



Waterborne Romanian troops prepare to move across Danube River as part of U.S.-led exercise Saber Guardian 2017, in Romania, July 17, 2017 (Courtesy NATOChannel, Jack Somerville)

U.S. Joint Doctrine Development and Influence on NATO

By George E. Katsos

Those possessed of a definite body of doctrine and of deeply rooted convictions will be in a much better position to deal with the shifts and surprises of daily affairs.

—SIR WINSTON CHURCHILL

Joint doctrine captures and socializes fundamental principles that guide the Armed Forces in campaign activities and military operations. Moreover, its content forms the foundation for assisting partnerships such as the North Atlantic Treaty Organization (NATO) in its implementation of collective defense, crisis management, and cooperative security activities. Joint doctrine's importance is so influential that NATO modeled its own allied joint doctrine development system after it. While the library of U.S. joint publications (JPs) continues to be a steadfast repository of information, joint doctrine's Achilles's heel is its inability to reflect changes quickly

Colonel George E. Katsos, USAR (Ret.), is a Program Manager on the Joint Staff.

enough to optimally serve today's generation of warfighters that is actively implementing policy. As such, it cannot drive rapid systemic changes in the NATO system. This article examines how the U.S. system is becoming more responsive to change and could influence NATO more quickly.

Military advice can often be conflicting unless coming from the same school of thought.¹ In 1985, a Senate Armed Services Committee staff report identified poorly developed joint doctrine as one of the symptoms of inadequate unified military advice.² Joint doctrine's purpose is to provide a common framework that U.S. military leaders refer to when providing advice to civilian counterparts and leaders. As a result of that report, at least in part, the following year Congress issued legislation that vested overall responsibility for U.S. joint doctrine development in a single individual—the Chairman of the Joint Chiefs of Staff (CJCS).³ Shortly after, the Chairman placed joint doctrine and terminology standardization responsibilities in the Joint Staff J7. Over the next few decades, the joint doctrine development system brought together some of the brightest minds in the Department of Defense (DOD) to build a common foundation for the modern era of joint doctrine.

Joint doctrine is official advice and should be followed unless a commander determines otherwise. However, joint doctrine offers much more than guiding mission success; it informs DOD and allied personnel on joint warfighting capability improvements, senior civilian leadership on approaches to military workforce employment, and non-DOD and non-U.S. Government personnel on how the U.S. military perceives and interacts with their organizations.⁴

A recently published document by the Joint Chiefs of Staff (JCS) states that the U.S. military workforce requires leaders at all levels who can achieve intellectual overmatch against adversaries.⁵ In the face of new geopolitical realities, expanding warfighting domains, emerging technical capabilities, and accumulating resource constraints, reflections on these issues are already challenging the doctrinal status

quo.⁶ From global integration to the competition continuum to creating a new military Service or adding members to the JCS, it is important that joint doctrine navigates leaders and readers away from outdated approaches that may not allow military workforces to adapt quickly enough. New challenges and anticipation of them—whether impacting cooperation or stemming from adversarial competition or conflict—are occurring faster and with less warning from more directions simultaneously and with far greater precision, lethality, and disruption than ever before.⁷ While joint doctrine has served the United States and supported NATO efforts well in the past, its system must constantly be reassessed as to whether it is agile or responsive enough to meet the challenges presented by external factors that now drive change.⁸

In the past 30 years, the process of the U.S. joint doctrine development system is often described as a consensus-driven function that links together a capstone, keystone, and subordinate JP pyramid hierarchy based on traditional Joint Staff directorate lines of responsibility (J1, J2, J3, and so forth) through vertical and horizontal alignment. This system continues to survive waves of expansion, contraction, and reorganization.⁹ The NATO system was originally structured on the U.S. model. It bins allied joint publications (AJPs) content in three categories: Level 1, capstone/keystone; Level 2, functional area publications that make up the AJP library; and Level 3, lower level publications. Both U.S. and NATO publications are developed within a consensus-based system.

The issue with a consensus-based system is that it usually drives to the lowest common denominator of agreement and is often seen as one interest group rolling another or the development of content watered down, losing original intent.¹⁰ For the topics of library expansion and contraction, the iterative challenge is whether one process automatically course-corrects the other or whether correction has to happen with brute force. For library reorganization, the balance is fought between necessity and political will. Other challenges include

the interpretation and separation of broad policy direction versus strict joint doctrine guidance, the expectations of individual subject matter experts versus enterprise gatekeepers (doctrineers and terminologists), and military Service capability relevance in the face of joint force integration.¹¹

In order to be adaptable and better support allies, the U.S. joint doctrine community must refine its policies and streamline its procedures to address these and other challenges and overcome status quo tendencies. To reinforce both Alliance purpose and unity, the United States agrees to abide by certain NATO policies and procedures and participates in the allied joint doctrine development process. The following groupings provide an overview of U.S. and NATO systems and processes as well as potential efficiencies.

