

## PME Lethality Working Group Final Report

### **The Art and Science of Warfighting, PME and Strategic Thinkers**

**BLUF:** The results of the review of education and personnel policies directed by the Secretary of Defense (SecDef) showed that the tenets of the art and science of warfighting are being taught in Service Senior Level Colleges (SLC), National Defense University (NDU), and Service Advanced Schools (AS). AS have developed education programs with critical elements necessary to develop strategy planners. The Services have specialized strategy programs that provide officers possessing high aptitude and potential the chance to examine and think through strategic planning issues and have developed sufficient talent management capacities to adequately/appropriately utilize and shepherd these officers. The Services have made strong efforts to produce sufficient numbers of applied strategists as called for by Congress, however, there are still too few strategic theorists being produced.

#### **Overview**

In support of the President's plan to build a larger, more capable, and more lethal Joint force, SECDEF directed USD(P&R) to review policies on Professional Military Education (PME) to "regain a focus on the art and science of warfighting and to enhance lethality." The WG interpreted that the art of war requires an intuitive ability to assess a situation and decide upon a course of action, and that the science of war applies to those elements which can be measured by scientific methods. The conduct of war is fundamentally a dynamic process of human competition requiring both the knowledge of science and the creativity of art but driven ultimately by the power of human will, an attribute that can be enhanced by strategic thinking.

To address this task, a PME WG was created with the participation of: ODASD (FE&T), ODASD (MPP), USD (I), J1, J7, ASN M&RA, OPNAV N1, ASA M&RA, Army G357, NGB J37, SAF/MR, AF/A1, Army War College (AWC), Air University (AU), Naval War College (NWC), and Marine Corps University (MCU). The WG reviewed PME policies related to Joint Professional Military Education (JPME) delivered through the in-residence Service Senior Level Colleges (SLC) and at National Defense University (National War College, Eisenhower School, and the Joint Advanced Warfighting School (JAWS).)

Leadership feedback refined the task to focus on the development of strategic thinkers. The WG then examined if and how Service Developmental Education (DE) programs support the development of strategic and critical thinking skills. The review included the following Service AS: the Army's School for Advanced Military Studies (SAMS), the Air Force's School of Advanced Air and Space Studies (SAASS), the Navy's Maritime Advanced Warfighting School (MAWS), the Marine Corp's School of Advanced Warfighting (SAW). These programs typically follow Service Intermediate Level Education (ILE) programs to more deeply educate competitively-selected groups of officers in the art and science of warfighting and operational planning.

Following the definitions originally articulated in the 1989 Ike Skelton Panel Report,<sup>1</sup> the WG

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<sup>1</sup> Report of the Panel on Military Education of the One Hundredth Congress of the Committee on Armed Services, House of Representatives, One Hundred First Congress, First Session

distinguished between applied and theoretical strategic thinkers. It concluded that the Officer Professional Military Education Program (OPMEP) driven SLC curriculum was sufficient to qualify joint officers as applied strategic thinkers and that AS programs, save SAASS, aim to develop strategically-conversant planners. SAASS's mission to "produce strategists through advanced education in the art and science of air, space, and cyberspace power for the Air Force and the Nation" provides a model to follow if elevated to the level of national strategy. The Services also have a variety of educational opportunities that develop the strategic acumen of officers more deeply, such as: Army's PhD producing Advanced Strategic Planning and Policy Program (ASP3), the CGSC Art of War Scholars Program, the Advanced Strategist Program (ASP) at the U.S. Naval War College, and the Air Force's Multi-Domain Operational Strategist Concentration Seminar at the Air Command and Staff College. The WG findings indicate the Services have made strong efforts to produce sufficient numbers of applied strategists as called for by Congress. The WG found, however, that there are still too few strategic theorists being produced, although only small numbers were called for, as the type of program required for this is more taxing and does not easily fit within PME's current structure.<sup>2</sup>

### **The Art and Science of Warfighting in PME/JPME**

The Secretary has stated concerns that PME has lost its focus on "the Art and Science of Warfighting" and must do better to develop strategically-minded military personnel. This report addresses these concerns. The Department of Defense ensures that officers are educated, trained, and experienced in joint matters to enhance the joint warfighting capability of the United States through a heightened awareness of joint requirements, including multi-Service, interagency, international, and non-governmental perspectives.

PME is a required system of progressive levels of military education that prepares Service members for increasing levels of Service and Joint leadership responsibilities. "Each service is responsible for educating officers in their core competencies according to service needs. Air Force schools, for example, primarily teach air and space warfare. Similarly, Army, Navy, and Marine Corps schools focus on land, maritime, and expeditionary warfare, respectively. The Department depends on the services' PME programs to develop officers with these service-specific proficiencies."<sup>3</sup>

JPME is a CJCS approved body of educational objectives, outcomes, policies, procedures, and standards supporting the educational requirements of the joint officer. JPME students are educated about the planning and execution of military operations at the theater and strategic levels. In short, PME produces professionally competent Service officers and JPME produces competent joint officers. Neither system requires to produce national-level strategic thinkers.

In this context, PME and JPME institutions develop officer competencies in the art and science of warfighting, albeit with slightly different emphases. Policies implemented after the 1986 NDAA

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(Washington: U.S. House of Representatives, April 1989), page 28. (Hereafter HASC Report of 1989).

<sup>2</sup> Ibid.

<sup>3</sup> Committee on Armed Services, Subcommittee on Oversight & Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington: U.S. House of Representatives, April 2010), page xi.

created a structure to ensure that the Services developed and leveraged officers who were educated in joint matters and assigned to joint billets. CJCSI 1800.01E, Officer Professional Military Education Program (OPMEP), explains that the purpose of JPME is to “convey the broad body of knowledge and develop the habits of mind essential to the military professional’s expertise in the art and science of warfighting,” while DoD Instruction 1300.19, “DoD Joint Officer Management (JOM) Program”, 4 March 2014, governs utilization of officers educated in joint matters. Over the past decade, each Service SLC institution joined National War College, the Eisenhower School, and the Joint Advanced Warfighting School (JAWS) in compliance with OPMEP requirements to be accredited to award JPME II, thus producing SLC/JPME II graduates. “JPME now permeates the Services’ traditional PME.”<sup>4</sup>

The Services maintain PME institutions that are not part of the JPME system. Of particular interests are the Advanced Schools, whose missions are more Service-specific and develop small cadres of officers more intensely than the required PME/JPME system. If the SLCs are where joint officers are produced, then the Advanced Schools (ASs) are where strategically knowledgeable Service officers are produced.

The WG assessed current statutes, regulations, and policies governing PME to identify opportunities for improving how those programs function with respect to Students, Curricula, and Utilization. Further, it requested information from both sets of institutions, with emphasis on (a) the inputs to the PME process (students), (b) details with regard to how they are developed while in the PME program (curriculum), and (c) the outputs of the process (utilization after graduation). The objective is to provide a short, dense, fact-based report to SecDef that captures this complex process whose implementation varies across the Services. Thus we structured the specific data requested to that which can be considered common across each School and Service.

## **Senior Service Level College (SLC) Assessment**

### Findings

#### *SLC Students*

Service selection processes for SLCs ensure that officers are at least O5 with no more than 23 years total active federal commissioned service at the end of their education year and meet requirements set by their Service. Army, Air Force, and USMC officers are competitively selected for in-resident SLC, either with or separately from promotion board processes. Navy uses an administrative review process made up of a proposal from the individual’s community with information on their professional quality, career timing, and academic potential.

