



# Introducing Information as a Joint Function

By Alexis G. Grynkewich

In July 2017, the Chairman of the Joint Chiefs of Staff issued a change to Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, introducing information as a new and seventh joint function. This issuance portends significant changes in how the joint force will plan and execute transregional, multidomain, and multifunctional operations. As such, it represents an opportunity to

reimagine what “combined arms” means in 21<sup>st</sup>-century warfare.

While the underlying nature of warfare remains constant, the character of modern warfare continues to evolve. The economic and social revolutions wrought by the industrial age rapidly changed how wars were fought and won in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Leaders who grasped the implications of those changes developed the strategies and designed operations that led to success, while those who did not were doomed to failure. Today, in the midst of an information age that has similarly transformed economies and societies, we must likewise adapt our thinking

and deepen our understanding if we hope to succeed in 21<sup>st</sup>-century conflicts. A key part of this adaptation is to develop a joint force that proactively uses and employs information across a wide range of activities. The incorporation of information as a joint function is but the first step toward enhancing joint warfighting and developing a future joint force able to dominate in the conflicts of tomorrow.

Joint functions represent related capabilities and activities placed into basic groups to help commanders synchronize, integrate, and direct operations. The original six joint functions as described in JP 1 are command and control,

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intelligence, fires, movement and maneuver, protection, and sustainment. The newly released JP 1 adds information to this list, stating:

*The information function encompasses the management and application of information and its deliberate integration with other joint functions to influence relevant-actor perceptions, behavior, action or inaction, and support human and automated decision making. The information function helps commanders and staffs understand and leverage the pervasive nature of information, its military uses, and its application during all military operations. This function provides [joint force commanders] the ability to integrate the generation and preservation of friendly information while leveraging the inherent informational aspects of all military activities to achieve the commander's objectives and attain the end state.*

The elevation of information in joint doctrine—the first addition to the list in 20 years—underscores the Department of Defense (DOD) focus on how to adapt in order to most effectively use the military instrument of national power in a changing strategic environment. Although conflict, violence, and war endure, the methods through which political goals are pursued are evolving due to technological changes.<sup>1</sup> Technologies such as autonomy and new forms of human-machine teaming have resulted in new concepts of operation that include data-focused intelligence, surveillance and reconnaissance, increased speed of decision, and enhanced lethality. The race to develop, leverage, and master such technologies and concepts poses a critical challenge.<sup>2</sup>

The joint force is rising to the challenge. As just one example, an Office of the Secretary of Defense artificial intelligence initiative—Project Maven—is examining how to find meaning in vast amounts of data at the speed of warfare.<sup>3</sup> The Department has also implemented a DOD Cybersecurity Campaign, developing a framework that integrates defensive cyberspace and information operations across the force. Furthermore, a newly

completed electronic warfare strategy is driving a renewed focus on the use of emerging electromagnetic spectrum systems and technologies.

Ultimately, of course, war is a uniquely human endeavor. While technology presents opportunities and challenges by itself, it is the transformative effect of technology on human societies that has had the most fundamental impact on the character of war. The ability of individuals to access information, from anywhere and at any time, has broadened and accelerated human-to-human interaction across multiple levels (person to person, person to organization, person to government, government to government). Social media, in particular, enables the swift mobilization of people and resources around ideas and causes. Coupled with the inability of humans to fully control the informational detritus that results from (and reveals) patterns of life in the information age, these trends present an opportunity for those most skilled in applying informational power. As the accompanying vignettes illustrate, potential adversaries are already applying their skills to influence relevant actors.<sup>4</sup>

Within the changing environment, information may prove to be the pre-eminent commodity and decisive factor in military operations. As such, the Chairman's JP 1 issuance is a call to action for the joint force to move rapidly to build information into operational art and design in order to deliberately leverage the informational aspects of military activities.<sup>5</sup> We have not always done this right. As the Joint Staff's *Decade of War* study of operations in Iraq and Afghanistan (2001–2011) revealed, policies, conventions, cultural mindsets, and approaches to leveraging information have sometimes hampered prior efforts.<sup>6</sup> Facing this new environment and the threats it presents—including crises and contingencies that cut across combatant commands; across the domains of land, sea, air, space, and cyberspace; and across capabilities including conventional, special operations, and deterrence forces—we cannot afford to repeat past mistakes.

The elevation of information as a joint function represents an important first step toward enhancing warfighting across all domains and the information environment. The Joint Staff and Office of the Secretary of Defense are working together to build a game plan that will follow through on across the breadth and depth of doctrine, organization, training, materiel, leadership and education, personnel, and facilities. In the end, however, it will be the efforts of the Services, combatant commands, and individuals in the field that will truly make this happen. Each of those entities will bring forward different perspectives, approaches, and experiences that will enrich the entire joint force. Our desire is that this collection of articles in *Joint Force Quarterly* will start an intellectual dialogue that will drive the community to experiment, exercise, and learn. I personally encourage all readers to bring their best ideas forward in future articles. Only together can we ensure information as a joint function will reach its full potential. JFQ

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## Notes

<sup>1</sup> *Joint Operating Environment 2035: The Joint Force in a Contested and Disordered World* (Washington, DC: The Joint Staff, 2016).

<sup>2</sup> *Ibid.*

<sup>3</sup> Cheryl Pellerin, "Project Maven to Deploy Computer Algorithms to War Zone by Year's End," *Defense.gov*, July 21, 2017, available at <[www.defense.gov/News/Article/Article/1254719/project-maven-to-deploy-computer-algorithms-to-war-zone-by-years-end/](http://www.defense.gov/News/Article/Article/1254719/project-maven-to-deploy-computer-algorithms-to-war-zone-by-years-end/)>.

<sup>4</sup> Joint Publication 3-13, *Information Operations* (Washington, DC: The Joint Staff, June 2016, unpublished draft).

<sup>5</sup> *Joint Concept for Operating in the Information Environment* (Washington, DC: The Joint Staff, August 2017, unpublished draft). Also see U.S. Senate Armed Services Committee, Subcommittee on Cybersecurity, Testimony of Rand Waltzman, *The Weaponization of Information: The Need for Cognitive Security* (Santa Monica, CA: RAND, April 27, 2017), available at <[www.armed-services.senate.gov/imo/media/doc/Waltzman\\_04-27-17.pdf](http://www.armed-services.senate.gov/imo/media/doc/Waltzman_04-27-17.pdf)>.

<sup>6</sup> *Decade of War, Volume I: Enduring Lessons from the Past Decade of Operations—Mistakes and Failures in the Iraq and Afghanistan Wars, Strategic Themes and Recommendations* (Suffolk, VA: Joint Lessons Learned Division, June 15, 2012).