Twentieth-Century Growth (1905–1991)

U.S. doctrine can be traced back to the Civil War, but formal U.S. doctrine comes into focus in 1905 with the publication of Field Service Regulations (FSRs).¹² (European history also contains many individual doctrine writings, most from military scholars from the 18th century onward.) U.S. origins stem from the early 1920s Army and Navy joint action in pursuit of coordination during operations.¹³ In 1939, FSRs were superseded by U.S. Army field manuals. During World War II, the Army developed its first military dictionary to improve interoperability among military Services and allies. In 1948, that document transformed into the first U.S. joint dictionary.¹⁴ After World War II, Service-driven doctrine became the backbone for 29 JCS publications guided by joint action policy.¹⁵ While the nomenclature system was at best random, the JCS publication footprint and subsequent 1959 guidance on united Armed Forces action policy informed the modern 1991 JP library structure. Through this period, the Services were still given wide latitude in JP development responsibilities. While NATO early on had communications,



Croatian soldiers discuss logistics during Immediate Response 19, co-led by Croatian armed forces, Slovenian armed forces, and U.S. Army Europe, in Croatia, May 27, 2019 (Courtesy NATO)

technical, and other publications, in 1958 it also developed its first official glossary of NATO terms and definitions subsequently published in the 1959 U.S. dictionary of military terms, further strengthening the foundation of cooperation between entities.¹⁶

Post–Cold War (1991–2000)

Before the 1986 National Defense Authorization Act, there was no individual responsible for U.S. joint doctrine development. There was no standard process for initiating, coordinating, approving, or revising joint doctrine. Moreover, there was no requirement for congruity between joint and Service doctrine, nor was the difference between joint and Service doctrine clear. Significantly, there was no mechanism that incorporated the expertise and knowledge that commanders were expected to use. In addition, the joint doctrine development system had no

means of either identifying or addressing doctrinal voids.

Joint doctrine was also published without formal evaluation. Initially with approximately 58 JPs in 1988, development continued; however, command staffers years later found it difficult to maneuver through joint doctrine's 120-plus approved and emerging JP titles. In essence, readers did not know where to start or what they needed to know.¹⁷ NATO's development policies and architecture formulated in the mid-1990s had approximately 35 AJPs and were built and based on the U.S. model.¹⁸

At one joint doctrine semiannual conference, General John Shalikashvili personally addressed the U.S. joint doctrine community and certain NATO attendees about the joint doctrine development system and process being stovepiped, time development horizons too elongated, and library subject matter unorganized (and of lesser quality

and consistent content).¹⁹ Compared to previous practices, the Chairman was now solely responsible for joint doctrine development and, through the J7-managed development system, refined its process and established new definitions, procedures, processes, and structures along with refining key positions (that is, lead agent, primary review authority, JCS doctrine sponsor, coordinating and technical review authorities).²⁰ Moreover, not only did J7 lead the effort to organize the joint doctrine library structure, but it also spearheaded ongoing JP consolidation and creation. This change brought structural logic to the joint doctrine library under traditional JCS directorate lines of responsibility, while new JPs filled joint doctrine gaps in support of joint operations.

Additionally, combatant command involvement was now mandatory, and the 5-year JP revision cycle required content consistency within and without

revised JPs. As such, the J7 began to exercise a more assertive role to include JCS directorate involvement and to keep them active in the process while the Services adhered to the primacy of joint doctrine.²¹ Overall, actions taken between 1991 and 2000 got the U.S. joint doctrine house in order.

For allied joint doctrine development, the J7 Joint Education and Doctrine Division was responsible for ratifying Levels 1 and 2 AJPs for the United States. The J7 also ensured U.S. joint doctrine was used as the initial basis for U.S. inputs during NATO Levels 1 and 2 AJP staffings and worked with multinational partners and U.S. representatives to minimize impacts of variances between the United States and NATO. Other DOD entities were responsible for Level 3 allied publication ratification. The J7 also acted as the U.S. Head of Delegation for allied joint doctrine and terminology standardization purposes at the NATO Military Committee Terminology Board and Allied Joint Doctrine (AJOD) working group. NATO foreign liaison and exchange officers on the Joint Staff also attended and briefed at the semiannual joint doctrine planners conference, thereby staying informed of U.S. military workforce challenges and improvements and using lessons learned to improve their own allied joint doctrine development system.

9/11 (2001–2010)

On September 10, 2001, the Joint Staff J7 published JP 3-0, *Joint Operations*, and the *Joint Doctrine Capstone and Keystone Primer*.²² Linked to existing strategic guidance and the primacy of traditional approaches to warfare (violence used to dominate opponents), the very next day these two documents became obsolete in the preparation for conflict with state and nonstate actors and their irregular approaches to offsetting dominant opponent advantages. The response to the terrorist attacks of September 11, and the subsequent second conflict with Iraq, generated a strategic shift in policymaking that overcame a nonexistent National Defense Strategy (published in 2005) and an

out-of-date National Military Strategy (published in 1997 and replaced in 2004).²³ While strategic guidance took its time to arrive, so did its impact on joint doctrine.

The U.S. joint doctrine library retained its hierarchy with a capstone JP underpinned by six keystone JPs supported by a subsequent layer of subject matter JPs. Changes to joint doctrine's keystone layer of JPs were slow to appear, based on traditional versus irregular content after 9/11, as the joint force awaited senior-level policy guidance. A reissuance of JP 1-0, *Joint Personnel Support*, took almost 5 years; JP 2-0, *Joint Intelligence*, almost 7 years; JP 3-0, 5 years; JP 4-0, *Joint Logistics*, 6 years; JP 5-0, *Joint Planning*, 5 years after 9/11 and over 2 years after the planned invasion of Iraq; and JP 6-0, *Communication Systems*, over 4 years. Most concerning, however, was that joint doctrine's capstone document, JP 1, *Doctrine of the Armed Forces of the United States*, took years to be reissued, waiting for National Defense Strategy and National Military Strategy direction and publication. Regardless of national limitations in strategy formulation, the aforementioned senior-level JPs were what U.S. military planners and operators went to war with both in Afghanistan (2001) and Iraq (2003).

NATO's joint doctrine development system began similar to the U.S. one but has significant differences that influenced its evolution. One difference is that NATO manages voting participation from individual nations with their political influences compared to the U.S. system managing DOD voting organizations (combatant commands, military Services). Another is that NATO allows its military committees to formulate and catalogue both doctrine and policy terminology, while the United States eventually halted that practice and generated criteria for joint doctrine terminology primarily from JPs.

For the U.S. process, joint doctrine development managed the JP life cycle adequately, but with multiple draft benchmarks, many JP dates did climb well beyond the 5-year threshold. Joint doctrine revision and production time

horizons were so long and slow that there was a demand to send out draft joint doctrine to push updated information to the warfighter quicker. The NATO process was similar in time and steps. To address revision practices and library expansion, the U.S. joint doctrine enterprise not only refined procedures but also embarked on its second consolidation effort to reset the JP library structure by decreasing it by over 33 percent. This reset was similar to the first organization—forced by circumstance, but with J7 now advocating for top-down driven approaches both to protect resources and for its process to be more responsive to change and to the warfighter.²⁴ To further expedite joint doctrine development, a test publication process was refined that became a vehicle for field-testing validated joint concepts.

Both U.S. and NATO processes provided more opportunities for individual publication consolidation and quick revision. While these processes were born 10 years apart and the models operated similarly, there was a year-and-a-half lag time for NATO to capture related changes made in the U.S. system. Moreover, a joint doctrine survey to the joint force revealed the size of, and impact to, full-time staffs and government billets dedicated to joint doctrine development. This survey opened the aperture for future discussions on what and how much product the joint doctrine development community should or could focus on. Additionally, the irregular warfare construct finally began to make its way down from policy into filling voids in joint doctrine.²⁵

While J7 socialized more top-down changes, community consensus limited progress. Efforts did bear fruit, however, with the standardization of military terminology. As an ever-expanding doctrinal dictionary was impacted by policy term infiltration from DOD directives and NATO proposals, this lack of clarity in and protection of the DOD dictionary added much confusion as to who was in control of the language that U.S. military forces used to communicate with each other.²⁶ As a result, the dictionary changed focus to reflect well-vetted JP glossary doctrinal terms with acceptance

of senior-level policy terms that filled temporary gaps in joint doctrine development. While the strategic surprise in this era of the 9/11 attacks showed how slow the joint doctrine development process and system were to change, the example of exercising a top-down approach with terminology cascaded into subsequent reform efforts in joint doctrine formulation.²⁷

For organizational purposes, U.S. Africa Command (USAFRICOM) stood up in 2007 and became a part of the joint doctrine development community. As more U.S. military support activities occurred on the continent, USAFRICOM's area of responsibility brought new perspectives on doctrinal gaps relating to civilian populations on the move from natural and manmade threats.²⁸ NATO also created bilateral strategic commands. In support, the U.S. European Command commander served as the Supreme Allied Commander, Europe, and the U.S. Joint Forces Command commander served as the Supreme Allied Commander, Transformation (SACT), with command over force development activities including doctrine development and NATO's centers of excellence.²⁹ Additionally, former Warsaw Pact nations began to join NATO, increasing the numbers of allied joint doctrine voting members, and France rejoined NATO's integrated military command structure.