Figure 1 shows throughput by each school. Between 1400–1450 officers, civilians, and foreign personnel are annually educated in-residence in SLC. This is a significant supply of senior officers that are presumed to be competent in the art and science of warfighting at the Service and Joint level.<sup>5</sup> Throughput by school varies between 30 per year for Marine Corps War College to

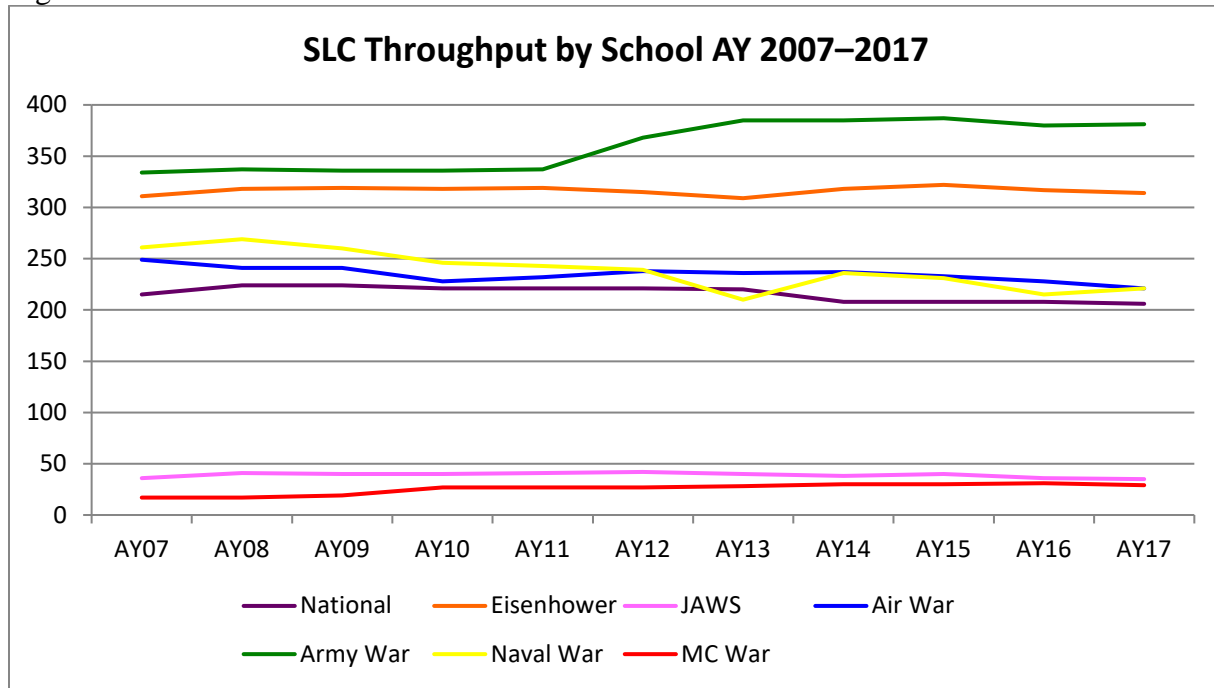
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<sup>4</sup> Committee on Armed Services, Subcommittee on Oversight & Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington: U.S. House of Representatives, April 2010), page xii.

<sup>5</sup> SLC graduates occupy Service and Joint positions at the O-5/O-6 level. There were approximately

approximately 380 per year for the Army War College.

Figure 1

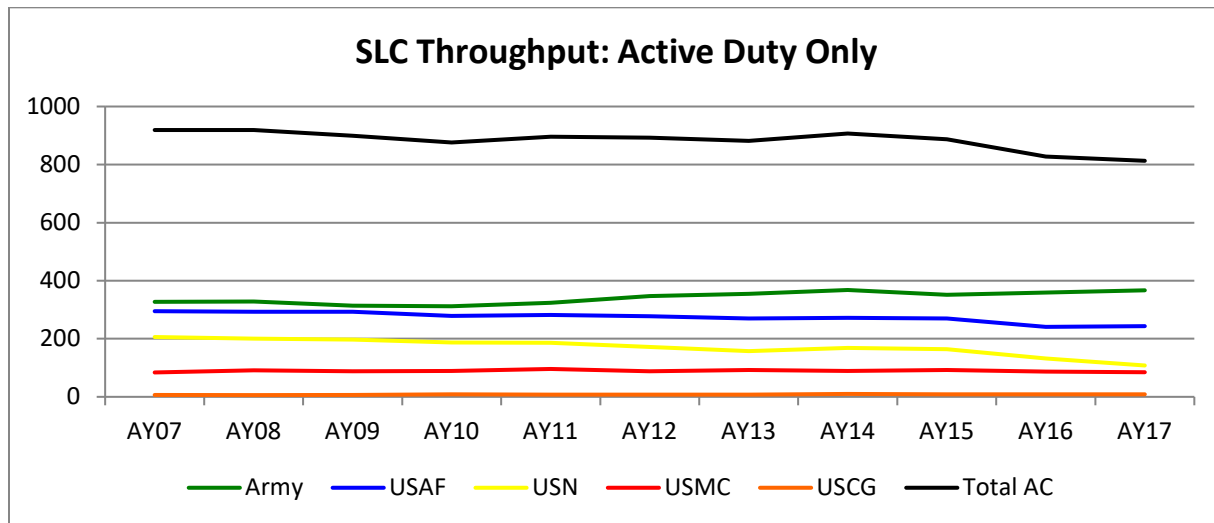


The relatively constant total throughput actually masks a recent decline in throughput for active duty officers from all Services, from about 890 to 810 officers per year, as shown in Figure 2. Throughput mirrors end strength and thus the decline reflects the contraction of the force over the past FYs. Some SLC institutions have maintained their capacity during this period by expanding the opportunities for international officers to attend the programs.<sup>6</sup> Other programs have reduced the opportunities for host Service officers to attend in residence while preserving opportunities for representatives from reserve component, sister services, civilians, Interagency, and international officers.

Figure 2

11,000 positions on the Joint Duty Assignment List—positions that require a Joint Qualified Officer—one that had graduated from a Phase II JPME institution and had sufficient joint experience (as defined in DoDI 1300.19, DoD Joint Officer Management Program, 4 March 2014). In 2016, approximately 73 percent of these position—or 8,000—were filled (“Review of Qualified Joint Tours,” OSD(P&R) Manpower & Reserve Affairs Brief to House Armed Services Committee, Nov 2016).

<sup>6</sup> In 2008, the Chief of Staff of the Army directed an increase in the number of International Fellows/Officers from 40 to 80 at the Army War College. Implementation took several years.



### SLC Curricula

SLC joint curricula are evaluated as part of the CJCS Process of Accreditation of Joint Education (PAJE) process and are required<sup>7</sup> to “embed JPME topics mandated by law and policy and reflect the mission of their parent Service’s needs” and include the following learning areas:

National Military Strategy

Joint planning at all levels of war

Joint doctrine

Joint command and control

Joint force and joint requirements development

Operational contract support

National security strategy

Theater strategy and campaigning

Joint planning processes and systems; and

Joint, interagency, and multinational capabilities and the integration of those capabilities.<sup>8</sup>

SLC curricula generally address these topics with five core course areas: strategy, U.S. national security processes, the international security environment, warfighting, and leadership.<sup>9</sup> In lieu of outcome indicators of officer education, the WG requested data on three metrics of program intensity: lessons, pages assigned, and contact hours between faculty and students per core subject. To normalize the data, Figures 3, 3.5, and 4 present the number of pages per lesson and the number of pages per contact hour between faculty and students—in essence, showing how much assigned reading material each school constructs lessons around.

<sup>7</sup> CJCSI 1801.01E, pages A 3.

<sup>8</sup> CJCSI 1801.01E, pages AA 1-2.

<sup>9</sup> Naval War College curriculum covers the international security environment and leadership topics amongst its other courses and did not break those lessons out. This explains the absence of data in those two sections as well as the very high number of pages per lesson in their strategy course.

Figure 3

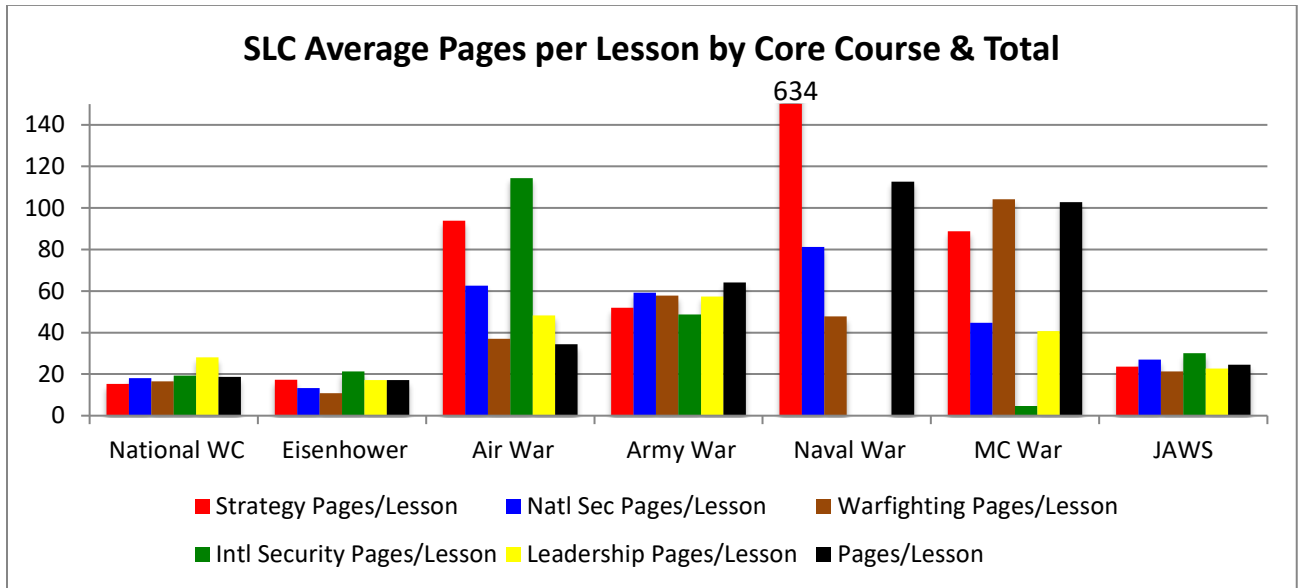


Figure 3.5

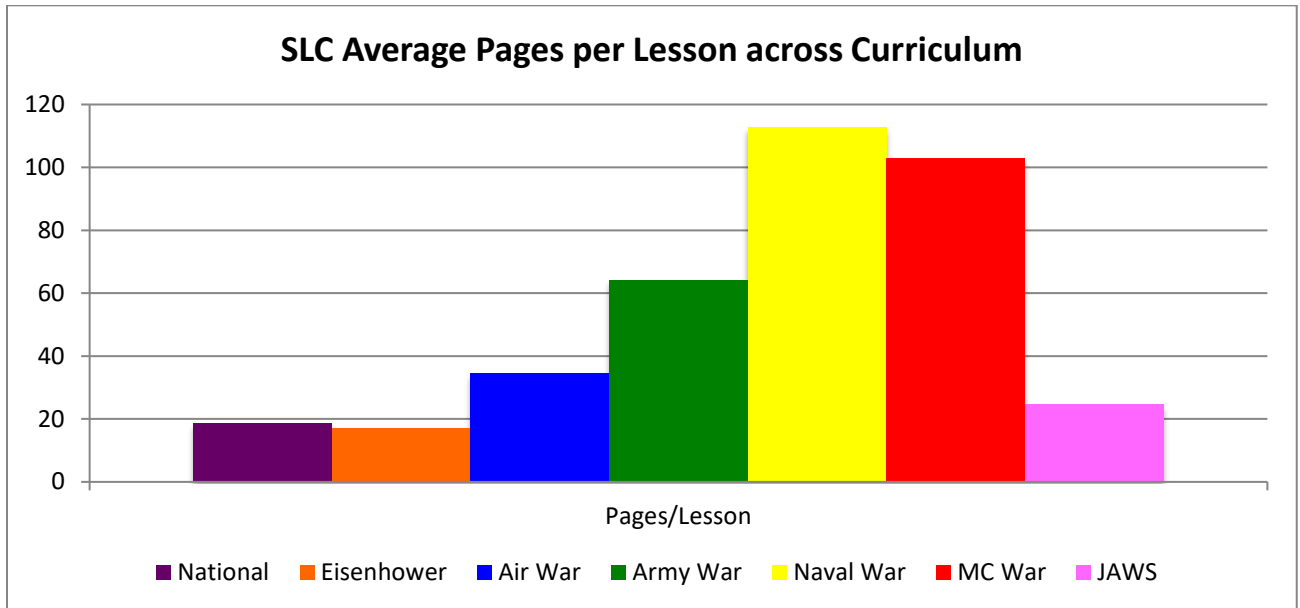
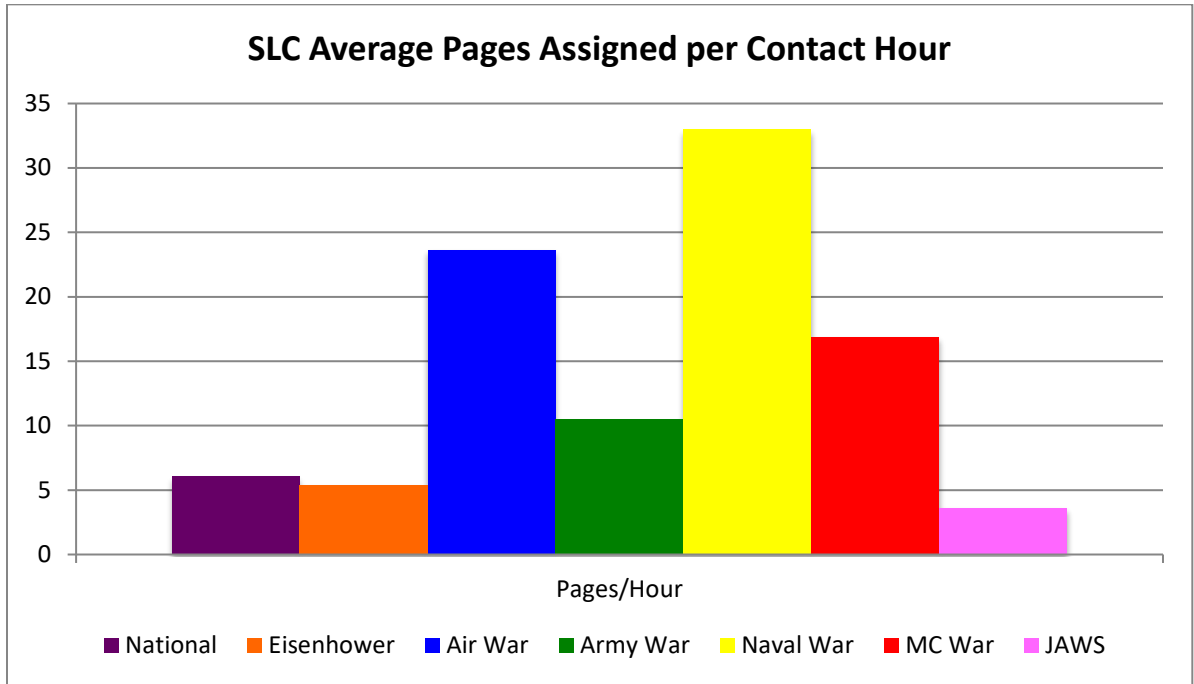


Figure 4



The figures demonstrate that each school implements its program differently across these metrics and no two “War Colleges” are alike. These metrics are an indirect indicator of the intensity and rigor of the education delivered by the programs and received by officers. They can convey the relative emphasis placed on these core “art and science of warfighting” topics in terms of how much material produced by published subject matter experts is discussed between faculty and students in a formalized educational setting, but they cannot capture philosophical or pedagogical differences in how that material, as well as the knowledge and experiences of the students and faculty is used to provide an educational experience. Nor can these metrics convey the impact of that education on officer cognitive competencies. The absence of such metrics, beyond the fact that 100 percent of officers meet the minimum requirements to graduate from these programs disables the ability to discern who our key strategic thinkers are and where they are developed in the SLC system.<sup>10</sup> [Thus one implication is that the SLCs, and perhaps all PME institutions, should develop means to measure the degree to which their education affects a change in the knowledge, skills and abilities (KSAs) of their students. A second is that the schools/Services formalize an identification program of each year’s ‘best & brightest.’] The SEC ARMY and CSA have approved a new Academic Evaluation Report (AER) (DA FORM 1059-2) specifically for CGSC and the Senior Service College that includes an assessment of Strategic Thinking. The AER is a formal part of an officer’s personnel record, considered at selection boards and available to talent managers.

*SLC Utilization*

<sup>10</sup> More granular performance metrics are available, such as grade point averages, class rank, status as a ‘distinguished graduate,’ and awards for academic performance or leadership. These indicators of performance, however, are not systematically reported on officer performance reviews nor subsequently utilized by the personnel system to discriminate between officers.

Utilization policies differ across the Services and NDU. In the Army all SLC graduates incur a two year service obligation, are tracked via their Officer Record Brief and MEL Code, and are assigned based on the needs of the Army modified at the margins by career timing, other professional needs, and personal desires. In the USAF, SLC graduates incur a three year service obligation and Force Development for officers and civilian equivalents is managed by Development Teams (DTs) that, per the Vice Chief of Staff of the Air Force guidance (memo dated 5 May 2017), “each DT will have a deliberate outplacement strategy. Officers must be matched to applicable follow-on assignments that will best capitalize on their newly obtained knowledge and skills. DTs must consider follow-on assignments along with the overall career timing of the individual.”<sup>11</sup> In the Navy, community priority qualified at the margin by the inventory of personnel and individual desires drives where an individual is assigned. In the USMC, graduates are assigned according to the needs of the Service. SLC completion is recorded in the Official Military Personnel File (OMPF) which informs future assignments. Assignments are accomplished through regular coordination and review with the Joint Staff and NDU to develop an out-placement plan. The slating process is conducted / overseen by monitors (assignment officers) after the selection board has determined the best and most fully qualified to be assigned. Assignments/slatings are reconciled with key development gates and cross-walked with external requirements to ensure the most highly competitive officer inventory as possible.

Beyond Service policy, title 10 United States Code (U.S.C.) directs a specific utilization from Eisenhower, National War College and the College of International Security Affairs (CISA) schools. Fifty percent of graduates from all Services are required to be assigned to joint duty assignments (JDA) and 100 percent of Joint Qualified Officers (JQO) to be assigned to a JDAL billets. For JAWS, 100% of active duty U.S. military graduates are assigned to specific senior planning billets at the Combatant Commands.

### **Advanced Schools (AS) Assessment**

In addition to the five phase continuum of PME (pre-commissioning, primary, intermediate, senior, and CAPSTONE), the Services have established Advanced Schools for O-4s situated between ILE and SLC. The mission of these programs is to:

SAMS’s Advanced Military Studies Program (AMSP): “educates members of our Armed Forces, our Allies, and the Interagency at the graduate level to become agile and adaptive leaders and critical and creative thinkers who produce and communicate viable options to solve operational problems develop effective planners who help senior leaders understand the operational environment and then visualize and describe viable solutions to operational problems.”<sup>12</sup>

MAWS: “educate mid-grade officers of participating Services to an operational planning proficiency level on par with our sister service Advanced Warfighting Schools. In specific terms, the MAWS purpose is to impart significant naval and joint planning knowledge and skills to select officers for subsequent assignment to the numbered fleets, naval components, combatant commands, and joint staffs.”<sup>13</sup>

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<sup>11</sup> Air Force Instruction 36-2640.

<sup>12</sup> SAMS Program Guide 2018

<sup>13</sup><https://usnwc.edu/college-of-naval-command-and-staff/Additional-Academic-Opportunities/Maritime-Advanced-Warfighting-School>



SAW: “produces officers qualified to fill high-impact service and joint planning billets.”<sup>14</sup>

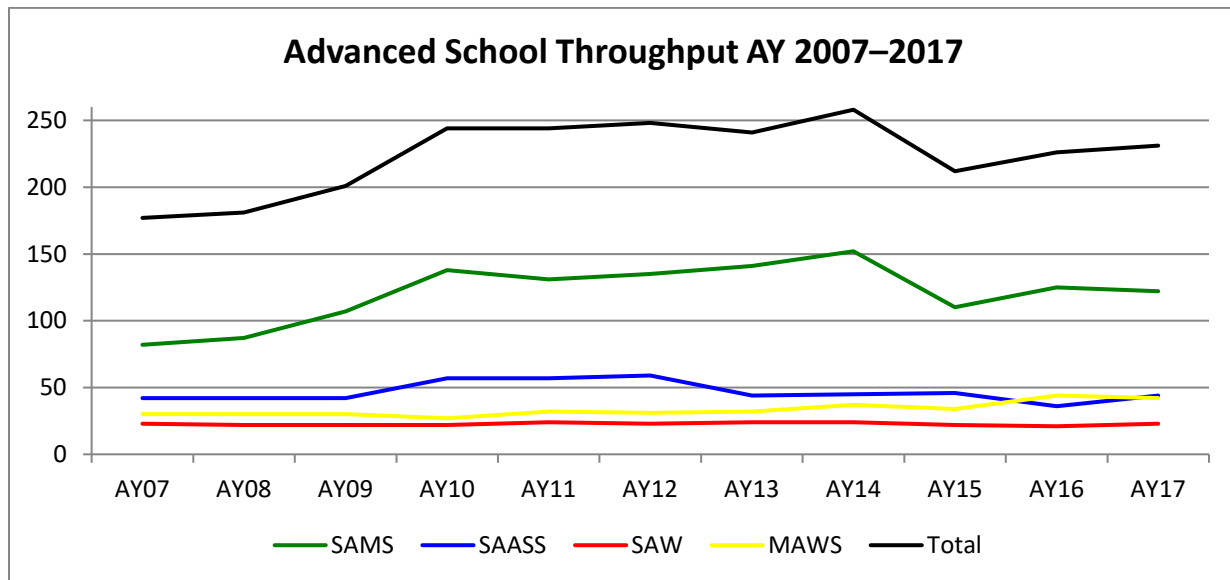
SAASS: “Produce strategists through advanced education in the art and science of air, space, and cyberspace power for the Air Force and the Nation.”<sup>15</sup>

*AS Students*

Prospective SAMS, SAW, and SAASS students apply to the program while in residence at ILE<sup>16</sup> or upon graduation. The Services establish selection criteria and the schools develop admission standards, including previous educational and professional achievements, promotion potential, a formal application that includes an exam, essay, and interview (SAMS), an essay on a specific topic (SAASS), and evaluation and recommendation by a local a selection board or committee. MAWS, on the other hand, considers all USN unrestricted line warfare, Information Operations, Intelligence, and Supply Corps officers, as well as sister service officers, “ordered” to the College of Naval Command and Staff “eligible” to enter the MAWS program.

Figure 5 shows active duty throughput by each school.<sup>17</sup> Total numbers increased since 2007, primarily due to increases at SAMS and SAASS. Over the past three years, approximately 260 officers, civilians, and international officers are educated in-residence in AS. Throughput by school today varies between 23 per year for SAW to approximately 120 per year for SAMS.

Figure 5



Approximately 220 U.S. active duty officers are educated in-residence in AS in AY 2017 (Figure 6). As with SLC, total throughput has declined in recent years as the increase from the early 2010

<sup>14</sup> <http://www.marines.mil/News/Messages/MARADMINS/Article/1278908/ay-2018-2019-school-of-advanced-warfighting-application/>

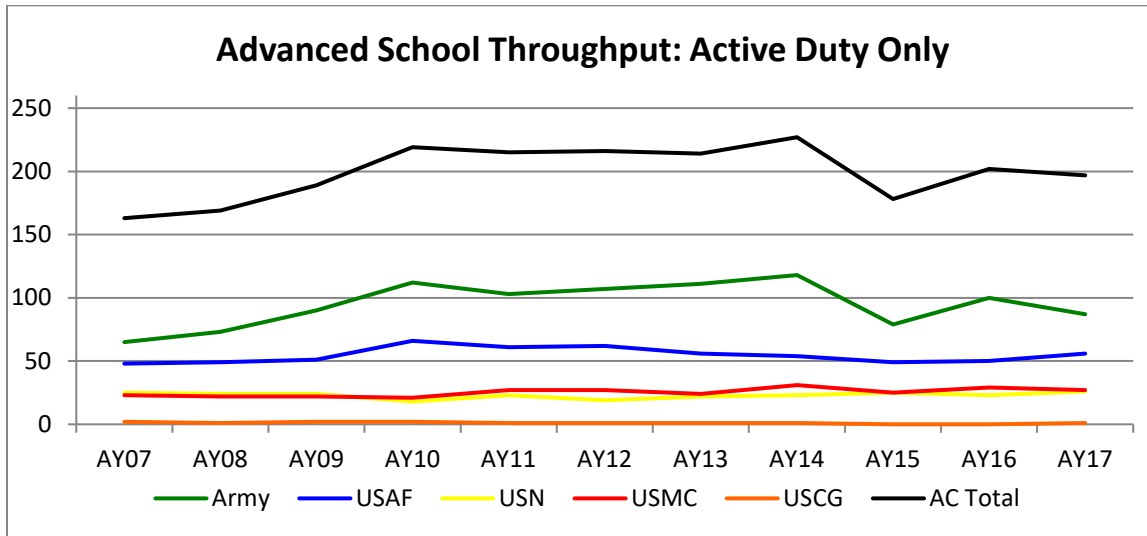
<sup>15</sup> <http://www.airuniversity.af.mil/SAASS/>

<sup>16</sup> “Only Marines may attend [SAW] based on College of Distance Education & Training [CDET] nonresident education” (<https://www.mca-marines.org/gazette/2015/06/saw-experience>).

<sup>17</sup> Data for AY07–13 from NDU has not been received.

has abated. Most pronounced has been the decline in Army officers and throughput at SAMS, although fewer USAF officers are being developed and throughput at SAASS fluctuated at levels about 75% of its AY12 high water mark. The increase in SAASS production between AY09 and AY12 was due to an initiative to try to bring production to 60 students per year. The intensity and selectivity of these schools, combined with lower demand from smaller allied forces, has precluded offsetting the decline with international officers.

Figure 6



### AS Curricula

The AS pride themselves on providing a more intense educational experience than ILE or SLC. As shown above, average SLC intensity ranged from 17 to 102 pages per lesson and 6 to 33 pages per contact hour. Shown in Figures 7 and 8, average Service AS intensity ranges from 110 to 300 pages per lesson and 25 to 150 pages per hour of contact between students and faculty. Furthermore, these courses focus their curricula primarily on warfighting, strategy, and the international security environment—minimizing time devoted to U.S. national security processes and leadership, as compared to SLC curricula. Finally, it is important to note that two AS (SAMS, SAASS) require a significant research product and oral exam at the end of the academic year.

Figure 7

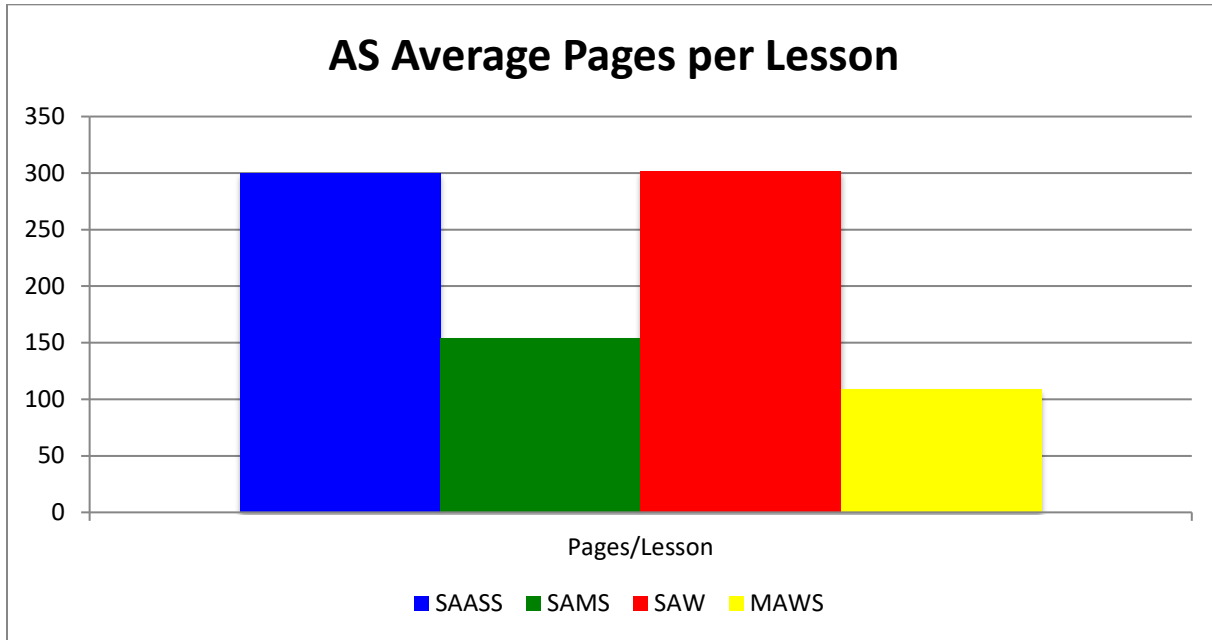
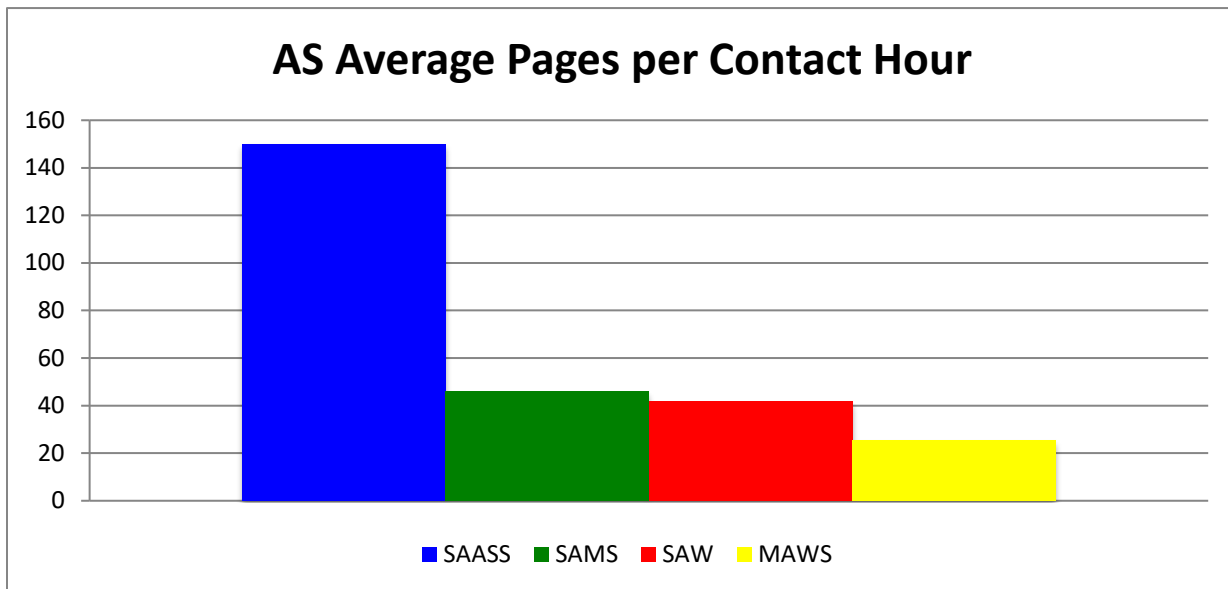


Figure 8



### AS Utilization

Utilization of Service AS officers has three components: flagging their competencies as graduates, placing them in appropriate assignments, and shepherding their career progression. Army and Navy personnel systems formally flag graduates from AS with a skill identifier or subspecialty code, one that may be unique to a subset of those graduates<sup>18</sup> or one that may be shared with

<sup>18</sup> The Army's 6S identifies applies to graduates of the Advanced Military Studies Program of SAMS, SAASS, and SAW, but not MAWS as it is considered to be a 3 month program. The Navy

officers that are developed through alternative means.<sup>19</sup> The USAF does not utilize such indicators but instead relies upon the judgment of each community's Development Team to know which officers are AS graduates.<sup>20</sup> In the USMC, AS graduates receive an AMOS 0505 designation.

With regard to assignment patterns, all Army AS graduates are assigned to either a Division, Corps, Army Service Component Command, Deployed HQ, or COCOM.<sup>21</sup> USAF AS graduates are proactively assigned to high-impact positions that capitalize on their unique exposure and expertise through the Advanced Studies Group (ASG) process managed by the Commandant of SAASS.<sup>22</sup> In the USN, "Following completion of PME, officers shall be assigned per community and individual need. Officers should be preferentially assigned to operational and joint billets, but may be assigned to other U.S. Navy billets as dictated by the distribution need." In the USMC, AS graduates are assigned to coded billets on planning staffs. While JAWS is an SLC institution with an advanced planning emphasis, it does have a direct impact on assignment patterns similar to some of the AS institutions.

With regard to shepherding, the HASC subcommittee noted that, as of 2010, "participation in the FA 59 program [which it identified as an umbrella program for developing strategic planners in the Army] severely restricts viability for promotion beyond the rank of colonel."<sup>23</sup> Army AS graduates do not face this handicap because they are primarily branch officers who go on to compete in their branch for promotion and "most do very well." In the USAF, the ASG assignment process provides protection for AS graduates, with a significant percentage being

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additional qualifier designation (AQD) JP-1 is awarded to Navy graduates of MAWS or the other advanced warfighting schools (SAMS, SAW, SAASS, and JAWS). Navy officers who attend MAWS or another advanced warfighting school, and then complete operational planner assignments, receive an AQD upgrade from "JP-1" to "JP-3" (<https://usnwc.edu/college-of-naval-command-and-staff/Additional-Academic-Opportunities/Maritime-Advanced-Warfighting-School>).

<sup>19</sup> The Army's Functional Area (FA) 59 Strategic career track requires completion of ILE Common Core, an appropriate Master's degree, the Defense Strategy Course (a 14 week distance learning course), and, the Basic Arts Strategy Program (BSAP) (16 weeks in residence) taught at the Army War College. FA 59 officers obtain 6Z Strategic Studies ASI upon completion of the Defense Strategy Course. Furthermore, "FA 59 officers are urged to attend the Joint Advanced Warfighting School as senior-level education," which suggests the heterogeneity of the specification. Likewise, the Navy's designators for Regional, National Security, and Stability Operations studies are not tied specifically to AS program graduates (Committee on Armed Services, Subcommittee on Oversight & Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington: U.S. House of Representatives, April 2010), pages 55-58).

<sup>20</sup> Committee on Armed Services, Subcommittee on Oversight & Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington: U.S. House of Representatives, April 2010), page 58.

<sup>21</sup> Positions at Division, Corps, Army Service Component Command, Deployed HQs, and COCOM are designated for Army AMSP/SAMS graduates.

<sup>22</sup> <http://www.airuniversity.af.mil/CSAT/Display/Article/1096090/blue-horizons-selection-process/>

<sup>23</sup> Committee on Armed Services, Subcommittee on Oversight & Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington: U.S. House of Representatives, April 2010), page 56.

promoted to the GO ranks. In the USMC, the slating process is conducted by career monitors after a selection board has determined the best and must fully qualified; assignments/slating are reconciled with key development gates and cross-walked with external requirements to ensure the most highly competitive officer inventory as possible. Utilization data and information from the USN was not sufficient to make a determination with regard to their AS graduates.

### SLC & AS Conclusions

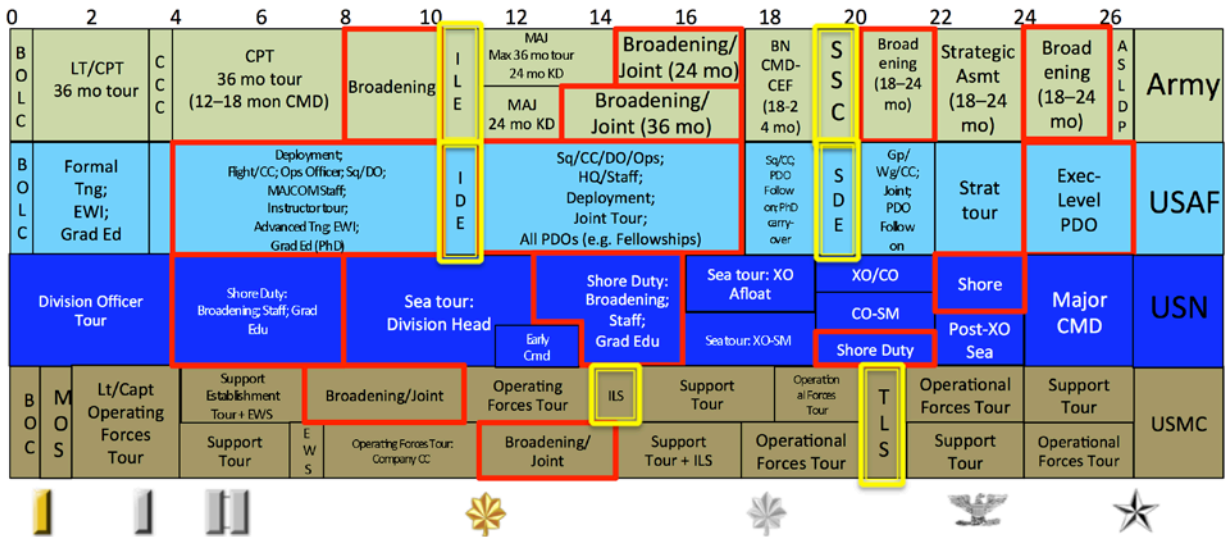
SLCs develop nearly 800 active duty O-5s and O-6s as joint officers each year. Compliance with CJCSI 1800.01E ensures that these officers are exposed to joint matters at all levels as well as the national security and military strategies—despite variation in how each school implements its curriculum. Each school also cover the core topics in the “art and science of warfighting” with varying degrees of emphasis. The WG necessarily relied on the assumption that each officer that graduates from such programs were sufficiently conversant in these subjects to be considered an applied strategist—i.e., one that is “analytical, pragmatic, innovative, and broadly educated in domestic and international political, technological, economic, scientific, and social trends.”<sup>24</sup> With the exception of graduates from National War College, the Eisenhower School, and JAWS utilization of these officers is determined entirely by their Service.

ASs develop about 225 active duty officers each year and are not required to comply with CJCS 1800.01E. The intensity of the educational experience as indicated by the average number of pages per lesson and per hour of contact between students and faculty, suggests a much deeper exposure to core topics in the “art and science of warfighting). Yet the mission of these schools, save SAASS, is to produce strategically-conversant operational-level planners. SAASS’s aforementioned mission comes closest to producing strategic thinkers along the lines indicated by the WG leadership. But its narrower focus on the air, space, and cyberspace domains indicates that no program is satisfactorily focused beyond the development of operational planners. Furthermore, utilization of AS graduates is determined entirely by their Service, which vary with regard to whether they explicitly flag and direct these graduates to specific billets that would capitalize on their educational development: the Army, Air Force, and USMC do, the Navy does not.

### Illustration of Officer Career Timeline

The following figure illustrates *typical* career timelines and opportunities for education assignments for officers across the Services—bearing in mind that milestones and opportunities vary within the DOPMA guidelines across the Services and across communities within each Service.

# Officer Career Timeline



<sup>1</sup> Acronyms: BOLC = Basic Officer Leader Course; CCC = Captains Career Course; CMD = Command; ILE = Intermediate Level Education; KD = Key Developmental Assignment; BN CMD-CEF = Battalion Command-Contingency Expeditionary Force; SSC = Senior Service College; ASLDP = Army Senior Leader Development Program; DO = Deputy; EWJ = Education with Industry; Grad Ed = Graduate Education Gp = Group; IDE = Intermediate Developmental Education; Ops = Operations; PDO = Primary Development Opportunity (e.g., Squadron Officer School); SDE = Senior Developmental Education; Strat = Strategic; Sq = Squadron; Tng = Training ; Wg = Wing; XO/CO = Executive Officer/Commanding Officer; OO = Operations Officer; EWS = Expeditionary Warfare School; TLS = Top Level School; ILS = Intermediate Level School; CO-SM = Commanding Officer-Special Mission; XO-SM = Executive Officer Special Mission (non-operational)

## Service Specialized Strategist Programs

### Army

The Army has developed special, selective programs focused on the development of Strategic Thinkers within the existing resident experiences at the Command and General Staff College and the Army War College.

### CGSC Art of War Scholars Program

The CGSC AoW scholars program provides an alternative to the Advanced Operations Course (AOC) within the CGSOC at Fort Leavenworth. CGSC’s Art of War Scholar’s program offers a small number of competitively selected officers a chance to participate in intensive, graduate level seminars and in-depth personal research focused primarily on understanding strategy and operational art through modern military history. The purpose of the program is to produce officers with critical thinking skills and an advanced understanding of the art of warfighting. These abilities will be honed by reading, researching, thinking, debating and writing about complex issues across the full spectrum of modern warfare, from the lessons of the Russo-Japanese war through continuing operations in Afghanistan and Iraq, while looking ahead to the 21st century

evolution of the art of war. Students must be enrolled in the Master of Military Art & Science Degree program to be eligible to apply, and must write their thesis on an approved art of war related topic. Once selected, everything in the program orients on successful completion of a publishable and academically reputable thesis. Art of War Scholars writing a history MMAS receive the 5X Army Historian additional skill identifier, and all Art of War Scholars qualify for the Strategist 6Z identifier.

#### USAWC Advanced Strategic Art Program (ASAP)

The ASAP offers approximately 15 selected resident students a concentrated course of study to prepare them to serve in subsequent assignments as advisers to strategic leaders, to include theater strategists and campaign planners. The course aims at the nexus between national policy and theater strategy. This unique program provides students with a solid intellectual foundation by using history, theory, and strategy that will enable them to develop a rich professional perspective on interagency and theater- strategic operations.

#### USAWC Carlisle Scholars Program (CSP)

The CSP is a program for students interested in further developing and articulating strategic thought during the academic year. Through competitive analysis of strategic challenges, Carlisle Scholars contribute to a broader strategic dialogue among national security leaders and stakeholders about the problems and opportunities of national security. Participants form a single seminar throughout the academic year which entails a combination of independent work, team work, and coordination with faculty. After completing approximately 10 weeks of intense course work, the scholars shift focus to writing articles and advising senior leaders. This unique program integrates the seminar concept of a traditional Professional Military Education experience with the autonomy of a self-directed fellowship.

#### USAWC National Security Policy Program (NSPP)

The NSPP provides approximately 15 selected students with an opportunity to immerse themselves in studies necessary to prepare them for the conduct of policymaking and planning at the national and theater levels. Maximum exposure is provided to the analysis of actual case studies, guest speakers who are or have been policy practitioners, student participation in policy-based exercises, and staff rides to relevant agencies. At the conclusion, program graduates are better prepared to serve in critical policy planner positions in the Washington-based interagency community, with any of the combatant commander staffs, and in American billets in international organizations such as NATO and the United Nations.

#### U.S. Army Advanced Strategic Planning and Policy Program (ASP3)

The ASP3 is a multi-year program that prepares field-grade officers for service as strategic planners through a combination of practical experience, professional military education, and a doctorate from a civilian university. Graduates of ASP3 are expected to be:

- Critical and creative thinkers who can frame problems and apply planning methodologies to propose viable options; have a reputation for intellectual acuity and military prowess;
- Grounded in strategic theory and history; can apply doctoral-level research and writing methodologies; understand the implications of legislative and long-range budgeting processes;
- Able to collaborate and negotiate effectively with people from a wide range of institutions and cultures to build consensus;

- Able to communicate clearly and effectively to diverse audiences, including senior leaders in each branch of the U.S. government, foreign governments, international organizations, business, and academia.

Once selected for the program, officers apply to doctoral programs at respected American universities in a liberal arts field of study related to strategy. Officers spend up to two years in graduate school satisfying all course and exam requirements leading to acceptance as a doctoral candidate. During these years, officers will also attend professional military education at the SAMS studying history, strategic theory, and the practice of strategic planning. Officers will then serve a developmental assignment in a strategic planning position. Officers selected for battalion or brigade command will be afforded the time for that opportunity. After the developmental assignment, an officer will spend one year working full time on their dissertation at SAMS or another suitable location. Subsequently, they will be available for assignments as a strategic planner.

#### Army Function Area Strategist (FA 59) Career Track

AC and RC Strategists (FA 59) lead multidisciplinary groups and facilitate senior leader decision making by assessing, developing, and articulating policy, strategy, and plans at the national and theater levels. Strategists integrate U.S. instruments of power across the Army, DOD, and throughout the JIIM environment. An FA 59 organizes, designs, guides, and directs multidisciplinary, Joint, and coalition teams dealing with complex, unstructured problems. Additionally, FA 59s provide extensive experience and understanding of operations and national security processes, leverage strong networks across the Army, Joint Force, and Interagency, and provide clear, simple products to translate the Commander's vision into action by leading planning efforts or allow senior leaders to make a fully informed decision. The Strategist career begins with a four-phased education and training period consisting of the Defense Strategy Course, master's degree, ILE Common Core, and the Basic Strategic Art Program (BSAP). Officers in the Strategist functional area continue development through education, training, and experience throughout their careers.

#### Navy

##### Navy Strategic Enterprise

Naval Strategists receive and are tracked with the 2300/2301 subspecialty code. This subspecialty seeks to develop top-tier strategy experts over the span of a career through strategy/policy development education followed by assignments designed to hone the skills in a subspecialty billet during shore assignments. This program will enhance Navy's ability to optimize employment of subspecialists following participation in programs such as the Federal Executive Fellowship (FEF), Pol-Mil Master's (PMM), Naval Postgraduate School (NPS) Strategic Studies (688) curriculum, and the Naval War College Advanced Strategist Program (ASP). In their experience tours, these officers will have the ability to develop and coordinate national, military, and naval strategy and policies to evolve concepts and strategy to employ military forces from the national through tactical levels.

##### Federal Executive Fellowship (FEF)



The FEF program was established in 1971 to give officers an opportunity to increase their understanding of policy development and national security decision making at the highest levels of government by participating as fellows at select non-profit research organizations (think tanks) and academic institutions. Equipped with this experience, fellows will subsequently be available to fill Navy and Joint billets in strategy, planning, and national security affairs that will leverage their expertise. The Navy currently has 15 funded billets annually.

PMM: The PMM program was developed to educate naval officers in Pol-Mil affairs and strategic planning through graduate education at elite civilian institutions (CIVINS). Officers selected for this program must carry a full academic load year-round, including summer sessions. Officers should expect to serve an immediate follow-on tour in an N5 (Office of the Chief of Naval Operations (OPNAV) or Navy component commander) or J5 (Joint Staff or combatant commander) billet. The Navy currently has 8 funded billets annually.

#### Naval Postgraduate School (NPS) curriculum 688

Strategy is concerned with the use of force to further the ends of policy. The aim of this curriculum is to produce students with a thorough understanding of this relationship, and of the relationship of force to other instruments by which the ends of policy may be pursued. Graduates will possess a comprehensive knowledge of US national security and defense policy and military strategy. They will have the ability to develop and coordinate national and military strategy; to develop concepts and plans to employ military forces at the national and theater levels; to write strategic- and operational-level vision and guidance documents; and to formulate, articulate, and coordinate the employment of all dimensions of military power to support the ends of American national policy. The Navy currently has 8 funded billets annually.

#### Naval War College (NWC) Advanced Naval Strategist Program (ASP)

The ASP is a CNO-directed initiative designed to produce officers with a deeper understanding of the theory and application of both military and national strategy. The Navy has determined there is a need for officers skilled in the practice of formulating, developing, and executing strategy at various leadership levels in order to fill key billets in Navy, Joint, and high-level political staffs. The U.S. Naval War College is one of several professional schools or university programs designed to produce such a cadre of officers educated in the study and application of naval, military, and national strategy. The Navy currently has 8 funded billets annually.

#### Air Force

##### The Air Force Blue Horizons Program

The Blue Horizons program is chartered by the Chief of Staff of the Air Force (CSAF) to provide rigorously researched strategies, concepts of operation, and technology applications to gain and maintain a competitive advantage for the Air Force and the nation in the year 2040. The program includes intensive academics, classified research, wargaming, and travel to answer a specific research question posed by the CSAF. The 10-month fellowship culminates with a final group report and out brief to the CSAF. Blue Horizons selects five Fellows from the incoming AWC class and 11 Fellows from the incoming ACSC class. The fellowship is not an elective, but rather an alternative IDE/SOE experience in lieu of participation in AWC or ACSC. Fellows will be selected from available volunteers to achieve a mix of professional backgrounds best suited to

answering the specific research question posed by the CSAF. Reporting and graduation dates for Blue Horizons are the same as published for ACSC. A current TS/SCI clearance is required.

### The Air Force ACSC Multi-Domain Operational Strategist (MDOS) Concentration

The MDOS concentration is a selective year-long advanced concentration specializing in developing leaders who understand the employment of multi-domain operational maneuver to counter future Anti-Access/Area Denial (A2/AD) threats. This concentration prepares selected students for operational and command assignments requiring cutting-edge knowledge of planning and operations. Students study and apply strategic and operational design, the joint operations planning process, reflexive control, decision making theory, and risk analysis. Additionally, students participate in exercises and wargames with Blue Horizons and Air War College's Grand Strategy Seminar. Post-graduation, approximately 30-50% of MDOS students attend SAASS, SAMS or SAW, 10% are selected for command, and the majority receive operational level assignments.

### Strategic Thinkers

In the 2010 United States Joint Forces Command "Joint Operating Environment (JOE)", Gen Mattis stated: "Professional military education must impart the ability to think critically and creatively in both the conduct of military operations and acquisition and resource allocation. The Services should draw from a breadth and depth of education in a range of relevant disciplines to include history, anthropology, economics, geopolitics, cultural studies, the 'hard' sciences, law, and strategic communication. Their best officers should attend such programs. Officers cannot master all these disciplines, but they can and must become familiar with their implications. In other words, the educational development of America's future military leaders must not remain confined to the school house, but must involve self-directed study and intellectual engagement by officers throughout their careers."

Based on an interpretation of this statement the WG started a review of policies and programs that conforms to his vision.

### Findings

There is no definition of "strategic thinker" in doctrine, and the Defense Department abides by the guidance stated in the HASC Panel report of 1989 (page 28). The report recognizes two main types of strategic thinkers - applied strategists (problem solvers) and theoretical strategists (large scope thinkers). Applied strategists provide the Joint Services with officers who can develop and implement strategic plans and policies, connecting these to campaign and operational plans in order to apply the ideas and achieve the goals set out by the President and his advisors. Theoretical strategists, in contrast, think about the ideas and goals, as well as their likely subsequent consequences, in order to help frame the choices for strategic decision making and action. Both must be analytical, pragmatic, innovative and broadly educated. To facilitate the implementation of the task, the WG developed the following working definition for "strategic thinkers":

*"Strategic thinkers assist civil and military leaders to balance the art and the science of warfighting when applying lethal and non-lethal military force or the credible threat of such force*

*to accomplish a mission. Theoretical strategists do this by assisting leaders with describing, visualizing, and assessing the applicability and limitations of actions and doctrine to a problem by studying the width, depth, and context of comparable historical campaigns and theoretical ideas. Applied strategists then develop and implement the plans required to bring these ideas to fruition.”*

### Who is a “Strategic Thinker”

A strategic thinker assists military and civilian leaders to generate insights on national security and military problems. The strategic thinker must navigate between the policy, national strategy, military strategy, and tactics to provide critical feedback to officials on capabilities and limitations of applied military force and doctrine to accomplish an objective given the problem’s unique context. A strategic thinker is someone who, through natural curiosity and learning, has developed the cognitive capability and intuition that can generate insights and collaboration to meet strategic challenges, identify national security and military problems, and articulate comprehensive, actionable solutions. The strategist must be analytic, pragmatic, innovative, and broadly educated. The military focuses on outcomes rather than processes and therefore the value of educating strategic thinkers is to go beyond the military focus on outcome to get at the process. In essence, the strategic thinker can leverage military experience, education, and intuition not to solve a specific strategic problem, but to identify the strategic problem we should be trying to solve. Strategic thinking is about asking the right questions, finding the hidden or unspoken assumptions, pointing out previously unidentifiable linkages, and then using education and experience to create new approaches using existing processes.

U.S. military engagements overseas have unleashed many unforeseen consequences that have complicated the ability to achieve policy objectives. A common misperception is that the formulation of national security strategy is a linear process whereby civilian policymakers set clear strategic objectives and U.S. military leaders craft supporting strategies to achieve them. In practice, the strategy making process is not nearly so well-defined. It is often unscripted and unstructured, with the responsibilities and interests of civilian and military leaders overlapping considerably. The shortcomings of the strategy making process have had corresponding negative effects on the U.S. efforts to achieve its policy objectives including a limited production of the type of strategic thinkers at DoD as previously defined. One of the reasons DoD do not have career paths for critical or strategic thinking personnel is that they are not required to be identified and coded by the personnel and advancement systems. When it is required, the Department tries to hone it from professionals grown in an active warfighting organization, not always conducive to critical and strategic development.

The 2014 study by the RAND Corporation “Improving Strategic Confidence, Lessons from 13 years of War,” posits that, after over a decade of war, “the making of a national security strategy has suffered from a lack of understanding and application of strategic art.” Despite some recent improvements, “a wider appreciation of the degree to which this deficit produces suboptimal national security outcomes may be lacking.”

Relevant to those in the profession of arms is the study’s finding that the formal strategy making process framed in U.S. military doctrine and taught in professional military education does not reflect current realities. In the words of one prominent theorist on strategy and politics, Colin Gray, “People cannot be trained to be strategists, but they can certainly be educated so as to

improve their prospects of functioning adequately or better in the strategic role.”

Data provided to the WG indicates that Services strategy programs have a strong focus on operational excellence, uniformity, and planning. However, these areas do not necessarily correlate with the development of strategic thinkers as defined in this paper. Creating climates in which important aspects of strategic thinking (e.g., reflection, learning, questioning) are valued and promoted is crucial to shifting PME culture to support strategic thinking development. A promising note in this regard is that the USAWC is leading a Strategic Educations Sub-committee to the Army Learning Coordination Council with a focus on the development of Strategic Thinking competencies across the force, not just in a select group of strategy specialists.

## **Conclusions**

Given DoD’s security and military challenges and obstacles, how do we make leaders better at creative and critical thinking? The Department must educate leaders in the knowledge, skills, and terminology associated with thinking competencies and provide the education to challenge ideas and pre-conceptions in order to develop the requisite habits of mind required. The best way to teach thinking skills to DoD leaders is to provide a broad education and to practice context-dependent skill development. Officers should be challenged to develop arguments and counter-arguments, in context, to support a theoretical strategic idea. Officers need to learn and practice these thinking skills within PME and specialized programs. In the JAWS program approximately 25% of the classroom credit hours are spent in a wide range of actives designed to place students either in realistic environment, in the midst of historical decision making context, or engaged with contemporary decision makers and advisors. The development of strategic thinkers, in the numbers required, will occur when PME highlights and makes available sufficient opportunities among the vast array of topics within their curriculum, for select groups of students. In addition, Services and NDU should develop in its instructors the requisite skills to enable strategic thinking in a context-dependent environment and should select instructors that have the background, intelligence, and requisite knowledge, skills, and abilities to ensure success by increasing their student’s ability to think clearly, and enhance their level of lethality.

To facilitate this process, the WG concluded that in order to satisfy SecDef’s concerns DoD needs to expand existing Service programs and develop a joint program to educate officers at the O4 level (Army major or other service equivalent) on strategic decision-making, using interactive case studies as problem-solving experiences. Drawing on the disciplines of applied strategic studies and history (including the importance of economics, culture, geography, etc.), this program should provide officers with the contextual ideas and information they need to become more effective in their profession and to develop their critical and creative thinking ability. This program should be based on the methodology and program of the CGSC Art of War, and, would provide a Master’s Degree in Strategy to qualifying students. The program should use a framework that includes the use of analytical tools that will allow the students to understand and find the most optimal solutions in an increasingly complex world, and that can transform the way they think, behave, and interact with military peers and allies at all levels. These tools will be used to support the decision-making processes of the military Services and Combatant Commands in developing and accomplishing strategic objectives and tactical execution.

## **Recommendations**

### Primary

Publish DoD definition of “Strategic Thinker”. (Immediate, achievable; no additional cost.)

Services identify the superior intellectual talent resident throughout the force. (Near term [12 mos.], achievable; no additional cost.)

#### CCMDs and Services:

Create the “strategic thinker” demand signal through a specifically coded billet. (Timeframe 6 – months.)

Assign only officers possessing advanced strategic education and competencies required for those billets. (Timeframe – 12 months.)

Harmonization of PME programs with Service assignments. (Timeframe 3-5 years.)

Establish an O-4 level 10-month Strategic Thinker master’s program (small; exclusive; ~ 8 students). (Near term [18 mos.], achievable; cost ~\$600-900K/yr, variables dependent; student billets will be funded through existing JPME quotas (~2 per service) so no additional cost to the services.

Incorporate direction into the OPMEP on the practical application of strategic lessons tied to lethality outcomes and thus bridge the curricula with current global operations. (Near term [6-12 mos.], achievable; no additional cost.)

JLDC develop innovative approaches to talent management and education to enhance the joint force. (Near term [6-12 mos.], achievable; no additional cost.)

Services manage the career development of these officer to ensure career progression.

### Secondary

Promote existing specialized PME programs (Advanced Strategic Planning and Policy Program [ASP3], Ike Skelton Art of War Scholars program in Army ILE/CGSC, MAWS, SAMS, SAW, and SAASS). (Immediate, achievable; no additional cost.)

Establish OSD essay competition on a Strategic topic to aid in officer identification. (Near term [6-12 mos.], achievable; no additional cost.)

JLDC establish Service schools war gaming competition on a Strategic topic to aid in officer identification. (Near term [6-12 mos.], achievable; no additional cost.)

Implementation: Recommendations can be accomplished through policy. No legislation required.