

Talent Show: Army Utilization of SAMS Warrant Officers

A Monograph

by

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Abstract

Talent Show: Army Utilization of SAMS Warrant Officers, by CW4 Terry A. Shelton, US Army, 59 pages.

This monograph provides discussion on issues surrounding the development, training and education of modern US Army warrant officers, specifically focused on utilization beyond the School of Advanced Military Studies' Advanced Military Studies Program. This conversation is based on the warrant officer doctrinal role, history, and the concept behind changes to the evolving model from the Army Warrant Officer Strategy.

Brief warrant officer history provides foundation of the existing paradigm which shapes the US Army's concepts of knowledge management, leadership, and the decision-making process. The Army Warrant Officer Strategy offers education and employment of warrant officer personnel within Army systems. Without strategy, administration of the warrant officer cohort and its effect on past, present, and future efforts including Multi-Domain Battle (MDB) expose the difficulties of supporting the Army Operating Concept.

Enthusiasm or ignorance topples strategy if converging efforts fail to balance requirements. The Army Operating Concept depends upon understanding history, theory, doctrine, strategy, systems, design, and their interdependent role while managing talent. This brief study of these efforts provides a glimpse into how seemingly insignificant omissions in design by using oversimplified efforts can fail to fulfill the Army's strategies and concepts.

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Acronyms

ADA	Air Defense Artillery
ADP	Army Doctrine Publication
AMSP	Advanced Military Studies Program
ARDEC	Armament Research, Development and Engineering Center
AVN	Aviation
CAC	Combat Arms Center
CGSC	Command and General Staff College
CONPLAN	Contingency Plan
CONOP	Concept of the Operation
DARPA	Defense Advanced Research Projects Agency
EAB	Echelons Above Brigade
EUCOM	European Command
EXORD	Execution Order
FA	Field Artillery
HQDA	Headquarters, Department of the Army
ISCARL	Ike Skelton Combined Arms Research Library
ILE	Intermediate Level Education
JCS	Joint Chiefs of Staff
MFE	Maneuver Fires and Effects
MI	Military Intelligence
MOS	Military Occupational Specialty
OD	Ordinance
OPLAN	Operational Plan
PACOM	Pacific Command
SAMS	School of Advanced Military Studies

SCO	Strategic Capabilities Office
SF	Special Forces
SOF	Special Operations Forces
TRADOC	Training and Doctrine Command
TSOC	Theatre Special Operations Command
TTP	Tactics, Techniques and Procedures
TWOS	Total Warrant Officer Study
USAJFKSWCS	United States Army John F. Kennedy Special Warfare Center and School
WO	Warrant Officer
WOFT	Warrant Officer Flight Training
WOAC	Warrant Officer Advanced Course
WOBC	Warrant Officer Basic Course
WOCS	Warrant Officer Candidate School
SFWOI	Special Forces Warrant Officer Institute
WOILE	Warrant Officer Intermediate Level Education
WOSC	Warrant Officer Staff Course
WOSSC	Warrant Officer Senior Staff Course
WOTTC	Warrant Officer Tactical Training and Certification Course

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Introduction

The Army should consider integrating a certain percentage of senior warrant officers into the Army War College, ILE ...and other advanced training opportunities to expand and complement the education, training, and future utilization of the warrant officer cohort. This initiative will allow warrant officers to train in a joint service and intergovernmental environment with coalition partners. This will afford the Army's technical experts the opportunity to share their expertise and experience when operating within a joint and foreign environment.

— CW3 Wayne A. Baugh, *Sustainment Warrant Officers' Expanded Roles*

US Army Warrant Officers enable the Army's marriage of maneuver and logistics using leadership and intellectual tools. Many of those tools have been provided via history, and some from the recent *Army Warrant Officer 2025 Strategy*.¹ By design, Warrant Officers have been part of the US Army's exploitation of tacit, experiential knowledge rather than written, explicit knowledge.²

In 2010, Warrant Officers gained acceptance to the School of Advanced Military Studies (SAMS), prescient to 2014's US Army *Third Offset Strategy* which regarded "human knowledge as crucial as it has ever been" to warfare.³ Similarly, the 2017 Multi-Domain Battle Concept intersected technology with humans to exploit cross-domain advantage.⁴ As stated, it was personnel specifically experienced and educated in future challenges to Army Operational Design

¹ US Department of the Army, *The Army Warrant Officer 2025 Strategy: In Support of Force 2025 and Beyond, 2016* (Washington, DC: Department of the Army, March 29, 2017), 1.

² US Department of the Army, Department of the Army Pamphlet 600-3, *Commissioned Officer Professional Development and Career Management* (Washington, DC: Department of the Army, June 21, 2017), 4.

³ Katie Lange, "3rd Offset Strategy 101: What It Is, What the Tech Focuses Are," *DoD Live, DOD News* (March 30, 2016): accessed July 28, 2017, <http://www.dodlive.mil/2016/03/30/3rd-offset-strategy-101-what-it-is-what-the-tech-focuses-are/>

⁴ US Department of the Army, *Multi-Domain Battle: Combined Arms for the 21st Century*, (Washington, DC: Department of the Army, February 24, 2017): accessed July 28, 2017, http://www.tradoc.army.mil/multidomainbattle/docs/MDB_WhitePaper.pdf, 1-4.

who will define the operational environment.⁵ This competition of dominant capability, dependent upon fusion of rapidly deployable Army personnel guiding these technologies in a globally-spanning, interagency environment remains the outlook of SAMS Advanced Military Studies Program (AMSP).⁶

The current US Army design lacks a prescriptive utilization plan to its occupational branches for US Army Warrant Officer graduates of AMSP. The lack of this prescription is a hazard. It puts at risk the Army's utility of the core purpose in Army operational problem solving, and specifically the golden opportunity to educate warrant officers simulating the fiscally-constrained but dynamic future environment. Army Human Resource Command (HRC) gives general parameters for utilization, however branches lack pre-planning of operational design usage commensurate with Army strategy to use these very finite resources from AMSP. Marrying AMSP talent directly to branch specific utilization results in more effective Crisis, Operational (OPLAN) and Contingency (CONPLAN) planning frequently used in the challenging joint and interagency defense environment. The AMSP education in operational art and design coupled to branch specific skills brings new resolution to the ways and means of increasingly challenged environments while broadening these officers.⁷

The brief 100-year history and rapid growth of US Army Warrant Officers is a steep trajectory. It has described the role of Warrant Officers as experience and technical experts in non-permissive and uncertain environments. Whether provided by warrant officers and/or contractors and civilian employees in Contracted Logistic Support (CLS), this increase has been

⁵ Wayne A. Baugh, "Sustainment Warrant Officers' Expanded Roles," *Army Sustainment, The Professional Bulletin of Army Sustainment* Volume 44, Issue 12 (January-February 2012): accessed November 30, 2017, http://www.almc.army.mil/alog/issues/JanFeb12/Sustainment_Warrant.html.

⁶ US Department of the Army, *The Army Talent Management Strategy 2025 and Beyond, 2016* (Washington, DC: Department of the Army, September 20, 2016), 4-1c.

⁷ David Vergun, "Solarium: Some warrants get more broadening than others," *US Army Online* (January 21, 2016): accessed July 28, 2017, <https://www.army.mil/article/161225>.

due to campaign designs in increasingly constrained and uncertain environments.⁸ This is precisely the role which US Army warrant officers were designed to fulfill, despite the limited current warrant officers (16.3%) in the officer inventory, seemingly trending toward growth (17.5%).⁹ However, it is this growth without efficient utility which draws attention to strategy.

Currently, US Army warrant officers are assessed, trained, educated and employed to fill a knowledge management role:

Tacit knowledge is what individuals know; a unique, personal store of knowledge gained from life experiences, training, and networks of friends, acquaintances, and professional colleagues. It includes learned nuances, subtleties, and workarounds. Intuition, mental agility, and response to crises are also forms of tacit knowledge.¹⁰

The Army requirement of expert technical understanding with management skill has evolved to where warrant officers are educated at the summit of design, planning, and its execution. Warrant Officers now acquire the same formal education alongside commissioned officers via the Command and General Staff College Intermediate Level Education (ILE) and the AMSP at Fort Leavenworth, Kansas. Post-ILE and field selects are provided tacit and explicit knowledge in theory, doctrine, history, and practice as volunteers meet requirements for a Master's degree in Military Operations. All graduates are trained to lead an operational planning team at division level and higher upon completion, key to synthesis of future operational support toward a more efficient operational force in keeping in with mid-grade officer and warrant officer development.

⁸ Eben Boothby, "Warrant Officers Leading Army's Change in Culture," *US Army Online STAND TO!* (February 13, 2017): accessed November 30, 2017, https://www.army.mil/article/182374/warrant_officers_leading_armys_change_in_culture.

⁹ US Department of Defense, Office of the Assistant Secretary of Defense for Manpower & Reserve Affairs Total Force Planning & Requirements Directorate "Defense Manpower Requirements Report Fiscal Year 2016," (February 2016): accessed December 5, 2017, <http://prhome.defense.gov/Portals/52/Documents/RFM/TFPRQ/docs/FY16%20DMRR.PDF>.

¹⁰ US Department of the Army. Army Training Publication (ATP) 6-01.1, *Techniques for Effective Knowledge Management* (Washington, DC: Government Printing Office, March 6, 2015), 1-3 and 1-6.

In 2016, the Army’s *Warrant Officer 2025 Strategy: In Support of Force 2025 and Beyond* provided direction for the future of the Warrant Officer. The strategy described broad development of Warrant Officers as leaders, as well as employment in new and challenging roles. These descriptions promised better timed education, commensurate with assignments, yielding personnel efficiencies influencing Army operations.¹¹ Warrant officer AMSP inclusion predates the *Warrant Officer 2025 Strategy*, and remains an education option despite its omission from the strategy. However, AMSP is not just an education, it is a mechanism for building officer redundancy into Army and Joint Crisis, OPLAN, and CONPLANs. AMSP develops “an individual’s doctrinal and experience-based knowledge to impact across Army Operational Design systems”, specifically planners saddled with the least technologically-enabled of circumstances.¹²

The Army demands a minimum one-year utility of graduates as a planner at the division level or higher post-AMSP graduation. Maximum use of the limited graduates from AMSP (Table 1) develops individual potential and multiplies Army operational capability.

Table 1: Composition of AY 2018 class population

SAMS AMSP Composition	
US Regular Army (RA) Officers	102
US Army National Guard Officers	5
US Army Reserve Officers	4
US Air Force Officers	10
US Navy Officers	0
US Marine Corps Officers	4
International Military Students	14
Civilian Interagency Students	4
Total	143

*Warrant officers included in Army Officer categories.

**Class attrition numbers not included.

Source: Author, from AMSP (2018) Introduction Week Briefing.

¹¹ US Army, *The Army Warrant Officer 2025 Strategy*, 2016, 1.

¹² US Army Combined Arms Center, School of Advanced Military Studies “Program Guide.” (Fort Leavenworth, KS: US Army Command and General Staff College, 2011).

AMSP graduates serving as Operational Planning Team leaders share their tacit and explicit knowledge, supporting and possibly educating leaders and staffs, fostering collective and individual responsibility, while solving complicated and sometimes complex problems.¹³ *The Talent Management Concept of Operations for Force 2025 and Beyond* recounts this:

Talent management, also known as human capital management, is one component of the broader human capital continuum. For example, the U.S. Office of Personnel Management describes a human capital framework as including five components: strategic alignment, knowledge management, talent management, culture, and accountability.

Division-level and higher headquarters confronted with operational problems maintain staff and generate plans routinely for the exigencies of a dynamic world and its environments. The concept of talent management priority by US Army HRC and Branch proponents ensure commissioned officer graduates remain effectively utilized.¹⁴ The warrant and commissioned officer residency at AMSP “stimulates shared understanding” between officer roles, the goal being realization of personnel interoperability.¹⁵ Army Talent Management strategy codifies this as “a way to enhance Army readiness by maximizing the potential of the Army’s greatest asset – our people.” By better understanding the talent of our workforce and the talent needed by unit requirements, the Army can more effectively “acquire, develop, employ, and retain the right talent, at the right time.”¹⁶

¹³ Chief Warrant Officer Five Kunz, “Army Senior Warrant Officer Council Memorandum 17-4, to Commandant, US Army Command and General Staff College.” September 22, 2017 (copy in author’s possession).

¹⁴ US Army, *The Army Talent Management Strategy 2025 and Beyond, 2016* (2016), 11.

¹⁵ Colonel Richard Hart Sinnreich, End of Tour Memorandum School of Advanced Military Studies to Commandant, US Army Command and General Staff College, June 10, 1986 (copy in author’s possession).

¹⁶ US Army, *The Army Talent Management Strategy 2025 and Beyond, 2016* (2016), 11.

The refined answer to this utilization issue is generated from very limited data. The only empirical data begins in 2011 and runs through 2015 with five warrant officer graduates and two prospective graduates by June of 2018. The limited set of AMSP results is dwarfed by the full history of warrant officer education with expected hazards -including misapplication for a variety of personal and professional reasons.