The Next Decade of War (2011–2020)

The publication of the titles *Decade of War* and *Lessons Encountered* exposed that military forces and leaders had to change their approaches to working with civilian-led organizations.³⁰ While the incline was real, some writers credited the joint doctrine enterprise with being one of two remaining U.S. Government Beltway entities that consistently reached out to cooperate with civilian-led organizations on whole-of-government efforts. Richard Hooker and Joseph Collins wrote, “Unfortunately, emphasis on working whole-of-government issues is fading across the U.S. Government, except in the field of joint concept and doctrine

development.”³¹ Furthermore, J7 addressed previous reports on the lack of interoperability with interagency stakeholders by cooperating with them to build the first *Joint Guide for Interagency Doctrine*. Released in 2019, the guide expanded on current knowledge and assisted in the strategic art of navigating government bureaucracy to make workforces collaborate more efficiently in pursuing national policy objectives. Additionally, J7 formulated an annual call process that many of these civilian-led organizations now have as a direct link to the highest levels of the U.S. military for the first time through the joint doctrine development process.³² In this process, interoperability improved between workforces through input on joint doctrine assessments and draft JPs that reflect organizational perspectives and interaction that put civilian organization perspectives in front of senior military leaders and warfighters.

In pursuit of resource efficiencies, some progress in reorganizing JP content to the warfighter was stunted by support for, and translation of, outdated restrictions and policies. In turn, J7 adopted a more assertive top-down approach to joint doctrine development under a senior-level initiative termed Adaptive Doctrine. Under Adaptive Doctrine, J7 instituted a more agile process to optimize the JP library in becoming more adaptable and flexible in organization as well as meeting joint force demands to best support joint operations and not be overrun by individual communities of interest. The J7 reduced its library 15 percent over the last 2 years.

Annually, JPs are now selected for revision by the joint doctrine development community based on necessity and importance. This approach removed the traditional 5-year JP time horizon revision cycle. With an annual master priority list and new single draft system, changes streamlined the revision process, putting JPs that fell under annual cut lines and those with similar content to other JPs as well as others with older dates under more scrutiny.

For library reset purposes, J7 split its capstone JP into two volumes, an

evolving one that reflects senior-level guidance and a static one that is concerned with theory and foundations. JP 3-0 continued its vertical alignment with JP 1, but now other keystones align horizontally with JP 3-0 to best support it. The primacy of individual keystones now reinforces subsequent vertical alignment. Library organization now has reinforced logic and can support top-down directed policy insertion placement. Procedures now support updating doctrinal expertise from multiple sources into a specific JP with a one-time horizon. Under Adaptive Doctrine and new business rules, the United States cut 8 to 10 months off staffing timelines, removed lower level staffing that subsequently emphasized O6/planner-level involvement, and supported one product per routine revision in 12.5 months with the development stage as well as more streamlined U.S. staffing efforts on NATO Levels 1 and 2 publications without losing quality.

While some challenges persist, progress was made on issues that existed in the previous decades. J7 initiated joint doctrine notes to encourage still emerging ideas. Standardized terminology and the DOD dictionary received more protection from policy term infiltration by housing it as an appendix in the CJCS-signed JP 1. Consolidation and top-down action reversed hierarchy structural erosion that made keystones weaker than subsequent hierarchical JPs. Campaign schedule and plan efficiencies countered sequestration and resource constraints. Strategic guidance and countering adversarial practices content were captured faster through change processes, top-down driven actions, and mid-year schedule and plan corrections. Furthermore, library reset put in motion the system's third consolidation effort via top-down guidance, but this time with an automatic 5-year reset disclaimer that protects the joint doctrine development community from future burdensome practices, driving the community toward evolution and away from permanent stasis and automatic expansion.³³

Since 2011, NATO's AJP library has increased 23 percent. NATO's routine development stage estimate timeline is

now 8 months longer than the recently shortened U.S. model with more staffing products. This divergence not only affects national resources in both systems but also brings to light the opportunity for efficiencies. The best example is that the United States began the process of combining content from five standing JPs on joint intelligence under one JP with a single time revision horizon. NATO, however, remains at 10 Levels 1 and 2 joint intelligence-related AJPs with 10 different time revision horizons to update the complete joint intelligence doctrinal footprint. Additionally, multiple drafts push off senior officer input until the end of the process. The number of custodians, revisions, and ratification commitments of intelligence AJPs and other sources should generate reassessment of national resource commitments to non-U.S. efforts. NATO has also expanded its membership to 30 nations, all with voting rights in allied joint doctrine development.

