



2019 SPONSORED RESEARCH TOPICS

The Acquisition Research Program (ARP) of the Graduate School of Business & Public Policy at the Naval Postgraduate School accepts research topics from potential sponsors. These topics have been compiled to assist graduate students in locating topics for their research projects.

Topic #	Sponsored Topic
T19-001	<p>Topic: Augmenting the Acquisition Decision Processes with Data Analytics</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-002	<p>Topic: Applying Model Based Systems Engineering to Defense Acquisition</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>



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T19-003	<p>Topic: The Role of Innovation in Improving Defense Acquisition Outcomes</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-004	<p>Topic: New Dimensions in Managing Systems of Systems</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-005	<p>Topic: Effects of Risk Tolerant/Averse Behavior on Cost, Schedule, and Performance</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>



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T19-006	<p>Topic: Rapid Acquisition</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-007	<p>Topic: Cybersecurity</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-008	<p>Topic: Breaking down silos, enterprise management</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>



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T19-009	<p>Topic: Incentivizing the workforce</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-010	<p>Topic: Leadership Development and Talent Management</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-011	<p>Topic: Innovative Contracting Strategies - contracting at the speed of relevance</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>



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T19-012	<p>Topic: Industry Best Practices and Barriers to applying them to DoN Acquisition</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-013	<p>Topic: Invigorating and Understanding the Industrial Base</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-014	<p>Topic: Workforce Bench Strength - now and planning for the future</p> <p>The 2018 National Defense Strategy outlines the following approach to generate decisive and sustained U.S. military advantages: (1) Build a More Lethal Force; (2) Strengthen Alliances and Attract New Partners; and (3) Reform the Department for Greater Performance and Affordability.</p> <p>The Department of the Navy Acquisition Workforce FY16-FY22 Strategic Plan outlines three major goals to build a workforce to compete and win now and in the future: (1) Energize the workforce; (2) Focus on professional and technical excellence; and (3) Reinforce responsibility and accountability.</p> <p>Student researchers should exercise judgment and original thought toward attaining the goals of the study within broad parameters of the selected research area of interest. Researchers are encouraged to be creative in the selection of the technical and management processes; approaches; and consider the greatest and broadest impact possible.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>



Topic #	Sponsored Topic
T19-015	<p>Topic: Evolutionary/Incremental Acquisition</p> <p>Within Defense Acquisition, an evolutionary strategy with incremental developmental approach is the preferred strategy for most acquisition programs. The basic advantage over a single-step acquisition developmental approach is that the warfighter can get some capability sooner than waiting for full capability. But, how hard is this to do for program managers (PMs)? The focus of this research is to examine how difficult it is to successfully develop an evolutionary acquisition strategy with an incremental development approach. The research will use the Joint Common Missile (JCM) program and the subsequent Joint Air Ground Missile (JAGM) program as the basis to survey acquisition professionals. The research will develop a survey for acquisition professionals that will ask them to develop an acquisition strategy for the JCM program based on approved requirements, a consensus technology risk assessment and sufficient funding. The results of the survey will be recommended acquisition strategies. These strategies will then be compared to the actual strategy implemented in the JAGM program. The research will provide insights into how PMs can better develop acquisition strategies based on requirements, technology, risk, urgency and funding. The study will also examine the effect that the approved requirements, technology risk assessment and funding levels have on the recommended acquisition strategy.</p> <p>Research Question: How difficult is it to develop a successful incremental acquisition approach for defense acquisition programs?</p> <p>POC: Dr. Robert F. Mortlock, COL (Ret), U.S. Army, 831-656-267, rfmortlo@nps.edu;</p>
T19-016	<p>Topic: Why Do Programs Fail? An Analysis of Defense Program Manager Decision Making in Complex and Chaotic Program Environments</p> <p>This qualitative and ethnographic study will study DoD Program Managers to better understand the sense-making processes in complex and chaotic program environments. We will focus on how the program manager gains insight in the decision making process and correlate this with overall program performance. Chaotic and complex decision making environments are not limited to Defense program environments. Commercial programs tend to organize similarly to Defense programs and experience similar cost and schedule issues and cost their corporations millions of dollars in lost revenue. This study will provide a greater level of insight into these issues and will be the basis upon which future research and possible policy can be derived to effect the performance of complex programs. Additionally, by studying decision making in complex and chaotic environments, we may be able to correlate these findings with other chaotic scenarios such as disaster relief and other emergency situations environments. The nonlinearity of these events in which human decision making is predicated by chaos may have certain similarities and patterns that can be studied with regard to their association with the individuals involved in the decision making process. If we better understood the human in the loop influence on decision making in ambiguous environments, perhaps future organizational and leadership theory and methods could be better tailored to the environment leading to more predictable outcomes.</p> <p>Research Question: How does the program manager gain insight in the complex and chaotic decision making process and how does this insight correlate with overall program performance?</p> <p>POC: Raymond Jones; GSBPP, (831)656-3960, rdjone1@nps.edu</p>



