Proceedings of the Annual General Donald R. Keith Memorial Conference
West Point, New York, USA
May 4, 2017
A Regional Conference of the Society for Industrial and Systems Engineering

Program Executive Office Special Operations Forces Warrior Process Modeling and Analysis

Christopher Boyle, Kristopher Lindner, Baggio Saldivar, and Matthew Ziegeler

United States Military Academy

Corresponding author's Email: matthew.ziegeler@usma.edu

Author Note: Cadets Boyle, Lindner, Saldivar, and Ziegeler are seniors in the Department of Systems Engineering at the United States Military Academy. This work is part of our senior capstone research in support of the Program Executive Office for Special Operations Forces Warrior (PEO SOF Warrior) and was completed under the guidance of our capstone advisor, COL Dan McCarthy. Our experience working with PEO SOF Warrior has enhanced the team's understanding and ability to apply a systematic approach to complex problems. Any requests for more information should be sent to the corresponding Cadet Matthew Ziegeler at the listed email address.

Abstract: Special Operations Forces Acquisition, Technology, and Logistics (SOF AT&L) is responsible for meeting the current and future operational needs of U.S. special operations forces and does so by maintaining an agile acquisition process. Working with the Program Executive Office (PEO) SOF Warrior, this research seeks to improve the process by which Special Operations Command (SOCOM) identifies emerging technologies and selects for further development those technologies that meet their short and long-term capability gaps specific to USSOCOM operators conducting decisive SOF activities and global operations against terrorist networks. By attending SOF AT&L sponsored industry collaboration events and interviewing relevant stakeholders, this study observed first-hand how the acquisition process works in the SOF community while also gaining a better understanding of how PEO SOF Warrior identifies and selects emerging technologies to pursue. The team conducted thorough research and stakeholder analysis and subsequently completed a functional analysis to create an in-depth view of PEO SOF Warrior's current technology scouting process. This work seeks to improve this process by making recommendations that enhance the way that the PEO communicates needs to the technology community, solicits potential technologies for examination, and then selects the most promising technologies for further exploration and potential acquisition. Altogether, this enhanced process will better equip SOF Warfighters to bring the fight to the enemy.

Keywords: PEO SOF Warrior, Special Operations Forces Acquisitions, Capability Gaps, Process Modeling and Analysis