For military organizational structure, the doctrine development community added the National Guard Bureau, U.S. Cyber Command, U.S. Space Command, and U.S. Space Force as voting members. U.S. Joint Forces Command was disbanded in 2013 and NATO's SACT responsibilities transferred to a French general officer. Joint Warfighting Center doctrine personnel now fall under the Joint Staff J7 Joint Education and Doctrine Division. The DOD Terminology Program reformed and implemented new policy that streamlined 75 percent of the DOD dictionary content and encouraged the U.S. Government to build and publish its own compendium of interagency terms.³⁴ Furthermore, program managers for both DOD terminology and allied joint doctrine development assist in senior-level guidance and influence efficiencies and resource protection.

Top-Down Approach

U.S. and NATO joint doctrine system and process challenges are not isolated. Other areas, such as U.S. policy, strategy, and plan formulation, face similar impediments to becoming more agile



Soldier from North Macedonia in full "ghillie suit" camouflage during Immediate Response 19, in Croatia, May 29, 2019 (Courtesy NATO)

and innovative in the face of today's complex threats. Former Under Secretary of Defense Michèle Flournoy testified to Congress about defense policy formulation becoming a "bottom-up staff exercise [that] includes hundreds of participants and consumes many thousands of man-hours, rather than a top-down leadership exercise that sets clear priorities, makes hard choices, and

allocates risk." The late Senator John McCain (R-AZ) stated:

development . . . in DOD has become paralyzed by an excessive pursuit of concurrence or consensus. . . . Innovative ideas that challenge the status quo rarely seem to survive the staffing process as they make their long journey to senior civilian and military leaders. Instead, what results too often



U.S. Marine with Marine Rotational Force-Europe 21.1, Marine Forces Europe and Africa, stands watch during cold weather training in preparation for Exercise Reindeer II, in Setermoen, Norway, November 12, 2020 (U.S. Marine Corps/William Chockey)

*seems to be watered-down, lowest common denominator thinking that is acceptable to all relevant stakeholders precisely because it is threatening to none of them.*³⁵

While U.S. systems face procedural challenges in the speed of decisionmaking and content dissemination, a top-down approach could further explore and forcefully emplace improved organizational results.

Next 30 Years

Given the last decade, it is important to continue capturing and formulating content on adversarial approaches and competitor influences and how military force is applied, whether tied to conflict or not.³⁶ In order to further reduce and eliminate policy and process imperfections, the new 5120 Series CJCS

Instruction and Manual will establish a more explicit top-down approach that sets boundaries for the Joint Staff to be more assertive in managing change. The policies will empower process owners to consolidate or cancel publications at any stage of the JP life cycle, better navigate the process of updating like-minded information simultaneously, and save the joint doctrine community thousands of hours and free hundreds of thousands of man-hours for other priorities in joint doctrine development. Conservative estimates show that a routine full JP revision cycle costs approximately \$300,000 (\$100,000 per full revision of NATO AJP) and 8,000 man-hours (2,000 man-hours and 500 custodian hours per full revision of NATO AJP). Per the old 5-year JP cycle, documents lined up in a queue regardless of topic.

Now, communities can commit their expectations and resources toward topics of necessity and importance.

A new committed approach to consolidation and library reset could update the full library in 3 years or less. Moreover, joint doctrine was disseminated as hard copies. Distribution went from mailing copies to compact disc management and then to Web page access and downloading. Looking toward the future, more U.S. joint doctrine will be considered sensitive and protectable behind firewalls with limited access.

For NATO, there is a huge efficiency in allied joint doctrine gained using the new U.S. JP 2-0 as a strawman for intelligence allied joint doctrine reorganization. NATO could also explore moving away from its 30 voters, at least in the AJOD, and move toward strategic

and subordinate commands as voters to remove barriers. U.S. and NATO challenges to be aware of and navigate are strict U.S. criteria-based terminology approaches that at times run into being subordinate to international laws and agreements, U.S. enterprise proposals compared to NATO standardization and national influences, and the capacity of U.S. support versus sustainable maintenance, especially within identified burdensome work practices.³⁷ In this, NATO's Allied Command Transformation and Military Committee Joint Standardization Board could strengthen the AJOD's role as the chief operations officer of allied joint doctrine development by driving top-down approaches to change library organization, policy and process formulation, standard agreement streamlining, and system implementation to effect real change in pursuit of a successful comprehensive approach. Furthermore, there must be an understanding that national resource commitments must be reviewed in light of resource constraints.

