



DEPARTMENT OF DEFENSE

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U.S. JOINT FORCES COMMAND
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IN REPLY REFER TO:

28 May 2009

MEMORANDUM FOR U.S. JOINT FORCES COMMAND

Subject: Joint Concept Development Vision

1. At the heart of future force and capability development are focused and clearly stated ideas about the challenges we face and potential ways for dealing with those challenges. In the recent past, concept development has too often lacked the focus and the agility to be relevant to today's rapidly changing global security challenges. We must focus concept development on the specific problems identified in the Joint Operating Environment or on identified gaps in doctrine. This will be a fundamental shift in the way we currently look at concepts and their value to fielding and sustaining relevant capabilities.
2. Ideas, in the form of concepts, are a key element in military readiness. Ideas drive the development of military capabilities by informing decisions about doctrine, organization, training, materiel, leader development, personnel, facilities and policy.
3. USJFCOM takes a leading role in this process, both in developing, testing and validating new concepts and in transitioning those concepts into doctrine as appropriate. This process to date has not worked as well as it could. The attached Vision for Joint Concept Development will guide our actions internally and externally so that the joint force can operate with more success in the future.
4. This vision describes an integrated concept-doctrine development system that distinguishes among unofficial concepts, which can be exploratory, official concepts, which impact force development and therefore must be more mature, and doctrine, which is authoritative and must be executable with current capabilities. My objective is to set a high standard for official concepts without discouraging more exploratory conceptual work. Concept development will be based on a thorough understanding of current doctrine. Concepts will provide a clear and testable alternative to that doctrine. Concepts validated through experimentation, practical experience, analysis, and professional debate will be transitioned systematically and expeditiously into doctrine.
5. This will require close cooperation between J7, which has responsibility for joint doctrine development, and J9, which has responsibility for concept development, with support from both J5 and the Joint Center for Operational Analysis (JCOA). Since USJFCOM is not solely responsible for concept and doctrine development, this will also require close cooperation with other commands involved in the concept and doctrine development process.
6. Periodic assessment of our progress and feedback from our many partners will be key to our ultimate success, and an important part of executing my vision.

Handwritten signature of J. N. Mattis in cursive.

J. N. Mattis
General, U.S. Marine Corps

Attachment:

(1) Vision for Joint Concept Development

VISION FOR JOINT CONCEPT DEVELOPMENT

A new idea is first condemned as ridiculous and then dismissed as trivial, until finally, it becomes what everybody knows.

—William James, 1879

Introduction

Ideas matter, sometimes fundamentally.

The right idea in the right situation can trump superior numbers and technology. In the spring of 1940, a German *Wermacht* still materially stunted by restrictions imposed at Versailles routed a larger French military that was widely accepted as the best in the world, famously overrunning France in six weeks. France, with her British allies, had numerical superiority, more and better tanks, and an impressively fortified defensive system. In contrast, the outmanned and outgunned Germans had a better idea, an innovative warfighting concept that merged the infiltration tactics developed during the Great War with the internal combustion engine, radio communications, and the German tradition of *Auftragstaktik*. The result was a true revolution in military affairs.

Concepts can transform organizations. I believe this. I have witnessed it twice in my military career, when the introduction of AirLand Battle doctrine transformed the Army and Air Force in the 1980s and the introduction of maneuver warfare similarly changed the Marine Corps a few years later. One may argue that these were doctrines rather than concepts, but at the heart of each was an innovative operating concept—an underlying idea for how Army or Marine Corps forces would operate in dealing with their respective challenges—and that concept was a driving force behind the dramatic institutional changes that those Services experienced.

Our recent experience has taught us that not all concepts will have this dramatic effect. Just as not all concepts will drive change, not all change requires a new concept to motivate it. Organizations can make incremental improvements within the context of the existing conceptual framework. Joint doctrine evolves continuously in this way. When the situation requires only gradual and incremental change, this evolutionary process is perfectly appropriate.

Technological or other advancements also can drive change, making it possible to operate in ways that were impossible before. It certainly makes sense to look to leverage these advancements, even independently of how they might be employed—although there is almost always at least an implicit notion for how an advancement would be used (even if it is usually the existing concept implemented better or faster).

It is possible to function in this purely opportunistic way—developing capabilities and figuring out how to use them later—but the premise of a concept-based approach is that it is better to start with an idea of how the force could operate more effectively and then to develop the capabilities needed to implement that idea. The basic purpose of concepts is to

guide change by motivating experimentation in and exploration of new operating methods, which, if validated, eventually will be supported by changes in doctrine, organization, training, materiel, leader development, personnel, facilities and policy.

The Problem with the Existing System

The existing system of joint concepts has failed to deliver the transformative effect on the joint force that was desired and expected of it. Under the current system, concepts have proliferated to the point that their sheer number confounds meaningful analysis. