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Topic IREF ID	Title	PI Fname	PI LName	TS ORG	TRB ORG	Validation Status	Funding Status
NPS-20-N271-A	Russian Federation A2AD Posture: Global Impact on USN	Donald	Abenheim	N3/N5	N3/N5	Requirement	Funded
NPS-20-M009-B	Software Development Now and in the Cloud – A Case Study	Carl	Albing	HQMC P&R	HQMC P&R	Requirement	Funded
NPS-20-N063-A	MEMS Acoustic Sensor for UAV Detection and Localization	Fabio	Alves	COMSUBPAC	USFF	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-N229-A	Simulation Modeling of FRC I Level CASS Bench Operations	Susan	Aros	CNAF	USFF	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-N349-B	Leveraging Blockchain as an Autonomous Unclass Software Distribution Support	Peter	Ateshian	N2/N6	N2/N6	Requirement	Funded
NPS-20-N213-A	MDUSV ISR Mission Requirements, Equipment, and Force Structure	John	Audia	SPAWAR	ASN RDA	Requirement	Funded
NPS-20-N053-A	Maritime Readiness Performance/Pricing Model Integration (Phase 1)	Paul	Beery	N8	N8	Requirement	Funded
NPS-20-N143-A	Effectiveness of Hypervelocity Gun Based Defense	Paul	Beery	ONR	ASN RDA	Requirement	Funded
NPS-20-N072-A	5G Cellular Communications for Flight Deck Radios to Reduce Electromagnetic Signature	Valdis	Berzins	NIWDC	USFF	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	Curtis	Blais	MCMSO	MCCDC	Requirement	Funded
NPS-20-M157-A	Objective Network for Operating with Resilience in a	Alex	Bordetsky	HQMC DCI	HQMC DCI	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-M117-A	MARSOC SOF-MAGTF Capabilities Integrations Analysis	Robert	Burks	MARSOC	HQMC PP&O	Requirement	Funded
NPS-20-N064-A	Implosive Seabed Effector Performance	Jarema	Didoszak	COMSUBPAC	USFF	Requirement	Funded

*Funded = funding is contingent upon a modification in project scope/budget.

List sorted by PI LName > IREF ID.

Topic IREF ID	Title	PI Fname	PI LName	TS ORG	TRB ORG	Validation Status	Funding Status
NPS-20-N186-A	Decoupling the Engine from the Engine Room	Jarema	Didoszak	NAVSEA	ASN RDA	Requirement	Funded
NPS-20-M163-A	Quantifying Enterprise Risk to Enable Portfolio Analyses Across the United States Marine Corps	Kenneth	Doerr	HQMC P&R	HQMC P&R	Requirement	Funded
NPS-20-N137-A	Impact on Naval Operations of Adopting JP5 as Single Fuel	Geraldo	Ferrer	N9	N9	Requirement	Funded
NPS-20-N225-B	NAVEUR implications of the current EUCOM's POL	Geraldo	Ferrer	N4	N4	Requirement	Funded
NPS-20-N096-A	NSW Lessons Learned Improvment (Continuation)	Shelley	Gallup	NAVSPEC WARCOM	N9	Requirement	Funded
NPS-20-N351-A	Embedding a Formal Knowledge Management (KM) Process	Shelley	Gallup	N1	N1	Requirement	Funded
NPS-20-N033-D	Machine Learning Techniques for Identifying	Victor	Garza	N8	N8	Requirement	Funded
NPS-20-N084-A	Mitigating the Impact of China's BRI on U.S. Interests	Michael	Glosny	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-M236-A	Fire Support Coordination Cognitive Assistant (FSCn CA)	Arkady	Godin	HQMC PP&O	HQMC PP&O	Requirement	Funded*
NPS-20-N313-A	Data Strategies in Support of the Naval Operational Architecture	Arkady	Godin	N2/N6	N2/N6	Requirement	Funded*
NPS-20-N362-B	Reconditioning Blockchain to Enable Global Supply Chain Assurance	Britta	Hale	N4	N4	Requirement	Funded
NPS-20-M284-C	Context Modeling in Support of Non-lethal Weapon Rules-of-Engagement	Steven	Hall	JNLWD	HQMC PP&O	Requirement	Funded
NPS-20-M013-A	Modeling, Simulation, and Experimentation to Examine	Alejandro	Hernandez	HQMC I&L	HQMC I&L	Requirement	Funded
NPS-20-M151-C	Removing Barriers to Hydrogen Use on Shipboard UAS	Alan	Howard	HQMC AVN	HQMC AVN	Requirement	Funded
NPS-20-N190-A	Added Capability in RASP	Alan	Howard	N9	N9	Requirement	Funded
NPS-20-N247-A	Optimal Pre-Positioning of Bulk Fuel Resources	Jefferson	Huang	N4	N4	Requirement	Funded
NPS-20-N214-A	Cyber Warfighting System for Resilience and Response	Scott	Jasper	USFCC/C10F	N2/N6	Requirement	Funded
NPS-20-N113-B	Modeling and Simulation of Naval Directed Energy	Bonnie	Johnson	N9	N9	Requirement	Funded
NPS-20-N071-A	IPCL Gap Analysis and Visualization	Magdi	Kamel	CNSF	USFF	Requirement	Funded
NPS-20-N309-A	Employing Machine Learning to Predict Student Aviator Performance	Magdi	Kamel	COMPACFLT	USFF	Requirement	Funded