Research on this topic has uncovered no Army senior leadership intent for utilization of AMSP warrant officers beyond some professional emails classified beyond this publication level.¹⁷ However, analysis of US Army warrant officers in history, their AMSP application information, as well as the concepts and strategies which permit warrant officers in AMSP provides respective branch managers to predict and project a more effective and desired utilization of future volunteer populations. In concert with this, the limited data research and thusly constrained analysis in this monograph aimed to set a foundation for future research evolutions and assist in determining what AMSP throughput level is most efficient. The overall intent is to offer a prediction and prescription for AMSP warrant officer utilization to the US Army, allow prescriptive changes to take effect, and cultivate multiple options.

To understand prescriptive utilization of warrant officers one must first understand their creation, history and role. The odyssey of warrant officers' beginning as mere technicians inside warfighting functions until their current utility as leaders and integrators parallels the industrial age, wars, and the redistribution of power across militaries and the civil sectors, as interconnected as the systems in Figure 1 (below).¹⁸ It is in this intractable relationship with history, humanity, technology, and the phenomena of warfare that warrant officers derive their existence. As stated

¹⁷ Stefan Banach, "FW: EXSUM – Warrant Officer issues to VCSA" (Unclassified), April 13, 2010 (copy in author's possession).

¹⁸ US Army Training and Doctrine Command (TRADOC), Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World* (Washington, DC: Government Printing Office, October 2014), vi.

in the *Warrant Officer 2025 Strategy* we must find “warrant officers of character, competence and commitment who thrive in complex and uncertain environments.”¹⁹ The way to find something is to look for it within its paradigm, armed with questions, shaped by observation and analysis -recording the resulting discoveries and the change they must bring.

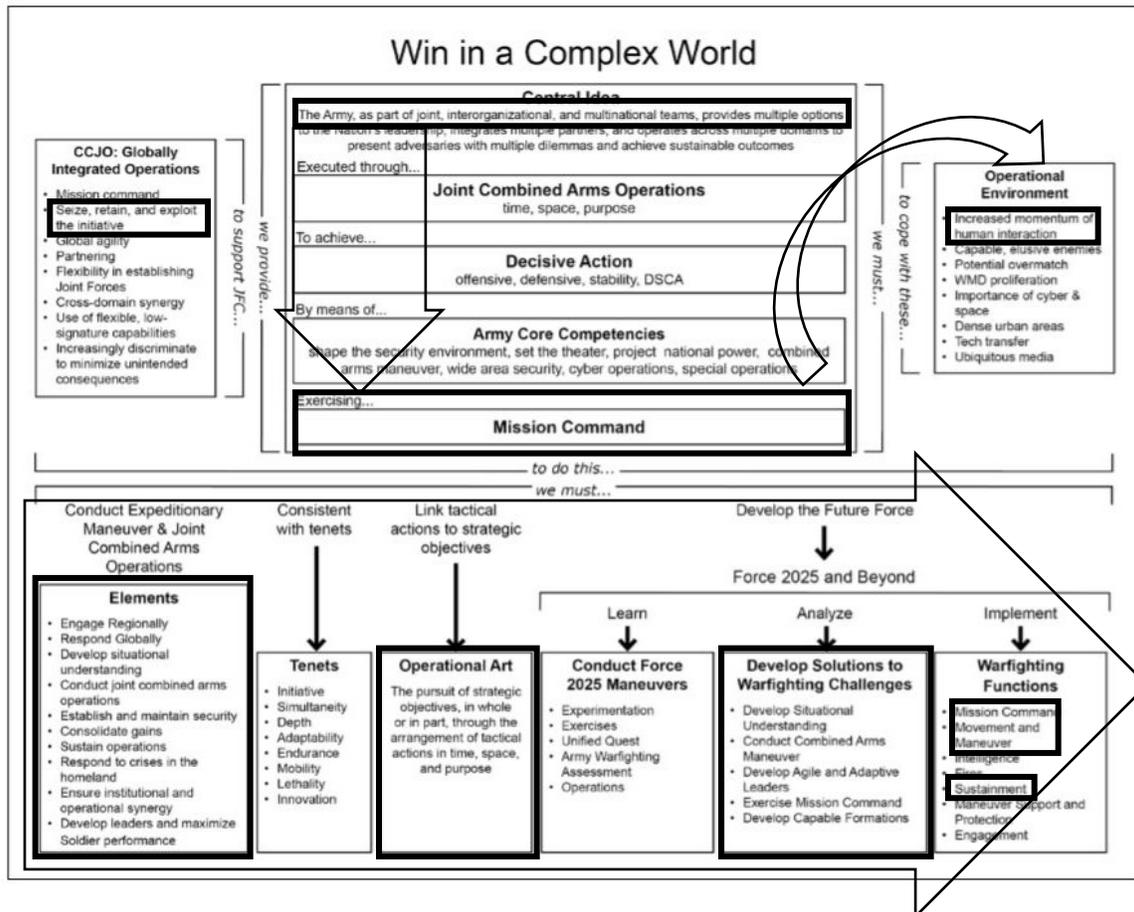


Figure 1. Win in a Complex World Logic Chart, *The Army Operating Concept*, US Army Training and Doctrine Command (TRADOC), Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World* (Washington, DC: Government Printing Office, October 2014), vi.

Development of Army Warrant Officers

The role of Warrant Officers has existed since the Ancien Regime, when nobles took to sea as captains and officers in leadership, and many served without the maritime skill to

¹⁹ US Army, “The Army Talent Management Strategy 2025 and Beyond, 2016,” 1.

demonstrate both tacit and sometimes explicit knowledge for seafaring. The issue of a “warrant” for faithful service of skilled non-nobles was incentive to retain the services and span the knowledge gap in noblemen. Since this inception, the role of warrant officers as technical experts and advisers to commissioned officers and commanders has formalized in the United States to the increasing technical requirements of the armed services. The most recognized of these histories begins with the Army Warrant Officer Corps on July 9th 1918, when technical specialists were first provided a warrant from the Secretary of War and assisted the US Army Mine Planter Service in installing obstacles supporting blockades and efforts of US and European Allies during the First World War.²⁰

As with many changes, it would take some time for the new cohort of US Army personnel and their capabilities to be recognized as technical specialists as part of the operational and tactical capabilities of the US Army. The post First World War US Army would draw down again, and U.S. troop strength would restructure. New technologies and systems would soon be relied upon in air, land and sea power exhibited during the Second World War, Korea, Vietnam, the Cold War, and the wars in the Middle East.²¹

The technological changes which took place from the industrial revolution and span the 20th century demand increasing utilization of advancing technology for the purpose of dominating adversaries on and off the battlefield. This increase in the use of technology manifested a growing need for a skilled technical work force to manage change of the officer corps’ tacit and explicit knowledge of the multitude of new technical systems.²² During the Second World War,

²⁰ Warrant Officer Historical Foundation, "Army Warrant Officer History - Part I (1918-1996)." *WARRANT The Legacy of Leadership as a Warrant Officer* (2014): accessed July 28, 2017, https://warrantofficerhistory.org/Hist_of_Army_WO.htm.

²¹ Warrant Officer Historical Foundation, "Army Warrant Officer History - Part I (1918-1996)." (2014).

²² Paine, S.C.M., *The Sino-Japanese War of 1894-1895: Perceptions, Power, and Primacy*. (New York, NY: Cambridge University Press, 2003), 62-66.

due to a shortage of trained officers, a need to show the advancement potential of Warrant Officers generated Public Law 230 in 1941.²³ This fast-paced and tension-filled world of war, where the loss of a critical capability (or worse) due to miscommunication or failure means the difference between life and death, demanded resiliency and redundancy.²⁴ Over time both commissioned and warranted cohorts retain military academies and various education commands, branch-specific installations, with corps-common curriculum at Fort Leavenworth -or elsewhere.²⁵ As both commissioned and warranted officers keep pace with the more sophisticated concepts of modern warfare, both sought uniformity in their respective educations and understanding of each other's generalist and specialist functions.²⁶

Because of these responsibilities, the first multi-level training and education system was developed for Warrant Officers in 1972. By 1974, the first occupational specialty Warrant Officer Staff Course was created to provide mid-level warrant officers skills in Army Operations. In 1975, the Department of the Army authorized the Civilian Education and Degree Completion Program for all officer grades as a result of a transition to a now all-volunteer Army.²⁷ In 1985, the Total Warrant Officer Study (TWOS) finally established in 1994 at Fort Rucker Alabama the Warrant Officer Candidate School (WOCS). Concurrently with the TWOS, the US Army refined

²³ Warrant Officer Historical Foundation, "Army Warrant Officer History - Part I (1918-1996)." (2014).

²⁴ Timothy D. Connelly, "Developing Strategic Leaders in the NCO and Warrant Officer Corps", USAWC Strategy Research Project, US Army War College, 2013, 3-15.

²⁵ Peter J. Schifferle, *America's School for War: Fort Leavenworth, Officer Education and Victory in World War II* (Lawrence, KS: University Press of Kansas, 2010), 31-35.

²⁶ Timothy D. Connelly, "Developing Strategic Leaders in the NCO and Warrant Officer Corps" 2013, 3-15.

²⁷ Warrant Officer Historical Foundation, "Army Warrant Officer History - Part I (1918-1996)." (2014).

its role in Joint Force application, while the Army restructured operational doctrine to meet Cold War adversaries on an increasingly connected technological battlefield.²⁸

Concurrently with TWOS, TRADOC and HQDA in 1983 authorized the creation of the School of Advanced Military Studies (SAMS), now identified as the Advanced Military Studies Program (AMSP). The SAMS program which was designed by then Colonel Huba Wass de Czega, ensured that a second postgraduate year was available to the US Army's newest field grade officers from the US Army Command and General Staff College, what is now known as Intermediate Level Education (ILE). The intent of CGSC's second "post-graduate" year at SAMS was to provide "division commanders and staffs with scholars efficient and effective at operational design to meet challenges posed by the undesirable force ratio with Soviet forces during the Cold War."²⁹

The concurrent development of SAMS, specifically the AMSP, intersects with the reshuffling and increasingly diversified application of warrant officer skills on the modern US Army during the Cold War. Both were efforts to balance the Army's capacities with its future requirements for capability. It is within this period of change at Fort Leavenworth that the role of leadership from US Army warrant officers takes shape across the US Army. Just as dynamic thinkers are developing plans and operations from a SAMS education, US Army warrant officers develop management strategies for the rapid integration of new technology and systems. Aviation, air defense, communications, so-called "smart" ordinance, as well as the myriad of multi-disciplined intelligence assets all become increasingly dependent on other technologies and systems, and eventually the personnel assigned to these implementations require education to match their sophistication.

²⁸ Ibid.

²⁹ Jeffery J. Goble, "Wants and Needs: SAMS' Relationship with the Army," monograph, School of Advanced Military Studies, 2008, 11-19.

Effects from the End of History?

What we may be witnessing is not just the end of the Cold War, or the passing of a particular period of post-war history, but the end of history as such: that is, the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government.

— Francis Fukuyama, *The End of History and The Last Man*, 1992.

Francis Fukuyama takes a lot of criticism over his statements about what he purported as capitalism (or rather democracy) supplanting communism as the final form of human government. Like Fukuyama, many wanted to believe that with new roles, new administration, more education via telecommunication and “the end of history” collectively, America could catch its breath and start to fulfill the opportunity to change. Like Fukuyama, the warrant officer cohort -with a new world and a modern, successful US Army returning from success in Panama and the Middle East, warrant officers would find their beliefs challenged at all sides, with only a small cadre of professionals tackling the role of change in the ranks. As recent post 9-11 history has shown, the “End of History” for warrant officers became a socio-cultural revolution of sorts, with a requirement for a dynamic new set of skills to tackle a new millennium and its complex challenges in the face of change, pessimism, and the opportunity of seemingly chaotic events.³⁰

By 1999, ten years after the end of the cold war, Chief of Staff of the Army General Eric Shinseki’s Army Transformation was executed around the globe, providing invaluable leadership by an Army yet to rebound from Army downsizing. The Army was doing more with less, using sophisticated equipment reliant on the ever-shrinking bandwidth of the new internet backbone exploited for command and control. Warrant officers were now serving in what were once Active

³⁰ Francis Fukuyama, *The End of History and the Last Man* (New York, NY: MacMillan Inc, 1992), xi-xiii.