In totality, the U.S. joint doctrine development system is entering a third 30-year time period for library reset (1959, 1991, 2020). Joint Staff J7, with new policies and a vision for the future, will be better positioned to generate more practical decisions and informed recommendations to leadership, provide a quicker response to policy guidance demands, harmonize with allies such as NATO, and present a more organized and logical joint doctrine library to warfighters to best support joint operations. JFQ

Notes

¹ Dudley W. Knox, "The Role of Doctrine in Naval Warfare," U.S. Naval Institute *Proceedings* 41, no. 2 (March–April 1915), 325–354, available at <<https://www.usni.org/magazines/proceedings/1915/march/role-doctrine-naval-warfare>>.

² Senate, Committee on Armed Services, *Defense Organization: The Need to Change*, Staff Report, 99th Cong., 1st sess., Committee Print (S Prt 99-86), October 16, 1985, 163–165.

³ *Goldwater-Nichols Department of Defense Reorganization Act of 1986*, Pub.L. 99-433,

99th Cong., H.R. 3622, October 1, 1986, available at <<https://www.govinfo.gov/conent/pkg/STATUTE-100/pdf/STATUTE-100-Pg992.pdf>>.

⁴ Douglas C. Lovelace, Jr., and Thomas-Durell Young, "Joint Doctrine Development: Overcoming a Legacy," *Joint Force Quarterly* 14 (Winter 1996–1997), 94–100.

⁵ *Developing Today's Joint Officers for Tomorrow's Ways of War: The Joint Chiefs of Staff Vision and Guidance for Professional Military Education & Talent Management* (Washington, DC: The Joint Staff, May 2020), available at <https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jcs_pme_tm_vision.pdf?ver=2020-05-15-102429-817>.

⁶ Gidget Fuentes, "INDO-PACOM Commander: New Warfighting Concept Requires More Joint Training, Ranges to Prep for Tougher Fights," USNI News, March 4, 2020, available at <<https://news.usni.org/2020/03/04/indo-pacom-commander-new-warfighting-concept-requires-more-joint-training-ranges-to-prep-for-tougher-fights>>.

⁷ Linton Wells II, Theodore C. Hailes, and Michael C. Davies, *Changing Mindsets to Transform Security: Leader Development for an Unpredictable and Complex World* (Washington, DC: Center for Technology and National Security Policy, 2013), 167, 225–226, available at <<https://ndupress.ndu.edu/Media/News/Article/1216550/changing-mindsets-to-transform-security-leader-development-for-an-unpredictable/>>.

⁸ *Ibid.*, 167.

⁹ "Joint Doctrine Hierarchy Chart," Joint Electronic Library, available at <<https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/status.pdf?ver=2020-07-30-140030-920>>.

¹⁰ William F. Furr, "Joint Doctrine: Progress, Prospects, and Problems," *Airpower Journal* 5, no. 3 (Fall 1991), 39, available at <https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-05_Issue-1-4/1991_Vol5_No3.pdf>.

¹¹ George E. Katsos, "DOD/JDD Programs Brief—Allied, Terminology, Interagency," 64th Joint Doctrine Planning Conference, November 6, 2019.

¹² Francis Lieber, *Instructions for the Government of Armies of the United States in the Field, Originally Issued as General Orders 100, Adjutant General's Office, 1863* (Washington, DC: Government Printing Office, 1898), available at <https://www.loc.gov/rr/frd/Military_Law/Lieber_Collection/pdf/Instructions-gov-armies.pdf>; War Department, *Field Service Regulations, United States Army: 1914; Text Corrections to February 4, 1916, Changes No. 4* (New York: Army and Navy Journal, 1914).

¹³ United States Joint Army and Navy Board, *Joint Army and Navy Action in Coast Defense* (Washington, DC: Government Printing Office, June 5, 1920), available at <<https://www.loc.gov/resource/dcmsiabooks>.

<<https://www.loc.gov/resource/dcmsiabooks>>; United States Joint Army and Navy Board, *Joint Action of the Army and Navy* (Washington, DC: Government Printing Office, April 23, 1927), available at <https://www.google.com/books/edition/Joint_Action_of_the_Army_and_the_Navy/Y41CTgx7uOwC?hl=en&gbpv=1&bsq=doctrine>; Departments of the Army, the Navy, and the Air Force, *Joint Action Armed Forces* (Washington, DC: Government Printing Office, September 1951).

