirement	Funded
NPS-20-N137-A	Impact on Naval Operations of Adopting JP5 as Single Fuel	Geraldo	Ferrer	N9	N9	Requirement	Funded
NPS-20-N190-A	Added Capability in RASP	Alan	Howard	N9	N9	Requirement	Funded
NPS-20-N208-A	Modeling Trust and Risk in USV operations	Moshe	Kress	N9	N9	Requirement	Funded
NPS-20-N303-A	Human-Unmanned Teaming in Distributed Maritime Operations (Continuation)	Mark	Nissen	N9	N9	Requirement	Funded
NPS-20-N342-A	Modeling the Operational Value of Data Fusion on ASW and Other Missions	Scot	Miller	N9	N9	Requirement	Funded
NPS-20-N096-A	NSW Lessons Learned Improvement (Continuation)	Shelley	Gallup	NAVSPEC WARCUM	N9	Requirement	Funded
NPS-20-N159-A	Non-Standard Navigational Methods for Unmanned Aerial Vehicles (UAV)	Sean	Kragelund	NAVSPEC WARCUM	N9	Requirement	Funded
NPS-20-N159-B	Integrated IMU/EO-Sensor Navigation System for Aerial Vehicles	Oleg	Yakimenko	NAVSPEC WARCUM	N9	Requirement	Funded
NPS-20-N229-A	Simulation Modeling of FRC I Level CASS Bench Operations	Susan	Aros	CNAF	USFF	Requirement	Funded
NPS-20-N233-A	Augmented Reality Use During Aircraft Moves Decrease	Meghan	Kennedy	CNAF	USFF	Requirement	Funded
NPS-20-N071-A	IPCL Gap Analysis and Visualization	Magdi	Kamel	CNSF	USFF	Requirement	Funded

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NPS-20-N279-A	Assessment of USV Certification Requirements for COLREGS Compliance, Anti-Tamper, Environmental and General Safety	Brian	Wood	CNSF	USFF	Requirement	Funded
NPS-20-N179-A	Development and Validation of System Engineering Based T&E Methodology for Operational Demonstration of Autonomous Undersea Vehicles	Donald	Brutzman	COMOPTEVFOR	USFF	Requirement	Funded
NPS-20-N309-A	Employing Machine Learning to Predict Student Aviator Performance	Magdi	Kamel	COMPACFLT	USFF	Requirement	Funded
NPS-20-N309-B	Analytics of Aviator Training Performance	Neil	Rowe	COMPACFLT	USFF	Requirement	Funded
NPS-20-N063-A	MEMS Acoustic Sensor for UAV Detection and	Fabio	Alves	COMSUBPAC	USFF	Requirement	Funded
NPS-20-N064-A	Implosive Seabed Effector Performance	Jarema	Didoszak	COMSUBPAC	USFF	Requirement	Funded
NPS-20-N076-A	Structural Analysis of 3D Printed Polymeric Materials and Associated Orientation-Dependent Mechanical Properties	Andy	Nieto	COMSUBPAC	USFF	Requirement	Funded
NPS-20-N298-A	Assessment of Ghost Swimmer Performance in Shallow Water with Marine Growth and the Surf Zone	Joseph	Klamo	NECC	USFF	Requirement	Funded
NPS-20-N059-B	Teach RADARs to Communicate	Ric	Romero	NIWDC	USFF	Requirement	Funded
NPS-20-N072-A	5G Cellular Communications for Flight Deck Radios to Reduce Electromagnetic Signature	Valdis	Berzins	NIWDC	USFF	Requirement	Funded