Army commissioned officer roles responsible for interagency teams, in command of far-flung SOF elements, and the logistics to provide for these dynamic commands.³¹

In June of 2000, a panel was convened and identified as the Army Team Leadership Development Process (ATLDP). Part of the panel was commissioned to review the warrant officer role in the Army, issues such as recruiting, retention, pay, and very specifically professional development, personnel management, training and education. At the time, warrant officers were still managed separately from commissioned officers, with cohort requirements which were disconnected from commissioned officer and branch professional development models. In 2004, Warrant Officers were distributed to their branch of accession and aligned for management under the strictures of DA Pam 600-3 (Officer Professional Development). For the first time in ninety years warrant officers would align together with commissioned officers “by definition of their cohort, by branch, and with definitions by grade of rank.”³²

Warrant officers in the 1990’s received some tactical and technical training for leadership at the Warrant Officers Candidate School (WOCS), attended a basic and advanced course for their Military Occupational Specialty (MOS), and reported to duty with years of integration to leadership structures across the Army’s responsibilities during training and combat. The various MOS roles evolved from history and spanned deployment and redeployment responsibilities of joint forces to expeditionary sites supporting no-fly zones and humanitarian missions around the world.³³ These deployments by “experts” relied on the parameters of logistics and resources,

³¹ US Army Combined Arms Center, “Biography, Chief Warrant Officer Five Richard R. Kunz Jr. Command Chief Warrant Officer, US Army Combined Arms Center and Fort Leavenworth, KS,” *US Army Combined Arms Center Homepage* (2017): accessed November 30, 2017, <http://usacac.army.mil/sites/default/files/documents/bios/cac-command-chief-warrant2.pdf>.

³² US Department of the Army, “The Army Training and Leader Development Panel ATLDP Phase III – Warrant Officer Study Final Report, 2002,” (Washington, DC: Government Printing Office, 2002), WO-6.

³³ The Honorable R.L. Brownlee, General Peter J. Schoomaker, *Army Posture Statement 2004* (Washington, DC: US Army Office of the Chief of Staff), 2004, 1.

largely relegated to the concept of “making it happen” rather than an education in deliberate planning. While an overtasked Army attempts to transform, a crisis emerges which serves as a wake-up call for many, if not only a catalyst for warrant officer transformation.

The attacks on September 11th, 2001 reminded the United States that its expeditionary policy has ramifications as asymmetric frictions resulting from economic globalization.³⁴ It is the polarizing events of 9/11, the requirement of leadership under limited resources which persuaded Army leaders that the new paradigm of the Global War on Terror (GWOT) required distribution of some command decision capabilities. While the Army struggled to balance both a response to terrorism and the burdens of a transformation strategy, warrant officers in intelligence, special operations, aviation and maritime operations led forces to receive and stage follow-on forces with priority planning information and capability.³⁵ The demand for answers to these complex challenges re-established the case for increased education, specifically to understand the operational art and design for a new century, which AMSP provides.

Combat Requirements Drive Administrative Change

Despite the lack of any programmed civilian education programs, warrant officers in maritime, aviation and intelligence are interfacing with civilian agencies and systems more frequently. Despite their decidedly military backgrounds, these specialty track officers are the interlocutors to the interagency.³⁶ The transition of the burden for the response to terrorism from

³⁴ Robert Gates, *Duty* (New York, NY: Random House LLC, 2014), 374.

³⁵ Donald P. Wright, et al., *A Different Kind of War: The United States Army in Operation Enduring Freedom, October 2001-September 2005* (Fort Leavenworth, KS: Combat Studies Institute Press, 2006), 141.

³⁶ Jeffrey Daniel, “Army's 'Best Kept Secret' Floats,” *1st Sustainment Command (Theater) Public Affairs* (January 26, 2012): accessed November 30 2017, http://www.army.mil/article/72469/armys_best_kept_secret_floats.

Law Enforcement (LE) to the military develops changes in perspectives citing history, theory, and eventual restructuring of doctrine and practice to accommodate concepts which span the Joint, Interagency, Intergovernmental, and Multinational (JIIM) environments. Where existing, these low-density warrant officers, the tacit and explicit knowledge managers of US Army organizations, become interlocutors within a framework of Army change.³⁷ In 1996, Joint Publication 3.08 Volumes I and II provided the means to span the gulf of understanding between civil authorities intertwined with military operations around the globe. The tragedy of 9/11 demanded the explicit ways to do so.³⁸

As early as October 2001, warrant officers in these key positions of leadership and understanding had the burden of cultivating the multiple options required for combatting terrorism in this new sophisticated operational environment. Key and essential to these tasks were the understanding of the histories of the new far-flung locations such as Indonesia, Singapore, Malaysia and the Philippines, of state and non-state sponsors to terror, and yet-to-be-established logistics hubs in the Middle East -all culturally distant and technologically challenged by US standards.³⁹ The theories and practices of these locations were equally unfamiliar to an Army unaccustomed to the rapid deployments supporting countering and combatting terrorism, all at great expense to the treasury of the United States.⁴⁰

³⁷ David Vergun, "Solarium: Some warrants get more broadening than others," *Warrant Officer Solarium* (January 21, 2016): accessed July 28, 2017, <https://www.army.mil/article/161225>.

³⁸ Joint Publication (JP) 3-08, *Interagency Coordination During Joint Operations, Vol. I* (Washington, DC: Government Printing Office, 1996), III-17.

³⁹ Richard R. Kunz Jr. "Biography, Chief Warrant Officer Five Command Chief Warrant Officer, US Army Combined Arms Center and Fort Leavenworth, KS." accessed November 30, 2017, <http://usacac.army.mil/sites/default/files/documents/bios/cac-command-chief-warrant2.pdf>.

⁴⁰ Linda Robinson, Patrick B. Johnston, and Gillian S. Oak. *US Special Operations Forces in the Philippines, 2001–2014*. (Santa Monica, CA: RAND Corporation, 2016), accessed January 10, 2018. https://www.rand.org/pubs/research_reports/RR1236.html, 19.

While political leadership demanded these strategic engagements take place, non-aviation Army warrant officers completed the arduous process as “digital immigrants” of not only mastering the technology of internet-based Army systems, but also needed to form plans to make the Army’s interdependence on automation resilient to this single point of failure through tactics, techniques and procedures (TTP). As information systems tied into more Army systems, the risks associated with Army personnel developing a reliance on the interconnectedness of information grew. Again, the need for a human backup to the constant progression of technology remained, drawing the tacit and explicit systems knowledge of Army warrant officers back into an integration role.⁴¹

Key and essential to Army operational roles remained the understanding of where Army operational systems fit into Army operational plans. Warrant officer augmentation between interfaces of systems at roll on, roll off sea lines of communication (SLOC) at the strategic level or leading surveillance teams identifying targets for air strikes and raids at the tactical level became critical. Having sufficient leadership experience represented synthesized plans which would exploit these opportunities and influenced the future training of a generation of warrant officers. Warrant officers with influence gained through these successful actions prior to and during the GWOT provided new opportunities to warrant officers for years of continuing combat.⁴²

As of 2006, warrant officer training and education had seen several changes. Several branches were identifying common curriculum between the different Warrant Officer branches

⁴¹ Randall L. Rigby, “Targeting UAVs— The Need is Great, The Time is Now,” *Field Artillery: A Professional Bulletin for Redlegs* (January-February 1997): accessed December 3rd, 2017, http://sill-www.army.mil/firesbulletin/archives/1997/JAN_FEB_1997/JAN_FEB_1997_FULL_EDITION.pdf.

⁴² CSA GEN Ray Odierno, “Appointment of Army Senior Warrant Officer,” *Army Warrant Officer History - Part I*, Warrant Officer Historical Foundation (2014): accessed November 15, 2017, <https://warrantofficerhistory.org/PDF/ARSTAF-SWO-Position-CSA-Sends-20140314.pdf>.

and the cohort curriculum at Fort Rucker in WOCS and WOBC, all seeking to understand the phenomena of war at an operational perspective. The first to challenge TRADOCs singular hold on this tactical and technical certification was the Special Forces branch. The theory was that senior NCOs with more than twelve years of service in grades of E7 and above did not require as much common core training as most candidates produced by the WOCS program of instruction. The struggle over the merits of this argument were only reinforced when Special Forces merged their initial warrant officer training course in 2008 with the plan to open a Special Forces Warrant Officer Institute (SFWOI) at Fort Bragg, further professionalizing and standardizing but fragmenting a branch approach to warrant officer education.⁴³

By 2009, Special Forces (SF) branch promotions in CW2 and CW3 had been accelerated with a surge toward sustaining and increasing US Army combat capability and minimizing attrition. The intent was to compete against retention challenges which competed with contracted logistics and services (CLS) which augmented battlefield capability. Prior to this promotion acceleration more than a few senior SF and MI warrant officers retired and accepted higher paying contracting jobs with their military retirement rather than wait for a congressional increase of Army authorizations for CW4's and now specifically CW5.⁴⁴ Since the Warrant Officer Management Act of 1991, conflicts requiring increasingly experienced personnel and the suitability to fill them had grown and developed. 2004's DA Pam 600-3 would be the first warrant officer career management document with specification in an Army division, Corps, Service Component Command (ASCC), or higher with specific CW5 roles.⁴⁵

⁴³ US Army Special Operations Center of Excellence, *Organization*, The Special Forces Warrant Officer Institute (2017): accessed November 30, 2017, <http://www.soc.mil/SWCS/organization.html>.

⁴⁴ David Issenberg, *Shadow Force: Private Security Contractors in Iraq* (Westport, CT: Praeger Security International. 2009), 59.

⁴⁵ US Department of the Army, Pamphlet 600-3. *Officer Professional Development and Career Management (2014)* (Washington, DC: Government Printing Office, 2014): accessed December 5, 2017, <https://www.milsuite.mil/book/groups/smartbook-da-pam-600-3>, 4.

Radical shifts in deployments and administration to meet operational tempo (OPTEMPO) changes demanded a crystalized understanding that warrant officers required change. This was not just a philosophy of better training to transfer knowledge effectively and mentor future technical leaders, it would require education. In order to sustain the warrant officer role in service to a transforming Army, which was also fighting an unpredictable adversary, the Army would need to take the initiative, educating leaders in new paradigm across all levels. General Peter J. Schoomaker captured that distinction in the Army Posture Statement of 2004: “We must train for certainty but educate for uncertainty ... how to think, not what to think.”⁴⁶

In 2009, Army policy authorized the first warrant officers an education from the Advanced Military Studies Program (AMSP) at the School of Advanced Military Studies (SAMS).⁴⁷ This opportunity would prepare warrant officers across the Army to; serve as an operational planning team (OPT) leader, support directly an OPT leader, or educate others in the most efficient means with which to do both at division level and higher.⁴⁸ In 2010, four applicants were selected by the routine process and endorsed by several General Officers. After a rough start three agreed to continue after an “administrative error” was corrected by the Combined Arms Center (CAC) Commander.

Every process has a testing period, the time when a new product goes through trials to determine its suitability. 2004’s DA Pam 600-3, the first to include warrant officers was useful as a one-stop shop for career mentorship. Unfortunately, as of 2017, the Army removed the career

⁴⁶ The Honorable R.L. Brownlee and General Peter J. Schoomaker, *Army Posture Statement 2004*, 8.

⁴⁷ US Army MILPER Message Number 10-209, Proponent ATZL-SWV “Selection Process Open for The Advanced Military Studies Program (AMSP) CLASS 12-01 (JUN 11-MAY 12)” (issued 10 Aug 2010): accessed November 23, 2017, <https://www.hrc.army.mil/milper/10-209>.

⁴⁸ US Army Combined Arms Center, School of Advanced Military Studies “Program Guide” (Fort Leavenworth, KS: US Army Command and General Staff College, 2017).

timeline graphics of all officers to an online forum. Warrant officers looking for mentorship tools would now require computer access, a connection to the MilSuite database, and the skills to find a specific webpage which is the roadmap of their chosen field. This is important because the 600-3 career timeline chart now resides only online. This chart described to warrant officers in simple terms what capabilities are required at specific times in service for continued performance and promotion. The chart itself has been indispensable to mentors and new officers since its inception over twenty years ago.⁴⁹

YEARS	0	2	7	12	17							
Rank	WO1		CW2		CW3		CW4		CW5			
Professional Military Education	WOBC		WOAC		WOILE		WOSSE					
Additional Training	Assignment Oriented Training: Air Assault, Airborne, Ranger, JFC, JTS, JOFEC, JAOC2C, JIOPC, MILDEC, STO Planner, Space Cadre Course, DISMIG-C, ADAM/BAE Air-Ground Operations Course, Army Basic Instructor Course, Small Group Instructor Training Course..											
Typical Assignments	DEVELOPMENTAL & UTILIZATION ASSIGNMENTS											
	FABN • Target Acquisition Platoon Leader • BN Targeting Officer FAB/DIVARTY • Targeting Officer • CFO • Assistant CFO • Target Acquisition Platoon Leader		BCI • Field Artillery Intelligence Officer DIV/Corps • Targeting Officer		Nominative - Chief Warrant Officer of the FA Branch (CWOB) - FA WO Senior Instructor/ Course Manager - Army Targeting Center SWO - FA WO Assignment Officer (HRC) - FA Proponent WO (FAPO)		Broadening Assignments - AMTC - Doctrine Writer - Combat Developer - DTRA TO - Instructor - TAC - 011A Pos. - Spec Ops - Cyber - Fellowship - USANCA - CTC O/C/T		Division TO/FAIO • Corps TO/FAIO • CCMD Staff • Joint/Combined Staff • ASCC Staff • BCD TO		Corps TO/FAIO • Joint/Combined Staff • ASCC Staff	
	Self Development: Maintain proficiency in Core Competencies to include Fire Support, Targeting, Counterfire Operations, MC Systems Integration, and Advanced Target Development.											
	Associate Degree			Baccalaureate Degree			Graduate Degree					

Figure 2. Field Artillery Warrant Officer Professional Development Model. US Department of the Army, Army Regulation 600-3, *Officer Professional Development and Career Management, Field Artillery* (2014): accessed November 26, 2017, <https://www.milsuite.mil/book/servlet/JiveServlet/previewBody/424274-102-1-707193/2Field%20Artillery%20Branch.pdf>.

⁴⁹ US Department of the Army, Pamphlet 600-3, *Officer Professional Development and Career Management* (2014), 4.

Unfortunately, there is a missed opportunity across every branch represented in the now fragmented 600-3. This is due to the omission of AMSP as a career education option as of 2018. Only the AMSP annual MILPER message and word of mouth can generate interest by listing branches which may apply (Figure 3). The aggregation of this information in that message shows obvious omissions in very technical and non- Maneuver, Fires, and Effects branches omitted based on AMSP curriculum.

<p>E. US ARMY MEMBERS MUST BE IN ONE OF THE FOLLOWING BRANCHES OR FUNCTIONAL AREAS: AD, AG, AR, AV, CM, EN, FA, IN, MI, MP, MSC (67A, 67J), OD, QM, SC, SF, & TC. FA 24, 30, 34, 37, 39, 40, 46, 48, 49, 53, 59, AND 90 OFFICERS MAY APPLY. WARRANT OFFICERS AND HIGH QUALITY DA CIVILIANS (GS-13/14 EQUIVALENT) ARE ALSO ELIGIBLE BUT MUST POSSESS A COLLEGE UNDERGRADUATE DEGREE.</p> <p>F. BRANCHES OR FUNCTIONAL AREAS NOT ELEGIBLE FOR SELECTION: AC, FI, JA, CH, AN, DE, MC, MSC (EXCEPT 67A, 67J), VC, AND SP (RESERVE ONLY). FUNCTIONAL AREAS 43, 45, 50, 52, AND 57.</p>

*First specified warrant officer eligibility announcement

Figure 3. AMSP (2010), MILPER 10-209 Message, US Army MILPER Message Number 10-209, Proponent ATZL-SWV “Selection Process Open for The Advanced Military Studies Program (AMSP) CLASS 12-01 (JUN 11-MAY 12)” (issued 10 Aug 2010): accessed November 23, 2017, <https://www.hrc.army.mil/milper/10-209>.

Senior Army leaders predict “Large-Scale Combat Operations”, therefore efforts in US Army Talent Management strategy should dictate AMSP recruiting of heavy division-supporting warrant officer MOS’s, as well as insisting from HRC on the logical utilization of any warrant officer AMSP graduates.⁵⁰ Before 2016, the operating force utilization consisted of two graduates employed in operating force in both the 101st Division, and the Joint Intelligence Center. Other utilizations were limited to the training force. After an attrition due to deployment challenges,

⁵⁰ LTG Michael D. Lundy, “FM 3-0 and Large-Scale Combat Operations.” (video of lecture, Army Leader Exchange, US Army Combined Arms Center, Fort Leavenworth, Kansas, February 2, 2018). accessed February 2, 2018, https://www.facebook.com/armyleaderexchange/?hc_ref=ARSJzIMFPBpNrzw5_8y6897BIprfQ1vdcYcJ3O6ZuAhz5LCjnogdn-gf4U5sFA9sC4

academic year 2016 added a subsequent graduate to the 101st as a planner. Academic year 2018 is on track to provide planners from AMSP to the operating force at the recently designated 1st Special Forces Command and USARCENT, utilization types which merit repeating.

Unfortunately, reductionist hazards surround the belief that warrant officer duties are all the same specialist regardless of branch, skill, or technical trade. It is as if the term “generalist” means something other than “administrator”, while “specialists” should be responsible for everything else, to include policy, regardless of whether these roles were previously baked into strategy by the Army Chief of Staff. Cohort role issues cannot be repaired by simply reassigning specialized daily duties from a SCIF to a motor pool, as this undermines other pre-strategized long-term policies. For example, the notion that a machine shop and field artillery MOS warrant officer demonstrate skill credibility the same way is myopic. While both operate in environments which reward knowledge, the manner by which each tacitly and explicitly demonstrate this knowledge is different.

As the saying goes “amateurs plan tactics, professionals plan logistics.” Commanders who earlier emplaced Contracted Logistic Systems (CLS) in times of spending must understand planners are needed to supplant and regress opposing strategic actions during military downsizing. Many disagree that even a few warrant officers belong at AMSP, but few doubt the critical utility in expert planners of logistics which support the operation of a modern US Army.⁵¹

CGSC ILE is open to warrant officers and was the first feeder for AMSP attendance. However, the Warrant Officer Career College renamed its “Staff Course” as Warrant Officer ILE (WOILE). With this change, questions on whether warrant officers will continue to feed AMSP as a sequel to some version of ILE, their own branch PME track, or possibly a less planner-

⁵¹ General Gustavo Perna, Commanding General, Army Materiel Command, Lecture, “Warrant Officer Professional Development Forum,” AUSA Conference, Arlington VA, October, 2017.

focused master’s level of education sufficient in understanding the theory, history and doctrine of a motor pool or supply and sustainment area.

The limited information showing utilization of warrant officers which completed AMSP may yet be insufficient for demonstrating effect. However, one cannot forget that the throughput of AMSP began only 35 years ago, when as few as 35 commissioned officers grew to more than just a single class of 144 in two decades. At that time the responsibility for the CAC was to provide a post-graduate education to Army CGSC graduates, to determine if the “juice was worth the squeeze”.⁵² In that case, AMSP graduates since then have had the quantitative population and qualitative utilization to demonstrate effectiveness in multiple theatres and conflicts.

The discourse over whether warrant officers should attend ILE or AMSP has been answered by Army senior leaders. As of 2017, a full eight years after inclusion and only a few monographs and careers of exploration, the question of whether AMSP warrant graduates’ utilization is solving AMSP-curriculum-framed problems at the division and higher level remains to be fully answered. An examination of where the first of this small group of AMSP-educated warrant officers were utilized from Table 2 provides some understanding, which was predominantly in the training force education institutions, and later reinforcing division-level operating force assignments.⁵³

Table 2: SAMS Warrant Officer Reconstructed AMSP Data.

MOS	GRAD DATE	LAST INFO	UTILIZATION	UTIL DATE	NOTES	TYPE UTILIZATION
SF 180A	20110519	2013	CAC	2011/05	1st WO, 1st in MOS, RETIRED 2015	Operational Level Planning, Training Force
FA 131A	20110611	2017	USA Joint Intel Center	2012/12	1st in MOS, 1st with Doctorate	Operational Level Planning, Operating Force
SF 180A	20110519	2017	USAJFKSWCS/CAC	2010/05	2nd in MOS, Retiring 2019	Operational Level Planning, Training Force
FA 131A	20121206	2017	101st DIV	2013/04	2nd in MOS	Operational Level Planning, Operating Force
OD 915A	20160526	2017	101st DIV	2016/02	1st in MOS	Operational Level Planning, Operating Force
SF 180A	20180524	2018	1 st Special Forces Cmd	2018/05	3rd in MOS	Operational Level Planning, Operating Force
MI 350F	20180524	2018	USARCENT	2018/05	1st in MOS	Operational Level Planning, Operating Force
AV 152H	20190526	2018	CAC	2019/05	1st in MOS	Op Planning, Training Force (proposed)

Source: Author, created from supplied HRC AMSP data.

⁵² Colonel Richard Hart Sinnreich, “End of Tour Memorandum to CGSC Commandant” School of Advanced Military Studies, US Army Command and General Staff College, 10 June 1986 (copy in author’s possession).

⁵³ Banach, “FW: EXSUM – Warrant Officer issues to VCSA” (Unclassified), April 13, 2010.

The data shows with complete clarity that there are very few AMSP warrant officer data points on which to reference. This small population in a massive Army records system was easily jumbled, and reconstruction of this data and its resulting usefulness was possibly overlooked by the US Army, unconcerned with what appeared as a small inefficiency. The utility of this material now corrected could have allowed Army senior leaders, the graduates of the program, and the prospective candidates across the warrant officer community to recognize the trajectories beyond AMSP. There are opportunities at every level to echo messages of senior leaders, and effect change using planning internal for the Army and Joint Force via these graduates. Utilizing these opportunities is key and essential to any administrative, training or operational strategy envisioned.

Paradigm: A Talent to be Managed

1. More Than 27,354 serve (as much as an armored division)
2. Senior Warrant Officers need a Talent Management Process
3. WOs must be held accountable to fulfill rightful role in the Army as our technical backbone (inclusive of Aviators and Special Forces)
4. There should be nobody more competent on our systems than our WOs; you must get back in the TMs, SSAs and Motorpools
5. You are essential to the Army's ability to wean itself off CLS and get back to Soldier-maintained equipment.

Takeaway: This is a Profession

— General Gustave Perna, US Army Materiel Command, *Warrant Officer Professional Development Forum at 2017 AUSA National Convention*

Three warrant officers attended AMSP in 2011, two from the Special Forces branch and one from Field Artillery.⁵⁴ It is no surprise that all three applicants were accepted. All had excellent academic backgrounds supporting the rigorous reading comprehension and writing

⁵⁴ US Army Human Resources Command, Organizational Research Spreadsheet, "SAMS Graduates 2009-2017" (copy in author's possession).

requirements AMSP demanded. Additionally, all were from the Maneuver, Fires and Effects category of the warrant officer cohort. During application exams SAMS seeks applicants who demonstrate an aptitude for operational art and design through an examination of history, doctrine and synthesis of strategy for use in developing mission plans and orders.⁵⁵

Subsequent academic years saw less warrant officer applicants either from specific branches or in some years, no applicants at all. While this may be due to career peculiarities inherent to specific branches or the utilization of the graduates observed by the force, the omission of opportunities in mentoring documents cannot be overstated. In the case of branch-specific career influence, all prospective candidates are Chief Warrant Officer Three (CW3) or above. This timing has exposed a career decision point as the SAMS opportunity typically coincides with the twenty-year service mark.

Retirement remains an option for senior warrant officers when no Additional Duty Service Obligation (ADSO) is present. Having a bachelor's degree with a sufficient GPA and the prospect for assignments and promotions all compete with personal situations on whether to attend AMSP. The question of AMSP utilization may also be at play in attracting warrant officers, which the Army Warrant Officer Strategy demands, the Army Operating Concept requires, and the Army Talent Management strategy promises.

⁵⁵ MILPER Message 10-209, "Selection Process Open for The Advanced Military Studies Program", 10 Aug 2010.

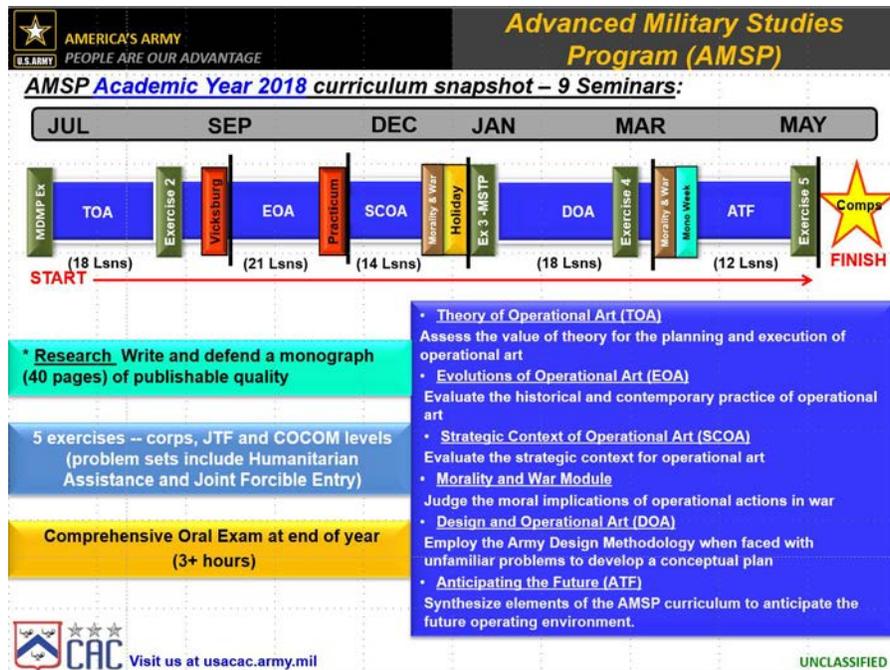


Figure 4. AMSP Curriculum Snapshot, Academic Year 2018, US Army Combined Arms Center, School of Advanced Military Studies “Program Guide.” (Fort Leavenworth, KS: US Army Command and General Staff College, 2017).

At face value, the expectation is that warrant officers of commensurate education and at least as much Army experience would be utilized similar to commissioned officers. One could expect that at a minimum, warrant officers who were selected to attend AMSP would be offered opportunities to utilize the very skills which the curriculum educated any AMSP graduate. Commissioned officers fill assignment preference sheets (Figure 5, below), interview requests, and competitive bidding for their skills through HRC. Warrant officers are not participants, these decisions are left to the HRC warrant officers and Chief Warrant Officers of the Branch (CWOB).

FY18 SAMS Preference List				Directions
Name: OFFICER, Generic		Branch: SF	Special Instructions/Considerations (i.e. EFMP, MACP, BNR)	1. Name and Branch 2. Prioritize units by preference taking note of billets which are only for specific hardcoded branches (yellow). 3. Identify WIAS of choice by placing an X in the corresponding box. 4. Fill in the 'Special Instructions' box with considerations unique to your assignment which should include anything you want the HRC team to know or consider during your assignment.
TASKING	LOCATION	PREFERENCE		
A U T H O R I Z E D	XVIII AIRBORNE	FT BRAGG, NC	7	MAJ Majors is competing for CSL. Depending on the results, HRC will pre-position him at a location where he can complete his utilization prior to taking command in Summer 2018. -CPT Captain As a KD Complete, MAJ (P) Majors should be assigned to a Corps HQs. He is not on the I Corps or XVIII ABC BNR List. The III Corps BNR list has not been submitted as of 30 Nov. -CPT Captain
	101ST AIRBORNE	FT CAMPBELL, KY	19	
	10TH MOUNTAIN	FT DRUM, NY	20	
	1ST ARMORED	FT BLISS, TX	21	
	1ST CAVALRY	FT HOOD, TX	22	
	1ST INFANTRY	FT RILEY, KS	23	
	25TH INFANTRY	SCHOFIELD BRK, HI	24	
	2ND INFANTRY	CAMP REDCLOUD, KR	8	
	3RD INFANTRY	FT STEWART, GA	9	
	4TH INFANTRY	FT CARSON, CO	10	
	82ND AIRBORNE	FT BRAGG, NC	11	
	8TH ARMY	YONGSAN, KR	12	
	I CORPS	JBLM LEWIS, WA	13	
	III CORPS	FT HOOD, TX	14	
	US ARMY NORTH	FT SAM HOUSTON, TX	15	
	US ARMY SOUTH	FT SAM HOUSTON, TX	16	
	7TH INFANTRY	EGLIN AFB	17	
	R O T A	CASCOM	FT LEE, VA	
USARAF		ITALY (VI)	6	
USAREUR		GERMANY (WS)	5	
USARPAC		FT SHAFTER, HI	4	
USARCENT		SHAS AFB	3	
75TH RANGER		FT BENNING, GA	2	
INSCOM		FT BELVOIR, VA	MI ONLY 25	
US ARMY CYBER		FT BELVOIR, VA	CY ONLY 26	
20TH CBRNE		ABERDEEN PG, MY	CM ONLY 27	
SMDC		PETERSON AFB, CO	FA40 ONLY 28	
W I A S	WIAS	ISAF	X	1
		USOR-A		
		NTM-A		
		SIOTE-A		
		HQA		

*AY 2018 Warrant officers included in this correspondence, informed not to participate.

Figure 5. FY 2018 AMSP Officer Preference List, Combined Arms Center. “AMSP Assignment Preference Sheet, Academic Year 2018.” School of Advanced Military Studies, Combined Arms Center, Fort Leavenworth KS, 2017.

Assignments within the Echelon Above Brigade (EAB) MTOE are descriptive, but not explicit. Divisions are organized around warfighting function with maximum flexibility for manning and organization by environment given to the commander.⁵⁶ With elevated commissioned officer ranks and the level of responsibilities associated with division staffs, the low probability of warrant officers selected as key staff or an OPT lead is governed by low population numbers, specialty, and cohort/branch talent management. As little or no HRC or AMSP data amplify this point, there has been little to provide senior leaders in selecting graduates by branch and cohort. Under-utilization of AMSP graduates may be reinforcing fragility on the part of the Army; that warrant officers are incapable of doing what the school educates them to do, or that limiting competition to commissioned officers for administrative or operational reasons is a goal.⁵⁷

⁵⁶ US Department of the Army, Field Manual (FM) 3-94, *Theatre, Army, Corps and Division Operations 2018* (Washington, DC: Headquarters, Department of the Army, 2012), 1-14.

⁵⁷ Nassim Nicholas Taleb, *Antifragile: Things That Gain From Disorder* (NY: Random House, 2012), 10.

As shown in Figure 2's *Officer Professional Development Model*, the one or two-year time-in-grade Chief Warrant Officer Three (CW3) is the optimal AMSP graduate, but a statistically rare resource at EAB and division headquarters staffs. In this case, the statistical opportunity for a By Name Request (BNR) remains low. Additionally, as warrant officers are junior in rank to commissioned officers, and specialists in fields normally governed by technology integration rather than design, doctrine and assignment structure shape their opportunities as OPT leads.

The example of the EAB command post demands that the mission select the maximum inclusions of Field Artillery, Intelligence, and Special Forces branches. These branch utilizations are characteristic in provision of warfighting and supporting functions. For instance, all three branches also operate targeting, Special Weapons, and Special Technical Operations skill sets, routinely a BNR assignment for these roles. These fields by design cover three key areas; specialized information to decision makers, critical targeting of high-tech and expensive weapons application, and application of sensitive capabilities which yield physical results at high risk.⁵⁸

These warfighting capabilities balanced against resource analysis factors of warrant officer utilization (the existing paradigm) clearly demand a thorough re-examination as more AMSP warrant officer data is available. The approach will need to divine multiple factors from branch, cohort, and certainly Army doctrine and practical requirements. The tools most applicable lie within the AMSP curriculum, and the personnel who would most efficiently alter the existing paradigm are from the AMSP population, possibly a 42A officer or a 420A warrant officer from the Adjutant General (AG) branch identified in Figure 3. Building this analysis from readiness

⁵⁸ US Department of the Army, Field Manual (FM) 3-94, *Theatre, Army, Corps and Division Operations 2018*, Figure 1-5, Example of echelons above brigade command post, (Washington, DC: Headquarters, Department of the Army, 2012), 1-13.

history, utilizing theory and the Army's evolving doctrine, AMSP warrant officer populations of the future might explore a more efficient by the Army leadership and its direction.⁵⁹

Utilization from AMSP is impossible without acceptance and attendance. Prior to 2009, warrant officers with baccalaureate degrees in good standing were relegated to pursuing a Master's Degree through either the degree completion program, or from their own pocket.⁶⁰ The inclusion of Army warrant officers into ILE and 2009's acceptance list to the AMSP of SAMS appeared natural to at least some Army senior leaders, and served as a paradigm shift.⁶¹

The acceptance discussion is what Thomas Kuhn, the self-described "historian of science" outlines in his concept of normal science as the shared anomaly. That individuals recognize difference presenting itself, share the observation as a group, and thus redefine the perspective of the group.⁶² Despite no formal baccalaureate program purpose-built in the timeline of warrant officer education, applicants to AMSP serve as an anomaly derived from outcomes during Army transformation, the Global War on Terror, the desire to pursue education, and desire to achieve something they too have seen missing from the US Army. It is this anomaly which Kuhn describes in his concept of "real science" as the shared crisis; that these volunteers recognize the crisis as opportunity, presenting itself and becoming the shared vision which redefines the perspective of the community as a new paradigm.⁶³ Utilization of the momentum in this paradigmatic shift is as important as its recognition by senior leaders and volunteers.

⁵⁹ LTG Lundy, Army Leader Exchange, "FM 3-0 and Large-Scale Combat Operations," February 2, 2018.

⁶⁰ US Army Pamphlet 600-3, *Commissioned Officer Professional Development and Career Management*. 2017, 25 & 26.

⁶¹ Banach, "FW: EXSUM – Warrant Officer issues to VCSA," (Unclassified), April 13, 2010.

⁶² Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970), 10.

⁶³ Kuhn, *The Structure of Scientific Revolutions*, 53-59.

It is within this Army community sharing a new paradigm, an aggregation of forming a new existence is found. From another perspective, this might be considered a new consciousness, possibly borne of institutionalization, as described by authors Peter Berger and Thomas Luckman, a revised “social construction of reality.”⁶⁴ The concept being that if warrant officers can contribute at tactical levels as planners, what keeps them from doing such planning and designing at operational levels? Answers might derive from US Army Command and General Staff College ILE or AMSP, but the question worth tackling arises from the appropriate utilization of this depth of knowledge and where it has been most efficiently applied.

The distinction which the AMSP solution provides is in curriculum interlinked with military exercises (Figure 4), simulating practical conditions in order to exert the newfound education of design and planning against military campaign execution. Intrinsicly, the exercises are at the same level as most AMSP utilization and supported by military staff planners.⁶⁵ The benefit is that warranted and commissioned officers together at AMSP integrate in this environment, sometimes for the first time in a career. Both share each cohort’s exposure to the harsh realities of a potentially undermanned and/or overtasked division and corps level staff in an all-volunteer force challenged by a Global War on Terror and the multiple dilemmas outlined in *The Army Operating Concept*.⁶⁶

The 2025 Strategy and Beyond: Enabling Continuing Advantage

The use of the term strategy requires a great deal of understanding as its misuse is highlighted and explored throughout AMSP. Understanding what strategy is becomes important

⁶⁴ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (NY: Doubleday, 1966), 23.

⁶⁵ US Army Combined Arms Center, School of Advanced Military Studies “Program Guide.” (Fort Leavenworth, KS: US Army Command and General Staff College, 2017).

⁶⁶ TRADOC Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World*, October 2014, 11.

for design of the bridge from policy to military aims. “Continuing advantage” is a concept described by Everett Dolman in his book *Pure Strategy*. The concept describes how just as operations are composed of a structure of tactical events, and that effective strategy is sustained and maintained by the use of positions of relative advantage, the combination provides “continuing advantage” when routinely reinforced.⁶⁷

In analyzing *The Army Warrant Officer 2025 Strategy*, key tasks are “baked in” to the lines of effort of the strategy. These tasks are identified responsibilities of the Headquarters, Department of the Army (HQDA) Personnel division (G1) in concert with the Human Resources Command (HRC). This assignment of graduates from professional education into utilization assignments was prescribed through the strategy directed by the Chief of Staff of the Army, General Milley.⁶⁸

The *Warrant Officer 2025 Strategy* maintains four Lines of Effort as ways to an end; Accessions, Development, Talent Management/Utilization, and Army Profession. Analyzing utilization of warrant officers after what the strategy describes as “world-class PME (Professional Military Education)” such as AMSP, the focus will be confined to the applicable LOEs 2 (Development) and 3 (Talent Management/Utilization). The ‘strategic ends’, within *The Army Warrant Officer 2025 Strategy and Beyond* states “a Joint and Combined Arms-capable Warrant Officer Cohort of Trusted Professionals with technologically agile, adaptive, and innovative leaders who maintain Army capability overmatch and reduce logistical demands for Force 2025 and Beyond.”⁶⁹

⁶⁷ Everett Carl Dolman, *Pure Strategy: Power and Principles in the Space and Information Age* (NY: Routledge, 2005), 4-6.

⁶⁸ US Army, *The Army Warrant Officer 2025 Strategy*, 2016, (2016), 8.

⁶⁹ US Army, *The Army Warrant Officer 2025 Strategy*, 2016, (2016), 3.

Interpretation of the strategic ends would dictate that implementation would consist primarily of those who have volunteered to seek formal education and experience in theory, history, doctrine, and practice of generating “technologically agile, adaptive, and innovative leadership”. Those who do so should then take responsibility for developing “Army capability overmatch and reduce logistical demands for Force 2025 and Beyond.” Those who do not volunteer for this responsibility might easily continue to serve as implementors and in some cases integrators of these solutions, as long as they remain “trusted professionals” of the “joint and combined arms-capable warrant officer cohort”, enabled by the warrant officer PME afforded them in current and future US Army strategy.



Figure 6. Lines of Effort, US Department of the Army, *The Army Warrant Officer 2025 Strategy: In Support of Force 2025 and Beyond, 2016* (Washington, DC: Department of the Army, March 29, 2017), 4.

The two approaches to answering these strategic aims are derived from the means expected from each line of effort.⁷⁰ LOE 2 (Development) shows a requirement from Army institutions to “develop new and more agile systems and processes in the education and development of warrant officers that allow them to adjust to a more dynamic set of requirements.” LOE 3 (Talent Management/Utilization) demands from HQDA G1/HRC a; “new approach to Talent Management and utilization of warrant officers to better support the Army of 2025 and beyond”. It will be these two areas in which an HQDA G1/HRC is directed to focus AMSP utilization, clearly articulating this to prospective candidates through application data under Line of Effort Two (Development).⁷¹

LOE 2 (Development) describes the lead as Army University. This is certainly in name an appropriate agent, but the Army University is an institution of many parts. One of those parts is the Warrant Officer Career College, trusted to provide the “world class education” reflected in the key tasks of the strategy. It is true that Warrant Officer Education has struggled to achieve this since TWOS in the 1980s and ATLDP which culminated in 2004, described in warrant officer history.⁷² The strategy’s Supporting Objectives of “establishing a capacity to provide direction and oversight...through sustained collaboration” is another way of saying that the existing Army Council that provides this direction has been incapable of fulfilling this task.⁷³ The capacity to think in itself does not accomplish the operational objective, the formal authority in the application of a capability, does. It would be wasteful to build another new Army education capability, when efficiency demands only to fully empower the systems that already create the

⁷⁰ US Army, *The Army Warrant Officer 2025 Strategy, 2016* (2016), 3.