¹⁴ *Dictionary of United States Military Terms for Joint Usage* (Washington, DC: Government Printing Office, June 1948).

¹⁵ United States Joint Army and Navy Board, *Joint Army and Navy Action in Coast Defense*; United States Joint Army and Navy Board, *Joint Action of the Army and Navy*; Joint Chiefs of Staff Publication (JCSP) 0-2, *Unified Action Armed Forces (UNAAF)* (Washington, DC: Joint Chiefs of Staff, November 1959); JCSP 0-2, *Unified Action Armed Forces (UNAAF)* (Washington, DC: Joint Chiefs of Staff, December 1, 1986).

¹⁶ JCSP 1, *Dictionary of United States Military Terms for Joint Usage* (Washington, DC: Joint Chiefs of Staff, July 1959), 147 (North Atlantic Treaty Organization [NATO] Allied Administrative Publication [AAP]-6(A), September 29, 1958), available at <https://www.google.com/books/edition/Dictionary_of_United_States_Military_Ter/i0AtAQAAIAAJ?hl=en&gbpv=1&dq=1959+dictionary+joint+usage&printsec=frontcover>.

¹⁷ Joseph W. Prueher, "Rethinking the Joint Doctrine Hierarchy," *Joint Force Quarterly* 14 (Winter 1996–1997), 44. Early 1990s joint doctrine development briefing, date unknown.

¹⁸ NATO-AAP-47, *Allied Joint Doctrine Development* (Washington, DC: Department of Defense, February 19, 2019); NATO-AAP-47, *Allied Joint Doctrine Development Supplement to AAP-3 Series* (Washington, DC: Department of Defense, December 19, 2013).

¹⁹ Joint Doctrine Working Party Minutes, October 22–23, 1996.

²⁰ David A. Sawyer, "The Joint Doctrine Development System," *Joint Force Quarterly* 14 (Winter 1996–1997), 36.

²¹ Lovelace and Young, "Joint Doctrine Development," 99.

²² Joint Publication (JP) 3-0, *Doctrine for Joint Operations* (Washington, DC: The Joint Staff, September 10, 2001); *Joint Doctrine Capstone and Keystone Primer* (Washington, DC: The Joint Staff, September 10, 2001).

²³ *The National Defense Strategy of the United States of America* (Washington, DC: Department of Defense, March 2005), available at <https://history.defense.gov/Portals/70/Documents/nds/2005_NDS.pdf?ver=FA4Qqo94ZB0x_S6uL0QEg%3d%3d>; *The National Military Strategy of the United States of America: A Strategy for Today; A Vision for Tomorrow* (Washington, DC: The Joint Staff, 2004),

available at <<https://history.defense.gov/Historical-Sources/National-Military-Strategy/>>; *National Military Strategy: Shape, Respond, Prepare Now; A Military Strategy for a New Era* (Washington, DC: The Joint Staff, 1997), available at <<https://history.defense.gov/Historical-Sources/National-Military-Strategy/>>.

²⁴ 30th Joint Doctrine Working Party Minutes, November 12–14, 2002.

²⁵ 37th Joint Doctrine Working Party Minutes, May 24–25, 2006.

²⁶ 38th Joint Doctrine Working Party Minutes, November 7–8, 2006.

²⁷ JP 1-01, *Joint Doctrine Development System, Change 1* (Washington, DC: The Joint Staff, June 29, 2001); Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5120.02, *Joint Doctrine Development System* (Washington, DC: The Joint Staff, November 30, 2004); CJCSI 5120.02, *Joint Doctrine Development System, Change 1* (Washington, DC: The Joint Staff, July 20, 2005); CJCSI 5120.02A, *Joint Doctrine Development System* (Washington, DC: The Joint Staff, March 31, 2007); CJCSI 5120.02B, *Joint Doctrine Development System* (Washington, DC: The Joint Staff, December 4, 2009).

²⁸ George E. Katsos, “The U.S. Government’s Approach to Health Security: Focus on Medical Campaign Activities,” *Joint Force Quarterly* 85 (2nd Quarter 2017), 66–75; George E. Katsos, “The U.S. Government’s Approach to Food Security: Focus on Campaign Activities,” *Joint Force Quarterly* 87 (4th Quarter 2017), 112–121; George E. Katsos, “The U.S. Government’s Approach to Environmental Security: Focus on Campaign Activities,” *Joint Force Quarterly* 89 (2nd Quarter 2018), 130–139; George E. Katsos, “The U.S. Government’s Approach to Economic Security: Focus on Campaign Activities,” *Joint Force Quarterly* 90 (3rd Quarter 2018), 106–112; George E. Katsos, “The U.S. Government’s Approach to Civilian Security: Focus on Campaign Activities,” *Joint Force Quarterly* 91 (4th Quarter 2019), 97–104.

