

The Information Warfighting Function

How stand-in-forces create and exploit information advantages

by LtGen Matthew G. Glavy

Marines now have a clearer understanding of how they are likely to operate against the pacing threat—and other near-peer adversaries who can create contested areas—because of the recent release of *A Concept for Stand-in Forces*. In the document's 23 pages of text (not including the foreword), the word "information" is used 27 times in various contexts but primarily in reference to operations in the information environment. *MCDP 8, Information*, currently nearing its final draft, was written in parallel with the development of the Stand-in Forces (SIF) concept. The two lines of thought influence each other. *MCDP 8* describes our newest warfighting function and outlines how Marines can utilize it to create an advantage in the context of our maneuver warfare philosophy. The SIF concept leverages these ideas and explains how the information warfighting function helps Marines using the concept to accomplish their mission. This article dives deeper into this relationship and provides additional insight into how information and Marines seeking information advantages, as broadly described in *MCDP 8*, can help turn SIF from a concept into a reality.

Creating Information Advantage

Through the information warfighting function, Marines create and exploit information advantages by generating, preserving, denying, and projecting information more effectively than an opponent. There are three types of information advantages Marines seek as a means to accomplishing objectives and ultimately imposing our will: *systems overmatch*, *prevailing narrative*, and

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force resiliency. These advantages are described in detail in *MCDP 8*. Figure 1 illustrates a way to visualize the steps Marines take to create information advantages in any warfighting domain. The figure is shaped like a pyramid to illustrate the cumulative effort this requires. As with all warfighting functions, the pyramid's foundation rests on the competence found in those who demonstrate capability and excellence in their craft—in this case, Marines educated and trained to perform effectively in every warfighting domain and the information environment. Intuitively, Marines understand that competence is necessary for *any* warfighting function if we are to include it in our combined arms approach to operations. Thus, while education and training are es-

sential to developing competent skills in one's MOS, appropriate education and training are also necessary for all Marines who seek to integrate information into combined arms plans.

Demonstrating such competence unlocks the next two levels of the pyramid, Authorities and Approvals. By "authorities," we mean the legal power given to particular commanders to take action in specified ways—in this case, the commander who can legally decide to take action in the information environment. "Approvals" means the commander with the power to act gives his permission for a designated course of action to proceed. Marine commanders performing any type of operation, including SIF operations, may receive authority to conduct operations in the information environment; for example, this authority may be provided in an execute order. More frequently, these types of authorities reside at a higher level in the chain of command. Regardless of where the authority lies, approval to

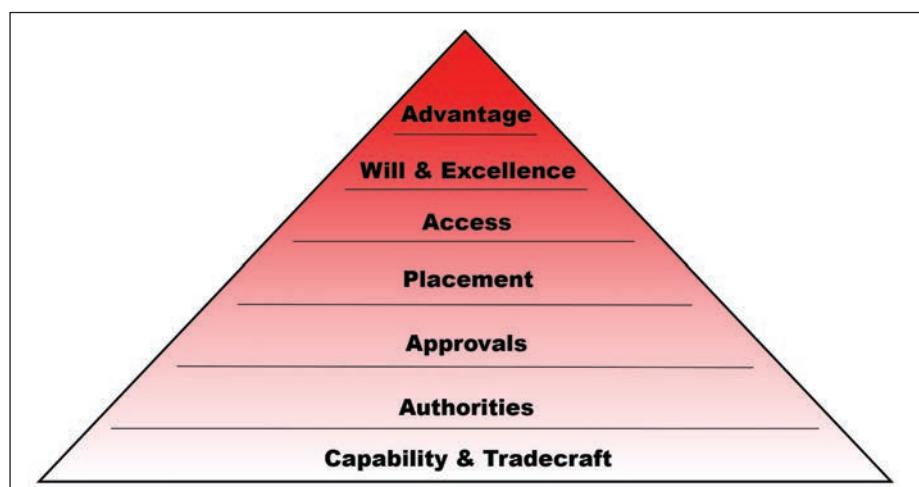


Figure 1. The Information Advantage Pyramid. (Figure provided by author.)

perform any operation using information capabilities must be obtained from the commander with the legal power to act. Approval can be given in a variety of ways, ranging from permission on a case-by-case basis to pre-approval to act if a specified trigger is met. Note that such approval can be given to subordinate commanders who do not have the authority to take action on their own; they can still operate effectively in the information environment so long as they, and their staffs, understand how to secure approval for their desired course of action. Understanding the nuances of authorities and approvals is essential for Marines performing future stand-in force missions.

“Placement” in the context of information advantages means putting something or someone into a relevant physical or virtual position. One joint definition that illustrates this relevance is “an individual’s proximity to information of intelligence value.” Placement is a location that makes something possible; Marines with good placement increase the chances they will be *in the right place at the right time*. “Access” refers to any action to enter a targeted system to collect intelligence or hold the system at risk. It can be gained in a variety of ways depending on the characteristics of the targeted system. For example, hackers gain access to a targeted computer system through its connection to the internet, which is what happened in the widely reported hack of Sony Pictures in 2014.¹ Access can also be gained through the electromagnetic spectrum. A good example of this is the (in)famous 2015 event when researchers demonstrated their ability to take control of a Jeep Cherokee’s operating system by using a cellular telephone network, which is a radio wave transmitter and receiver system, to enter the vehicle’s wi-fi system—another radio wave transmitter/receiver.² Access was obtained to the operating system through the vehicle’s wi-fi receiver antenna in this example.

To achieve an information advantage, we also need “Will & Excellence.” To understand this level of the pyramid we turn to our warfighting philosophy found in *MCDP 1, Warfighting*. To ex-

ecute any of the warfighting functions effectively requires determination, while the object in war is to impose our will on our enemy.³ The nature of war does not change, even though the Marine Corps added an additional warfighting function to our lexicon. The conduct of operations requires resolve regardless of the domain or domains through which we act. To truly achieve an advantage against an opponent requires creativity to produce courses of action that pit strengths against weaknesses, which is an apt description of excellence.

Our foundational philosophy found in *Warfighting* instructs us that “the essence of maneuver is taking action to generate and exploit some kind of advantage” over our opponent. Advantages can be generated in any domain and “may be psychological, technological, or temporal as well as spatial.” When we create several different advantages and apply them so they work together, we produce combined-arms effects. Cross-domain advantages, to include information-based advantages, are simply a particular kind of combined arms warfare. The pyramid in Figure 1 illustrates the steps necessary to create advantages in the information environment, which can then be applied to help us impose our will.

Information Advantages and SIF

SIFs are designed to operate across the competition continuum within a contested area as the leading edge of a maritime defense-in-depth to intentionally disrupt the plans of a potential or actual adversary. These forces deter by integrating their activities with other elements of national power (economic, diplomatic, and informational), and with the activities of allies and partners, to impose costs on rivals who want to use ways and means below the violence threshold to achieve their goals. SIF’s enduring function is to help the fleet and joint force win the reconnaissance and counter-reconnaissance battle at every point on the competition continuum. When directed, SIF conduct sea denial in support of fleet operations, especially near maritime chokepoints. SIF can perform sea denial by using organic sensors and weapon systems to

complete kill webs as well as by integrating organic capabilities with naval and joint all-domain capabilities.⁴

As an enabler to all of the warfighting functions, the information warfighting function is critical if we are to realize the above description of SIF. Figure 2 provides a visualization of how the information warfighting function supports Marines as they perform SIF missions and the requirements that must be fulfilled for this support to happen effectively. The information advantage pyramid illustrates the requirements needed for any force—in this case, SIF—to create an information advantage. Specifically for SIF, the diagram shows them performing the range of expeditionary advanced base operations while focusing on the enduring function of winning the reconnaissance/counter-reconnaissance battle.

A Concept for Stand-in Forces tells us the all-domain collection plan developed to win the recon/counter-recon battle provides the foundation for the force’s overall scheme of maneuver.⁵ The information function is critical both for the fight to generate an accurate all-domain picture of a potential adversary and also for the fight to deny adversaries from developing their own picture of us, not only of SIF but also of the fleet, joint force, and allies and partners. Generating our own accurate picture while denying the adversary such a picture describes a form of information advantage that *MCDP 8* refers to as *systems overmatch*. In this case, intelligence systems overmatch. Said another way, achieving an all-domain reconnaissance picture while denying such a picture to an adversary is a form of information advantage. For it to be useful, such intelligence must be in a suitable form and be delivered to the right place in a timely fashion. Denying such a picture to an adversary means disrupting this chain within the opposing system. Understanding how this warfighting function helps us win the recon/counter-recon battle is one of the ways information advantages help us achieve our objectives.⁶

The left side of Figure 2 illustrates how we build the pyramid that helps SIF accomplish their objectives. The

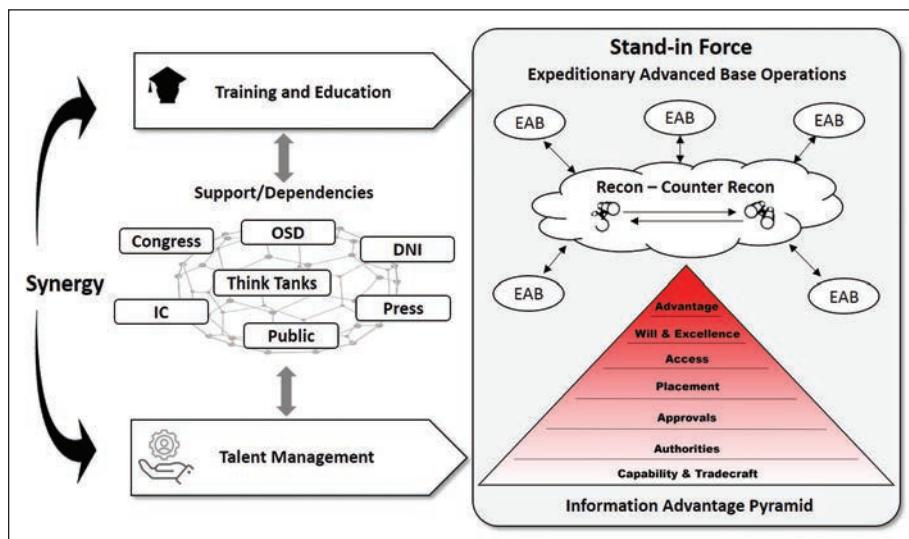


Figure 2. The Information Warfighting Function and Stand-in Forces. (Figure provided by author.)

Training and Education arrow depicts a line of effort required to build the pyramid and then apply it in SIF operations. For example, to create information advantages in support of SIF Marines must learn such things as where authorities are held and how to seek timely approval to use those authorities. They must also learn how these are related to a wider community that can affect their use, many of which are shown underneath the heading of Support/Dependencies. Then, specific Marines need training in their craft so they can create a capability for use, and staffs at multiple levels need training on how to create information-related concepts of employment and the processes to use to obtain approvals that are fully integrated with the other warfighting functions. Once individual skills are developed, units of Marines need to practice creating timely information advantages that are then integrated into a combined arms approach. They can do this in wargames and exercises at all levels, from command post exercises to major joint exercises.

Finally, Talent Management is the engine in the background that makes all of this work. The arrow in Figure 2 illustrates how the right people are needed to understand the physical and non-tangible aspects of the information environment and visualize combinations of capabilities that result in operating effectively in the information

environment. Many of the necessary skills are not just perishable, but they also evolve at a rapid pace as technology changes, which places a premium on managing the human resources—the people—who need to evolve at least as fast as the technology. Figure 2 also illustrates the human relationships needed to create synergy, such as the relationships between the Intelligence Community and units performing SIF missions. Talent management helps ensure these important relationships are identified and then taken into account as personnel change. Ultimately, both arrows are necessary if we are to achieve the excellence required to create effective information advantages.

Conclusion

I know from my own experience that what is described in this article is well within the Marine Corps' grasp. I have seen Marines at Marine Corps Forces Cyberspace Command create information advantages in ways remarkably similar to the pyramid in Figure 1. I can say the same for the Marine Cryptologic community. Both groups created information advantages that were regularly, and effectively, employed in operations by a variety of commanders who either had the authority to use their capabilities or were given the approvals to do so. Indeed, the sustained excellence demonstrated by these Marines led to them receiving approvals to operate

more frequently in the information environment. As all Marines know, demonstrating competence in a competitive environment is a confidence builder and can give your adversary pause to reconsider their own plans.

Marines performing SIF missions can generate this same kind of confidence and it can lead to obtaining the approvals they need to operate effectively in the information environment. This article gives an overview of how that can be done, and the publication of *MCDP 8, Information*, provides the conceptual underpinning for it. The Marine Corps is also looking at how we organize to do this most effectively, all the way from Headquarters Marine Corps, to the Marines performing SIF on the “leading edge of a maritime defense-in-depth.” I encourage all Marines to think about our newest warfighting function and how it relates to our current and emerging operating concepts. Contribute to the discussion. Our ability to create winning advantages depends on it.

Notes

1. Danny Yadron, Devlin Barrett, and Julian E. Barnes, “U.S. Struggles for Response to Sony Hack,” *Wall Street Journal*, (December 2014), available <https://www.wsj.com>.
2. Alex Drozhzhin, “Black Hat USA 2015: The Full Story of How That Jeep Was Hacked,” *Kaspersky Daily*, (August 2015), available at <https://www.kaspersky.com>.
3. Headquarters Marine Corps, *MCDP 1, Warfighting*, (Washington, DC: 1997).
4. Headquarters Marine Corps, *A Concept for Stand-in Forces*, (Washington, DC: December 2021).
5. Ibid.
6. Headquarters Marine Corps, *MCDP 8, Information*, (Washington, DC: n.d.) (Unreleased).