Topic #	Sponsored Topic
T19-017	<p>Topic: Measuring process efficiency in defense acquisition management: Comparing the acquisition processes of the US, other countries and/or large multi-nationals</p> <p>Study Questions:</p> <ul style="list-style-type: none"> • What are the key development processes used by nations and multi-nationals? • What are the efficiencies? • Can the development costs for similar acquisitions be compared? • What (if any) are the reasons for more or less efficiency? • What are the differences in buying performance between nations and multi-nationals? • What causes the differences? • What are the results? • How can you measure efficiency? <p>POC: Dr. Charles K. Pickar, GSBPP (703) 589-7544, ckpickar@nps.edu and Dr. Robert F. Mortlock, COL (Ret), U.S. Army, GSBPP (831) 656-267, rfmortlo@nps.edu</p>
T19-018	<p>Topic: Innovative Defense Acquisition Concepts</p> <p>Strategic Communication (STRATCOM) Plans for Defense Acquisition Programs</p> <p>This project would look at the importance of a STRATCOM plan in the success or failure of defense acquisition programs. A Stratcom plan is more than a public affairs guidance, and it serves as a program synchronization tool for the PM to get an entire Service “on the same sheet of music” for a particular program. This project would investigate the existence of Stratcom plans for particular programs, and examine possible correlation with program success. This project would also look into the best techniques to develop and get a plan approved that is actually useful to Senior leaders.</p> <p>POC: Dr. Robert F. Mortlock, COL (Ret), U.S. Army, 831-656-2672, rfmortlo@nps.edu</p>
T19-019	<p>Topic: Organic and Commercial Industrial Base</p> <p>How to maintain the viability of each in a time of declining resources.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-020	<p>Topic: Humanitarian Aid Disaster Relief</p> <p>Provide an assessment of the potential utility of LCS and JHSV ships in HADR operations.</p> <p>POC: Karey L. Shaffer, MBA, ARP, (831) 656-2257, klshaffe@nps.edu</p>
T19-021	<p>Topic: Case Studies of Defense Acquisition Programs</p> <p>The development of research and/or teaching cases studies based on past acquisition programs provides unique insights into the challenges within the Defense Acquisition institution. These cases studies can then be used to enhance the course content and keep the courses relevant with current issues facing program managers. Case studies can focus on critical thinking, decision-making, stakeholder management, cost benefit analysis, ambiguous test results, quality challenges, and other areas pertinent to project management. Case study development involves the creation of new and innovative ways to relay information. Potential topics include combat camouflage uniforms, hard armor industrial base, milestone cost estimating, deployment uniform readiness, advanced parachute development, soldier protection system acquisition strategy, and contracting strategies for light-weight advanced combat helmets.</p> <p>Research Question: Can we use a deep-dive analysis of past defense acquisition programs to document lessons learned, inform acquisition reform initiatives and enhance critical thinking among acquisition professionals?</p> <p>POC: Dr. Robert F. Mortlock, COL (Ret), U.S. Army, 831-656-267, rfmortlo@nps.edu</p>



Topic #	Sponsored Topic
T19-022	<p>Topic: Acquisition Workforce: Program Management (PM) Functional Competencies</p> <p>In September 2016, the Office of the Assistant Secretary of Defense for Acquisition approved the program management functional career field competencies. This research will study the alignment of these DoD PM competencies with the international recognized standards for project, program and portfolio management published by PMI by mapping DoD PM to PMI competencies. The DoD broadly uses the term program management (PM) and establishes PM certification standards for levels I, II, and III with specific training, education, and experience standards required for Defense Acquisition Workforce Improvement Act (DAWIA) certification. PMI uses project, program and portfolio management terms. PMI offers certifications in project management professional (PMP) based on the project management body of knowledge (PMBOK), program management professional (PgMP) based on the Standard for Program Management, and portfolio management professional (PfMP) based on the Standard for Portfolio Management. This work will provide traceability between the DoD PM competencies and the industry standard competencies, highlight areas of inconsistencies, provide recommendations for changes in DoD standards for training and education as well as potentially policy changes.</p> <p>Research Question: How do the DoD program management functional competencies align with Project Management Institute (PMI) standards for project, program, and portfolio management?</p> <p>POC: Dr. Robert F. Mortlock, COL (Ret), U.S. Army, 831-656-267, rfmortlo@nps.edu</p>