²⁹ Supreme Headquarters Allied Powers Europe, available at <<https://shape.nato.int>>; NATO’s Warfare Development Command, available at <<https://www.act.nato.int>>.

³⁰ *Decade of War, Volume 1: Enduring Lessons from the Past Decade of Operations* (Suffolk, VA: Joint and Coalition Operational Analysis, 2012), 2, 25–28, available at <<https://apps.dtic.mil/dtic/tr/fulltext/u2/a570341.pdf>>; Richard D. Hooker, Jr., and Joseph J. Collins, eds., *Lessons Encountered: Learning from the Long War* (Washington, DC: NDU Press, 2015), 9, available at <<https://ndupress.ndu.edu/Media/News/News-Article-View/Article/717665/lessons-encountered-learning-from-the-long-war/>>; James C. McArthur et al., “Interorganizational Cooperation—Part I of III: The Interagency Perspective,” *Joint Force Quarterly* 79 (4th Quarter 2015), 106–112; James C. McArthur et al., “Interorganizational

Joint Publications (JPs) Under Revision (to be signed within 6 months)

JP 1-0, *Personnel Support*

JP 2-0, *Joint Intelligence*

JP 3-0, *Joint Operations*

JP 3-03, *Joint Interdiction*

JP 3-07, *Joint Stability*

JP 3-XX, *Information*

JPs Revised (signed within last 6 months)

JP 1, *Doctrine for the Armed Forces of the United States, Volumes 1 and 2*

JP 3-05, *Special Operations*

JP 3-26, *Combating Terrorism*

JP 3-36, *Joint Air Mobility and Sealift Operations*

JP 3-72, *Joint Nuclear Operations*

JP 3-85, *Joint Electromagnetic Spectrum Operations*

JP 5-0, *Joint Planning*

Cooperation—Part II of III: The Humanitarian Perspective,” *Joint Force Quarterly* 80 (1st Quarter 2016), 145–152; James C. McArthur et al., “Interorganizational Cooperation III of III: The Joint Force Perspective,” *Joint Force Quarterly* 81 (2nd Quarter 2016), 129–139.

³¹ Hooker and Collins, eds., *Lessons Encountered*, 9.

³² Joint Doctrine Interorganizational Cooperation Program, available at <<https://www.jcs.mil/Doctrine/Interorganizational-Documents/>>; *Joint Guide for Interagency Doctrine* (Washington, DC: The Joint Staff, November 4, 2019), available at <https://www.jcs.mil/Portals/36/Documents/Doctrine/Interorganizational_Documents/jg_ia.pdf?ver=2020-02-03-151039-500>.

³³ Chairman of the Joint Chiefs of Staff Manual (CJCSM) 5120.01, *Joint Doctrine Development Process* (Washington, DC: The Joint Staff, January 13, 2012); CJCSI 5120.02C, *Joint Doctrine Development System* (Washington, DC: The Joint Staff, January 13, 2012); CJCSM 5120.01A, *Joint Doctrine Development Process* (Washington, DC: The Joint Staff, December 29, 2014); CJCSI 5120.02D, *Joint Doctrine Development System* (Washington, DC: The Joint Staff, January 5, 2015).

³⁴ George E. Katsos, “Department of Defense Terminology Program,” *Joint Force Quarterly* 88 (1st Quarter 2018), 124–127, available at <<https://www.jcs.mil/Doctrine/DOD-Terminology-Program/>>.

³⁵ Joe Gould, “QDR Dead in 2017 Defense Policy Bill,” *Defense News*, April 25, 2016, available at <www.defensenews.com/home/2016/04/25/qdr-dead-in-2017-defense-policy-bill/>.

³⁶ Scott Kendrick, *Vice Versa: An Artistic Appraisal of Joint Doctrine’s Expression of Campaigns, Major Operations, and Objectives* (West Point, NY: Modern War Institute at West Point, July 11, 2018), 10, available at <<https://mwi.usma.edu/wp-content/uploads/2019/03/Vice-Versa.pdf>>.

³⁷ George E. Katsos, “DOD/JDD Programs Brief—Allied, Terminology, Interagency,” presentation to the 64th Joint Doctrine Planning Conference, November 6, 2019.