Topic IREF ID	Title	PI Fname	PI LName	TS ORG	TRB ORG	Validation Status	Funding Status
NPS-20-N362-A	Blockchain Technology in Support of Navy Logistics and Global Supply Chains	Walter	Kendall	N4	N4	Requirement	Funded
NPS-20-N233-A	Augmented Reality Use During Aircraft Moves Decrease Aviation Ground Mishaps	Meghan	Kennedy	CNAF	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-M183-A	MCWL Innovative Employment of the F35B in	Jeffrey	Kline	MCWL	MCCDC	Requirement	Funded
NPS-20-M251-A	Data Collection and Analysis to Support a Limited Objective Test/Experiment (LOT/E) of aBillet Marketplace for Infantry Marine Officers	Robert	Koyak	HQMC M&RA	HQMC M&RA	Requirement	Funded
NPS-20-N152-A	Optimizing Distributed, Collaborative MCM Missions with Unmanned Maritime Vehicles	Sean	Kragelund	N8	N8	Requirement	Funded*
NPS-20-N159-A	Non-Standard Navigational Methods for Unmanned Aerial Vehicles (UAV)	Sean	Kragelund	NAVSPEC WARCOM	N9	Requirement	Funded
NPS-20-N208-A	Modeling Trust and Risk in USV operations	Moshe	Kress	N9	N9	Requirement	Funded
NPS-20-N146-B	Commercial Batteries for Navy Use	Ira	Lewis	NAVSEA	ASN RDA	Requirement	Funded
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-N052-A	Naval Aviation Readiness Performance Pricing Model Integration (Phase 2) (Continuation)	Douglas	MacKinnon	N8	N8	Requirement	Funded
NPS-20-N215-A	Applying Big Data Analytics to Improve Naval Aviation Sustainment	Douglas	MacKinnon	N4	N4	Requirement	Funded
NPS-20-N038-A	Adaptive Data Flow	Randy	Maule	N2/N6	N2/N6	Requirement	Funded
NPS-20-N326-A	Reliable Learning without Persistent Network Access	Randy	Maule	NETC	N1	Requirement	Funded
NPS-20-N342-A	Modeling the Operational Value of Data Fusion on ASW and Other Missions	Scot	Miller	N9	N9	Requirement	Funded