⁷¹ *Ibid.*, 4.

⁷² US Army, “The Army Training and Leader Development Panel ATLDP Phase III – Warrant Officer Study Final Report, 2002.” WO-19.

⁷³ US Army, *The Army Warrant Officer 2025 Strategy, 2016*, (2016), 5-6.

education capacity. In this effect, AMSP has become a workaround for further professional military education for some warrant officers demanding more of themselves and the Army.

In a similar manner, LOE 3 (Talent Management/Utilization) has the most critical of supporting objectives to the provisioning of AMSP; “Institute methodologies to improve utilization of the warrant officer cohort to better support the Army of 2025 and beyond”.⁷⁴ This supporting objective’s key tasks 3.1.1 through 3.1.4 demand (in order): *utilization across gaps, restructure of evaluation, review of (assignment) management, and a formalized talent management process for select positions*. This *Warrant Officer Strategy*, signed by the Army Chief of Staff maintains both a capacity and authority to address the utilization of all warrant officers with the full assistance of Human Resources Command (HRC).⁷⁵ Most specifically, those educated at AMSP, trained and experienced in the fundamental goals of the Army mission, if not AMSP’s expected vision of “*Division-level thinkers and planners to describe and communicate viable options to operational problems*”. The most damning of these is task 3.1.1, Utilization.⁷⁶ This is where Secretary Hon. Mark T Esper, pledging in his inaugural memorandum as Secretary of the Army to seek efficiency through Readiness, Modernization and Reform, demands efficiency.⁷⁷ At precisely the same time, an entire Army Task Force focused specifically toward Talent Management must inform prospective populations of AMSP graduates as to their utility if not assignment post-graduation, just as they have done for the past forty years of Commissioned Officer graduates.⁷⁸

⁷⁴ Ibid., 6-7.

⁷⁵ Ibid.

⁷⁶ US Army, *The Army Warrant Officer 2025 Strategy, 2016*, (2016).

⁷⁷ Mark T. Esper, *To the Army Family* November 20th, 2017, Office of the Secretary of the Army (copy in author’s possession).

⁷⁸ US Army, “The Army Talent Management Strategy 2025 and Beyond, 2016.” (2016), 4-1c.

As with many phenomena, why utilization appears difficult involves recognition of disconnections between development of newfound warrant officer capability, to explain the challenges, and the ability to prescribe potential solutions. As with Figure 3, the Warrant Officer 2025 Strategy already developed means by which to resolve this. However, as with many things the devil is in the details.

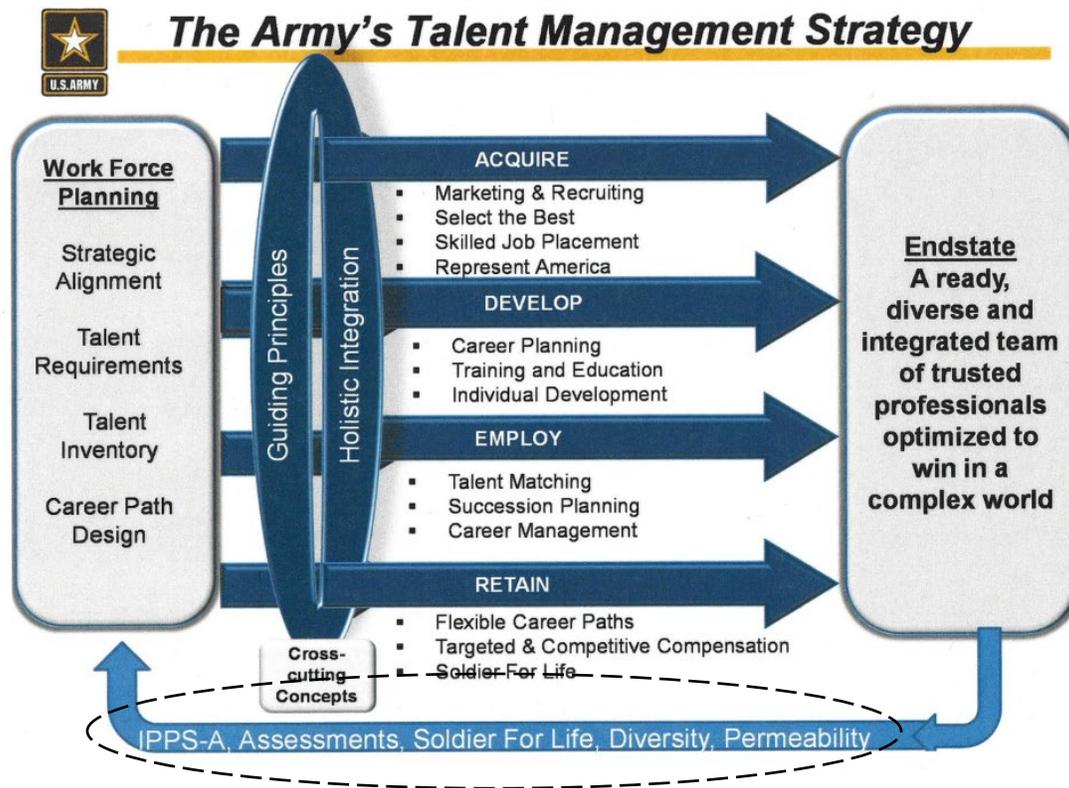


Figure 7. Talent-Focused Workforce Management Framework, US Army. “The Army Talent Management Strategy 2025 and Beyond, 2016,” 4-1c.

Without a very clear feedback loop built into the operational design (Figure 7), the opportunity for recursive analysis is only implied.⁷⁹ The hazard of discerning who is qualified to receive the opportunity for “world-class education”, and to what extent institutions are compelled to be responsible for the evolution of a cohort and its members is built into the strategy. This

⁷⁹ US Army, “The Army Talent Management Strategy 2025 and Beyond, 2016,” 4-1c.

strategy, if left unqualified though recursive analysis, will likely remain the exact opposite of what Dolman theorizes; a series of missed opportunities and pre-programmed mismanagement enabled by operational blinders, and a failure to evaluate efficiency. The evidence exists in the Army's Knowledge Management training publication 6-01.1 from 2015:

(Knowledge Management) Implementation Plan

6-6. ...The fully developed knowledge management solution implementation plan contains a timeline, quality control plans, resource scheduling, and risk management...

6-7. When planning for implementation of a knowledge management solution, consider that the solution is a strategic process and needs careful expectation management, condition setting, and continuous review.

The challenge in strategy, and specifically from Dolman's "continuing advantage" theory is to never concede that there is a final victorious point. This reflects the previous insert for Knowledge Management change implementation.⁸⁰ Julian Corbett, the author of *Some Principles on Maritime Strategy* describes that theory is a question of education and deliberation, and not of execution at all. That it depends on the combination of intangible human qualities which most describe as executive ability.⁸¹ Corbett uses this to remind us of several incidental pitfalls and to learn lessons from our previous conflicts. This concept of continuous learning reinforces the Dolman theory of relative and continuing advantage.

With additional foresight, the entire enterprise of adding "feedback loops" to a complicated system of operations within a strategy allows designers to avoid Daniel Kahneman's theory on 'hindsight bias'. The bias Kahneman states, is "The tendency to revise the history of

⁸⁰ US Department of the Army, Army Training Publication (ATP) 6-01.1, *Techniques for Effective Knowledge Management* (Washington, DC: Government Printing Office, March 6, 2015), 6-6 and 6-7.

⁸¹ Julian Corbett, *Some Principles of Maritime Strategy* (Original publication: 1911), reprinted in *Roots of Strategy, Book 4*, Four Military Classics, ed. David Jablonsky (Harrisburg, PA: Stackpole Books, 1999), 12.

one's beliefs in light of what actually happened produces a robust cognitive illusion.”⁸² This theory provides us a beacon to alert one’s critical thinking, reinforcing that one-time implementation is not enough to support lasting change.

The first example described by these theorists, as well as purveyors of normal science, is in the acknowledgement that one’s situation is never the same as it has been before. Scientific historian Thomas Kuhn’s work on the subject describes how the arrow of time and the physical rules of entropy provide all that is required for the situation to be unique, but also changing. The use of critical thinking to examine the situation with all of its unique attributes is the first requirement.⁸³ Additional theorists in combination with Kuhn pave this path of understanding.

The second example of the phenomena of education and utilization of warrant officers is provided by and virtually demands the use of Henri Jomini’s reductionist examinations of military resources and requirements. Jomini’s embrace of quantitative observation provides the critical thinker with empirical information.⁸⁴ It is this observation of this data, in this case warrant officer utilization, which defines scientific examination best articulated in Thomas Kuhn’s theory on scientific revolutions.⁸⁵ That existing modalities remain reinforced unless there are questions raised of anomaly which might lead to paradigm shift.

At the moment of paradigmatic change, the tacit knowledge from the phenomenon of war is recouped and serves as an efficiency generating function. Observing leaders will quickly recognize obvious mistakes and seek to fix them holistically. To carve out the time to restructure a system for future identification and avoidance of inefficiency is another duty altogether. This is

⁸² Daniel Kahneman, *Thinking Fast and Slow* (NY: Farrar, Straus, and Giroux, 2013), 203.

⁸³ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970), 128-129.

⁸⁴ Henri Antoine Jomini, *The Art of War*. Translated by G.H. Mendell and W.P. Craighill (Philadelphia: J. B. Lippencott & Co., 1862), 26.

⁸⁵ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (1970), 128-129.

the mindset of the modern warrant officer; that there are no ‘magic bullets’, that there is a mission to accomplish, that one must develop or become the alternative plans for failure acknowledging that technology, and possibly our methods of developing it, were unreliable.

Technology was conceived of and built by man, and as such it contains subtle imperfections which may eventually result in its failure. As soldiers and officers responsible for the performance of this technology, warrant officers also understand that adversaries will find work-arounds in this technological advantage. Warrant officers inherently understand they have a responsibility for preparedness in adaptation and to train and equip others with this same sense of duty. Coupling this responsibility in the warrant officer role with an eye to the future requires warrant officers prepared to adapt to uncertainty and being comfortable with ambiguity for the purpose of bringing chaos under relative control.

Managing Opportunities

In structuring and preparing an army for war, you can be clear that you will not get it precisely right, but the important thing is not to be too far wrong, so that you can put it right quickly.

— Sir Michael Howard

As Michael Howard states, “putting it right quickly” is the balance between failure and the opportunity for success.⁸⁶ As if on cue enters the Army warrant officer -to close knowledge gaps in Army populations focused primarily on the administration, training, or execution of the Army’s mission. Warrant officers do this using tacit and explicit leadership and specialized expertise to their given job field. This position of influence can be easily undercut without the education to provide a smooth transfer of this knowledge and experience. Army warrant officers less fortunate with time to pursue programmed civil education program, consistently wrestle with how much education is needed or appropriate at the right time. This education is the keystone in

⁸⁶ LTC Paul Yingling, “A Failure in Generalship”, *Armed Forces Journal* (May 1, 2007): accessed November 30, 2017, <http://armedforcesjournal.com/a-failure-in-generalship/>.

the arch of responsibility inherent to warrant officers and determined through dedicated efforts in talent management.

The opportunities afforded by AMSP at SAMS provide new responsibility for select warrant officers who have served among the Army for at least a decade. While the growth medium of AMSP becomes a springboard from a baccalaureate education through a master's program, there is also time to reflect on individual service and its role in society, to produce a monograph on any military topic and other introspection away from an operational or administratively distracting environment. What results is an ethical expression of individual understanding while enabling a mid-career assessment for the Army's stock-in-trade; developing multiple solutions for decision makers at increasingly higher levels. Each one of these statements undergirds the foundation of talent management.

In the earlier examination of Army warrant officer career timelines, it was shown that AMSP is only available to CW3 or higher.⁸⁷ This stipulation limits the population which is qualified to apply, but also the potential for an earlier and extended utilization, more in accordance with the feedback loop of the Army's Talent Management Strategy (Figure 7). Ostensibly, the worst case for an earlier utilization is to have a less-experienced but educated CW2 serve on a Division staff, a specification not in accordance with the instructions of 600-3.