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Title	PI Fname	PI LName	TS ORG	TRB ORG	Validation Status	Funding Status
Using Virtual Environments and 3D to Assess Issues Related to JF iso DMO / Integrating Joint Fires in Support of DMO with Focus on Integrating Unmanned and Conventional Fires	Scott/Eugene	Miller/Paulo	N2/N6, N9	N2/N6, N9	Requirement	Funded*
Network Traffic Covert Channel Detection and	John	Monaco	N8	N8	Requirement	Funded
Corrosion Testing of Cold Sprayed Coatings and Deposits in Simulated Austere Marine Environments	Andy	Nieto	NAVSEA	ASN RDA	Requirement	Funded
Structural Analysis of 3D Printed Polymeric Materials and Associated Orientation-Dependent Mechanical Properties	Andy	Nieto	COMSUBPAC	USFF	Requirement	Funded
Human-Unmanned Teaming in Distributed Maritime	Mark	Nissen	N9	N9	Requirement	Funded
Testing and Refinement of Bayesian Data Analytics for Tactical Prediction Capabilities in Data Denied Areas	Wendell	Nuss	N2/N6	N2/N6	Requirement	Funded
Incorporation of Operational Modeling Factors into Early Stage Ship Design via Digital Engineering	Fotis	Papoulias	ONR	ASN RDA	Requirement	Funded
Railgun Capability on Amphibious Ships	Eugene	Paulo	ONR	ASN RDA	Requirement	Funded
Shipboard Hydrogen Unmanned Aerial System	Anthony	Pollman	HQMC AVN	HQMC AVN	Requirement	Funded
Teach RADARs to Communicate	Ric	Romero	NIWDC	USFF	Requirement	Funded
Identifying Anomalous Network Flow Activity Using Cloud Honeypots	Neil	Rowe	N8	N8	Requirement	Funded
Analytics of Aviator Training Performance	Neil	Rowe	COMPACFLT	USFF	Requirement	Funded
21st Century Naval Revolutions	James	Russell	N3/N5	N3/N5	Requirement	Funded
Optimizing Naval TACAIR Training & Readiness Requirements Generation	Robert	Semmens	N9	N9	Requirement	Funded
Development Time of Zero-Day Cyber Exploits in Support of Offensive Cyber Operations	Gurminder	Singh	N8	N8	Requirement	Funded
Shipboard Deployment Testing of Light Fidelity (LiFi) with Power Line Communications (PLC)	Weilian	Su	N2/N6	N2/N6	Requirement	Funded
	Using Virtual Environments and 3D to Assess Issues Related to JF iso DMO / Integrating Joint Fires in Support of DMO with Focus on Integrating Unmanned and Conventional Fires Network Traffic Covert Channel Detection and Corrosion Testing of Cold Sprayed Coatings and Deposits in Simulated Austere Marine Environments Structural Analysis of 3D Printed Polymeric Materials and Associated Orientation-Dependent Mechanical Properties Human-Unmanned Teaming in Distributed Maritime Testing and Refinement of Bayesian Data Analytics for Tactical Prediction Capabilities in Data Denied Areas Incorporation of Operational Modeling Factors into Early Stage Ship Design via Digital Engineering Railgun Capability on Amphibious Ships Shipboard Hydrogen Unmanned Aerial System Teach RADARs to Communicate Identifying Anomalous Network Flow Activity Using Cloud Honeypots Analytics of Aviator Training Performance 21st Century Naval Revolutions Optimizing Naval TACAIR Training & Readiness Requirements 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NPS-20-N191-B	Social Network Analysis, Connectedness, Intrinsic Motivation, and the Effect on Sailor Retention	Gail	Thomas	N1	N1	Requirement	Funded
NPS-20-N319-A	Blended Training Environment	Simona	Tick	NETC	N1	Requirement	Funded
NPS-20-N068-A	Great Power Competition and Strategic Deterrence – Russian New Capabilities Impact on NATO and the U.S.	Mikhail	Tsypkin	N3/N5	N3/N5	Requirement	Funded*
NPS-20-M046-A	Tactical Cybersecurity Decision Matrix for COTS UAS	Douglas	Van Bossuyt	MCWL	MCCDC	Requirement	Funded
NPS-20-N290-B	Navy Additive Manufacturing Afloat Capability Analysis	Douglas	Van Bossuyt	N4	N4	Requirement	Funded
NPS-20-N005-A	New concepts for In Theater Ship Repair	Simon	Veronneau	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-N279-A	Assessment of USV Certification Requirements for COLREGS Compliance, Anti-Tamper, Environmental and General Safety	Brian	Wood	CNSF	USFF	Requirement	Funded
NPS-20-N159-B	Integrated IMU/EO-Sensor Navigation System for Aerial Vehicles	Oleg	Yakimenko	NAVSPECWARCO	N9	Requirement	Funded
NPS-20-N333-A	Inference on Missing Information on a Social Network	Ruriko	Yoshida	N1	N1	Requirement	Funded
NPS-20-M041-B	Supply & Maintenance Predictive Modeling and Simulation Analysis Tool	Ying	Zhao	MCSC	MCSC	Requirement	Funded