An increasing population of Army warrant officers holding baccalaureate degrees earlier might also be an opportunity at both prospecting AMSP talent earlier. This could retain that talent beyond traditional retention marks attributed to ADSOs of grade, commission, or education. This

⁸⁷ MILPER Message 10-209 "Selection Process Open for The Advanced Military Studies Program," 10 Aug 2010.

type of analysis and prioritization appears in the Army's own professional journals as the basis for talent management.⁸⁸

While the Army is not as flexible as civil industry in the “onboarding” (hiring) and “displacement” (firing) of personnel when the stock market takes a jump, it has an entire command (HRC) capable of providing increased structure and efficiency through analysis to personnel management through internal policy. Blithely stating that warrant officers are “subject matter experts” in their fields, are a relatively small population, and therefore more easily managed would be presumptuous given the existence of *The Warrant Officer 2025 Strategy*. Kahneman warns readers of the role of experts, as an introduction of heuristic bias.⁸⁹ This same caution is echoed in Philip Tetlock's book *Superforecasting* a couple years later.⁹⁰

Warrant officers are subject to branch-specific policies, family preferences, and maturing career timelines which form very solid decision points. By outlining the increased structure and efficiency from the strategy, potentially yielding opportunities for meaningful and challenging work, the Army can simultaneously increase its base population of the educated warrant officer while using those products of the strategy to take on difficult tasks, fulfilling strategy mandates to further professionalize and retain exceptional talent.

A study of the Field Artillery warrant officer MOS professional development model provides insight on the subject of timing. The warrant officer with the right skills, can exploit the opportunity windows for education and broadening earlier. While the preponderance of CW3s are

⁸⁸ Army G1, “Talent Management Task Force,” *US Army Online STAND TO!* (Thursday August 11, 2016): accessed November 23, 2017, <https://www.army.mil/standto/2016-08-11>.

⁸⁹ Daniel Kahneman, *Thinking Fast and Slow* (NY: Farrar, Straus, and Giroux, 2013), 218 & 219.

⁹⁰ Philip E. Tetlock and Dan Gardner, *Superforecasting: The Art and Science of Prediction* (NY: Crown, 2015), 86.

wrapping up their initial ADSO for promotion to CW3 concurrent with or just after completing an ADSO for their warrant service or education benefits, others are choosing to extend it, or retire.

Those who extend the Army gains in benefit of utilization. The other portion may choose to retire their warrant officer service at around 10.5 years, or 20 years of service. By resetting this timeline through a re-calibrated AMSP inclusion of *select* CW2s (Figure 8) with demonstrated skills and commitment, the warrant officer is provided the opportunity to; a) use their pre-existing education, b) plan to be offered and serve as a CW3, and c) use an otherwise untapped set of skills at AMSP, toward increasingly difficult problems challenging an increasingly responsible Army as an AMSP graduate. The ways in which this enables the Army are quantitative in longevity and qualitative in depth of employment as an efficient and focused AMSP utilization will the Army generate warrant officer opportunities for extended service using AMSP skills:

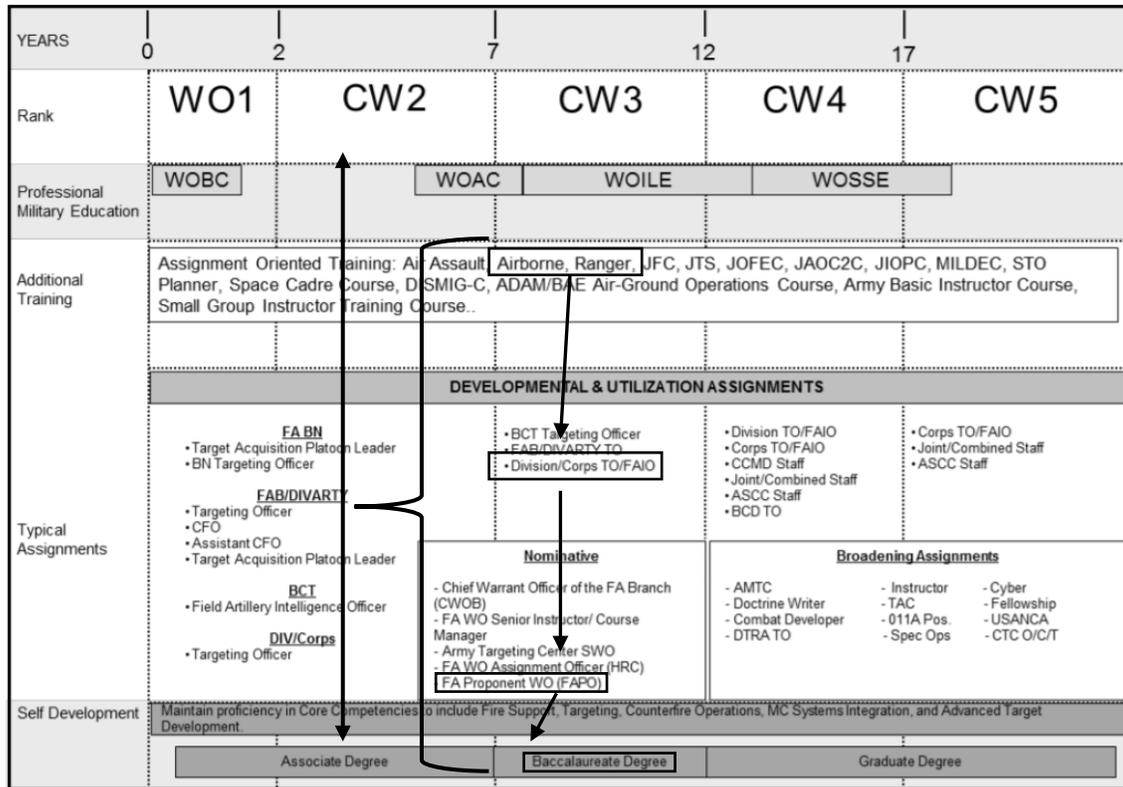


Figure 8. Recalibrated Field Artillery Warrant Officer Professional Development Model, US Department of the Army, Army Regulation 600-3, *Officer Professional Development and Career Management, Field Artillery* (2014): accessed November 26, 2017, <https://www.milsuite.mil/book/servlet/JiveServlet/previewBody/424274-102-1-707193/2Field%20Artillery%20Branch.pdf>.

Furthermore, the Army branches which would benefit the most from warrant officer utilization are varied. Currently AMSP graduates are from the Maneuver, Fires, and Effects fields. The vision of the AMSP seeks to provide solution makers for Army operational problems in conflict. As such, the Army’s requirements to develop Crisis, Contingency, and Operational plans for decision makers fall most frequently into this same MFE community of planners, always dependent on the non-MFE specialties for operational data.

Two additional benefits exist in this outcome; AMSP apportionment for civil education opens more Training with Industry (TWI) and Degree Completion opportunities to non-MFE branches (such as Ordnance or Quartermaster). The acknowledgement of course is that select non-MFE warrant officers serve a significant role in planning, and with the right credentials,

should be considered for AMSP. In essence, efficiencies are gained across the Army in existing programs while a more focused approach breeds a more educated and effective Army.

The Army has been directed to commit intellectual energy toward solving the Army and the United States' challenges by tapping into its most experienced officers. Programs such as AMSP provide operational designers a sound, military operational art studied across history governed by science and practiced through codified doctrine. The merits of increasing written and verbal presentation from this education appear as an untapped exponential growth resource in an age of information. Few will say that the challenge is anything but daunting, however the tools are in the Army's hands.

In summary, few can overlook the advantages and vast opportunities of the *US Army Warrant Officer 2025 Strategy*. If implemented in concert with *The Army Talent Management Strategy 2025*, it empowers what could be a "world-class educated" coterie of officers to provide specialized technical knowledge for senior leaders on multiple viable solutions -but only if the feedback is executed and followed to conclusion. Warrant officers not only need the opportunity to be educated, they require the time to use that education, to provide the continuing advantage that a strategy demands from a dynamic, information-dependent environment challenged by limited resources.

Prescription Until Review: Conclusions and Recommendations

Strategy is a system of expedients; it is more than a mere scholarly discipline. It is the translation of knowledge to practical life, the improvement of the original leading thought in accordance with continually changing situations.

—General Helmuth von Moltke “the Elder”

The role of Army warrant officers embody the expediency Moltke describes, performing as Army leaders who fused legacy and current technology across a technologically dependent and growing future Army population.⁹¹ This expedience should also apply to distribution of SAMS-educated “technicians of operational design” and the Army systems dependent upon them. While the research conducted on this subject has determined that AMSP throughput appears as utilitarian as possible, there are efficiencies which can be capitalized on. The following predictions and prescriptions for the US Army should provide opportunities for prescriptive changes to AMSP attendees in order to maximize effect.

The US Army Training and Doctrine Command (TRADOC), as the proponent for training the US Army, produces concepts which frame the ends, ways, and means by which Army leadership will train toward operational challenges. The Training Pamphlet (TP) 525-3-1, *The U.S. Army Operating Concept (AOC): Win in a Complex World*, provided a series of sequential and concurrent goals to achieve readiness in order to project capability for winning our nations’ wars. Summarizing the document, it essentially re-states Clausewitzian theory that war is a human endeavor, dependent on the strength of this trained, efficiently-organized, human resource.⁹²

⁹¹ Helmuth von Moltke, *Moltke on the Art of War: Selected Writings*, ed. and trans. Daniel J. Hughes, trans. Harry Bell (NY: Ballantine Books, 1993), 47.

⁹² TRADOC Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World*, October 2014, 39.

Further elements of the concept describe the need for adaptive leadership, operating in an increasingly joint environment seeking deterrence rather than primarily conflict outcomes.⁹³ Leader development, from Field Manual 6-22 *Army Leader Development* outlines that “Army leader development processes produce and sustain agile, adaptive, and innovative leaders who act with boldness and initiative in dynamic, complex situations to execute missions according to doctrine, orders, and training.”⁹⁴ As the Global War On Terror (GWOT) has shown Army leaders’ adaptation is crucial to survival in the Joint environment.

Author John Kotter’s broad understanding of leadership outside of formal authority explains this concept. He states that “people in professional, managerial or technical jobs must also be skilled in the complex set of interdependent relationships that come with their jobs.”⁹⁵ The need for leadership to understand the resources of a Joint approach are specifically tailored to the complex-adaptive requirements of a system yielding a strategic or political outcome.⁹⁶

Using the tools of land warfare doctrine to synchronize the desired effect of a deterrence may require more than “we’ll work it out when we get there.”⁹⁷ NATO’s alliance in the Baltic is a recent case of this. Adaptation to previous deterrence postures of the Cold War, while embracing the Army’s multi-domain battle concept use technologies (such as cyber and space) interdependent with traditional domains now required for modern effects. For example, the use of

⁹³ TRADOC Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World*, October 2014, 12.

⁹⁴ US Department of the Army, Field Manual (FM) 6-22, *Leader Development* (Washington, DC: Headquarters, Department of the Army, 2012), 1-14.

⁹⁵ John P. Kotter, *Power and Influence* (NY: Free Press, 1985), 37.

⁹⁶ US Army Combined Arms Center, Center for Army Leadership. “About Leadership: ADP 6-22.” accessed August 7, 2017, <http://usacac.army.mil/cac2/events/ADP622/>

⁹⁷ Col. Vincent Alcazar, US Air Force, and COL Thomas M. Lafleur, US Army, “A Role for Land Warfare Forces in Overcoming A2/AD.” *Military Review*, (US Army Combined Arms Center, Fort Leavenworth KS, November-December 2013): accessed February 7, 2017, http://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20131231_art014.pdf.

modern propaganda is dependent upon modern systems of information distribution in an Anti-Access/Area Denial (A2/AD) environment.⁹⁸ Understanding and capitalizing on dependence of a domain re-establishes a balance to the risks inherent from adversaries engaging offensively without mitigating strategies in place. An AMSP educated warrant officer alongside planners can rapidly recognize and plan active and dynamic damage control to planning deficiencies using knowledge and experience when domains lose friendly dominance.

Technology, Leadership and Systems Management

The highly technical knowledge of designated Army warrant officers enriches distributed command and control environments of a resource-constrained Army. Having this experience close at hand immediately provides planners alternatives to means or ends through advice. In a phrase, warrant officers serve as the connection to the most promising practices of the past, while AMSP warrant officers explicitly observe, record, retain, and re-purpose these practices as a side effect from education. However, not all observations are of best practices. The use of warrant officers as advisors in Command Chief Warrant Officer (CCWO) advisory assignments feedback past successes when serving in this aspect of the warrant officer role. Paraphrasing Carl von Clausewitz, objectives are formed through advice and counsel, and take the form of policy aim. The role of advisor only reinforces the idea that “war cannot be divorced from political life.”⁹⁹

For years communities have wrestled with the criteria which would differentiate warrant officers from their peers. Some commands hold boards reviewing records with assessments which focus on tactical skills, others on education or training. Some pride themselves on balancing a

⁹⁸ US Department of the Army, *Multi-Domain Battle: Combined Arms for the 21st Century* (Washington, D.C.: Department of the Army, February 24, 2017): accessed July 28, 2017, http://www.tradoc.army.mil/multidomainbattle/docs/MDB_WhitePaper.pdf.

⁹⁹ Carl von Clausewitz, *On War* Translated and edited by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 605.

hindsight bias of job performance from a different paradigm as the evidence for potential. In the previous example of policy exerting on military objectives, experienced advice may well be the best advice. The best advice is best acquired using lenses of theory, history, doctrine and practice.

The advice from the above metaphor requires expert focus as well as broad perception. Understanding the paradigm (or operational environment) one finds themselves is key and essential. Only then can one know how to exploit perspective from a position of relative advantage, the operative function for any current or future strategy, especially one espousing talent management.¹⁰⁰

Interpretation of Planning Requirements

Warrant officers which attended the Warrant Officer Career College (WOCC) Warrant Officer Staff Course received entry-level training on knowledge and project management during the distance learning or residency phase of the course.¹⁰¹ Project management is a general concept which traverses the military and civilian enterprises in peace, in preparation and during campaigns. The project management concept, which finds its home in both civil and military sectors, is prime terrain to be occupied by warrant officers.

The benefit of warrant officers are experiences resulting from a civil-military workforce integration. It is the exposure by warrant officers to processes internal and external to Army process of not specifically what the Army needs done, but how else it might be accomplished. Warrant officers, many of which hold civilian certification in maritime, aviation, information, law enforcement, and personnel management (among many others) provide unique integrating

¹⁰⁰ Everett Carl Dolman, *Pure Strategy: Power and Principles in the Space and Information Age* (NY: Routledge, 2005), 4-6.

¹⁰¹ US Army Combined Arms Center, Warrant Officer Career College, *Warrant Officer Intermediate Level Education (WOILE)* (2017): accessed January 8th 2018, <http://usacac.army.mil/organizations/cace/wocc/courses/wosc>.

capacities when operating under expeditionary environs or among purely non-military relief operations.¹⁰²

The training received in WOCC at various levels to include ILE allow warrant officers to participate in broad ways as part of an expeditionary staff, to synthesize basic solution systems for leaders in a joint environment. Applying minimal theory, history, and doctrine only mask the recognition of challenges in an environment and its paradigm, which can unseat the strategy of a plan. It is the exposure by warrant officers to processes internal and external to the mechanics of not what the Army needs done, but how it will be accomplished which is of use. As a result, several branches are taking their own approach to ILE.

Starting immediately, Human Resource Command (HRC) should review and analyze throughput data for AMSP-accepted and non-accepted packets, by branch attendance, and past utilization. If nothing else, HRC can provide statistical information informing the Army leadership of any inefficiencies in application and or attendance of warrant officers to ILE or AMSP. The *Talent Management* and *Warrant Officer 2025* strategies on pages 30 and 33 respectively, codifying inclusion and utilization of warrant officers with AMSP talents have been signed, and as professional development narratives begin to match it is time to efficiently execute these strategies.

Areas for Further Study

As directed, warrant officer graduates of AMSP are designated for utilization in accordance with the goals of the Warrant Officer Strategy, and the Army Talent Management Strategy, both designed to work in harmony. However, the fact remains that an Army of

¹⁰² Jeffrey Daniel, "Army's 'Best Kept Secret' Floats," *1st Sustainment Command (Theater) Public Affairs* (January 26, 2012): accessed November 30 2017, http://www.army.mil/article/72469/armys_best_kept_secret_floats.

constrained resources with a broad range of technically diverse domains and an endless appetite for talent requires some finesse. Some areas where the Army can regain its tacit knowledge and AMSP utility are in multi-domain interfaces on page 46, the areas of JIIM interaction on page 47, and operational planning integration processes listed on page 48.

Accessing the Multi-Domain from Training with Industry

As stated earlier, the warrant officer integration with civil processes are prolific. The most codified of these is in the program Training with Industry (TWI). While TWI embeds warrant officers to civilian processes, it also provides more in the way of codifying the operationally relevant details into a broader strategic military application. While TWI requires an additional duty service requirement of 3 years, the program has no formal requirement to produce direct updates to military doctrine, theory, history or practice.¹⁰³

By applying Army design from AMSP for multi-domain development over the TWI program, operational planners can develop a framework for accumulating TWI findings in a broader scope for use in operational plans for administration, logistics, operations, communications, among other specialties. These practices of industry at the leading -or “bleeding-edge”, where rapid fielding occurs can cut time for bridging logic gaps as warrant officers integrate them to “Win in a Complex World” via Army operations.

In peacetime, ensuring sites that do developmental science are refreshed with talent to hone their practical use is yet another utilization. Sites such as the US Army Armament Research, Development and Engineering Center (ARDEC) at Picatinny Arsenal, the Army G3/5/7, and the Defense Advanced Research Projects Agency (DARPA) work with the Strategic Capabilities Office (SCO) to cultivate multiple options for commanders and civilian leadership. Utilizing a

¹⁰³ US Army Human Resources Command, Training with Industry (TWI) Student Handbook, Enlisted Personnel Management Directorate (February 5, 2018): accessed September 20, 2017, <https://www.hrc.army.mil/content/Training%20With%20Industry%20TWI%20Student%20Handbook>.

trained, educated, and institutionally familiar integration expert to shepherd advanced projects is the systemic fail-safe for knowledge and capability left under or unexploited. Warrant Officers from AMSP can remedy this.

Leveraging the Benefits of a JIIM Environment

As conflicts mature across an information age, the increasingly integrated civil-military interface requires more dynamic actors, not less. As Army warrant officers comprise only three percent of the Army yet operate in 16 specialties across 17 branches of this one service cohort, one need not calculate their interdependence and worth to modern plans. It is for this reason that warrant officers should be increasingly utilized as liaisons and exchange officers to partnerships in the JIIM environment.

The dynamic, intercultural nature of JIIM environments require leaders selected and trained to operate in environments defined by similar characteristics. These environments are bound by the strictures of technological convergence with populations, which demand control and shared understanding. The need for deconfliction, coordination, cooperation, and/or synchronization is magnified in crisis or combat particularly when newly globalized cultures with language, or other instruments of shared understanding are missing.¹⁰⁴

The addition of an AMSP education ensures that an understanding of history and theory accompany the practices and doctrines of these differing environments. Commissioned officers are programmed for utilization in post-AMSP assignments through interviews, by name requests, and HRC required operational assignments based on their competencies. Warrant officers

¹⁰⁴ US Department of Defense, Joint Staff, Joint Publication (JP) 3-08, *Interagency Coordination During Joint Operations, Vol. I* (Washington, DC: Government Printing Office, 1996), I-1.

distributed in a similar fashion could integrate competencies into systems to qualitative depth for deep aspects of the operational environment which Joint operational plans insist upon.¹⁰⁵

Operational Planning Integration

It has been said that doctrine is a point of departure for plans. Without routinely updating this doctrine, plans fail to adapt, and become outmoded by the environments they are expected to perform within. While not all warrant officers are expected to be doctrine authors, their experiences can be a gold mine if assayed and compiled. It is in this process where shared learning has bred a “shared experience” where if efficiently used the Army can formulate increasingly effective future plans.¹⁰⁶

The primary injection of this process begins at locations such as the Command and General Staff College and are refined for use at the School of Advanced Military Studies, specifically the Advanced Military Studies Program. Officers educated there, particularly warrant officers as identified on pages 43 through 45, identify the strengths and weaknesses inherent to themselves and any plans as they are developed. The depth by which these officers and plans are examined are what codifies the practices, specifically those culled from the variety of warrant officer MOS experiences as well as training with industry. In this way, units might not succumb to the old adage of only doing well what the commander inspects.¹⁰⁷

When required, warrant officers use experience efficiently to manage risk applied to resources in a single iteration. Managing risk of priceless personnel and expensive technology is a technical effort, requiring proficiency, especially in a dynamic threat environment. Knowing the

¹⁰⁵ US Department of Defense, Joint Staff, Joint Publication (JP) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), I-2.

¹⁰⁶ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (NY: Doubleday, 1966), 23.

¹⁰⁷ Peter J. Schifferle, *America's School for War: Fort Leavenworth, Officer Education and Victory in World War II* (Lawrence, KS: University Press of Kansas, 2010), 196.

specific tolerance of systems to risk is crucial to limit enemy exploitation. Having the skills to describe this in detail using any type media to strategic decision makers is key and essential to the strength of an alliance, a coalition, or a tactical partnership. Warrant officers who attend AMSP fulfill these requirements in education, just as their MOS provides them the specificity, to articulate the broadened and potentially critical understanding.

Just as AMSP provides very explicit knowledge in the form of doctrine, it also provides time for practicing that doctrine. Forming this doctrine into usable plans requires as much efficiency as possible. Efficiency as the mother of invention requires a well from which to drink, and Warrant officers from AMSP provide intuitive solutions in volume.

History Theory and Practice: The Explicit Use of Experience

Contingency planning of logistics between US Army corps and divisions alone requires planners of merit. In the past, that merit has been the survival of enough engagements to earn a seat in the next plan. In recent history, where cultural experience became essential to expeditionary operations, it is depth of knowledge frequently manifested as experience which enables one to handle history with more than just a healthy dose of respect, what Dietrich Dorner regards as “intuition.” He continues by stating that in order to avoid mistaken hypotheses, one must eliminate ignorance through the understanding of structural knowledge. Dorner continues by stating that one must know this structural knowledge now in order to know how they will interact, creating a “reality model.” The result is a knowledge of explicit variables while implicitly these variables remain invisible. The Dorner term for describing the concept is Intransparency, regarded by the US Army as “situational awareness.” The result is what has been commonly described by warrant officers as “intuition.”¹⁰⁸

¹⁰⁸ Dietrich Dörner, *The Logic of Failure: Why Things Go Wrong and What We Can Do to Make Them Right* (NY: Metropolitan Books, 1996), 42.

Understanding the strategic nature of infrastructure upon populations or culture can influence the outcome of engagements, an observation routinely demonstrated across six division-level or above exercises at AMSP. Knowing that specific ports are not used due to their traditional purpose may have hidden meaning. That meaning may become operationally relevant in a limited guerilla conflict where the population serves as the most influential element.

Synthesizing appropriate regional or functional means for engaging in conflict may be tied to a historical use of specific logistics, serving as a constraint for the friendly force or a lever to be used by the adversary. Having a specialist in this region or function to observe, understand, modify or plan for these nuances gains efficiency which the requirements of other US agencies do not record or evaluate. When this regional or functional specialist is not available, the well-worn research methods by planners from AMSP for supporting campaigns of this type.

Where deliberate planning requires refinement over time, modern conflicts using technological leaps in communications have shown that crisis management and response require a resident understanding of theory. Planners with a foundation in the scientific method, bolstered by a depth of sociological understanding and experience serving as “first responders” to events punctuate history and the contemporary security environment. The Joint principles of operations; Legitimacy, Perseverance, and Restraint -demand the ability for departments of the armed forces to respond effectively to such events and assert the neutral or positive perception of the international community as an operational requirement.¹⁰⁹

Using the associated theories available in AMSP are what these specialized planners use to find weak points in design which have changed under burdens of entropy or exigency. Adaptive leadership reinforced throughout the AMSP course culminates in the examination of

¹⁰⁹ US Department of Defense, Joint Staff, Joint Publication (JP) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), I-2.

design in operational art and the exercises throughout. This education in theory and application of adaptation allows AMSP warrant officers the capacity to serve as go-betweens in an all-volunteer force virtually dependent upon the exponential growth of technological advance.

For an Army serving within the demands of that political environment, crisis planning and execution become a critical capability. Warrant officers who complete and thrive after AMSP share characteristics required by the demands of this modern military's responsibilities. The only way to get to this position of relative and continuing advantage is when our Army "Prioritizes the development of leaders capable of visualizing, describing, directing, leading, and assessing operations in complex environments and against adaptive enemies." allowing the outcomes of talent management and interdependent strategies to yield positive results.¹¹⁰

Beginning with the Army's Operating Concept, *Win in a Complex World 2020-2040*, as experienced, tacit and explicit knowledge managers during technological crisis, warrant officers remain the relevant population to meet, understand and design around the complexity of that paradigm. Just as many warrant officers retain diverse, specialized skills, they are also composed of an attrition model of the Army's best practices. This alignment with institutional knowledge regards them as mentors on subjects from safety to decisive combat actions and managing risk in times of uncertainty.

The Army, and its requirement to satisfy Joint Staff assignments can provide data on units requiring concurrent development of Crisis, OPLANs and CONPLANs. By cross-referencing HRC and Joint Staff data sets, AMSP warrant officer graduates can enhance assignments where capability gaps within or between deployed units, near-term deploying units, and units fulfilling apportionment to theatre commands require their talents.

¹¹⁰ US Army TRADOC Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World* Executive Summary (Fort Eustis, VA: TRADOC, October 2014), 3.

Army organizations and individuals can benefit from a more efficient utilization of warrant officer AMSP graduates. Knowing the theory of talent management, the doctrine of what the Army is asked to do, the history of what inaction can yield, and the practice of repairing mistakes or oversights in plans is what AMSP provides. It only takes an acknowledgement and understanding of Army warrant officer development to provide the basis for what utilization assignments would be most appropriate with regard to the *Army Warrant Officer 2025 and Beyond* strategy.

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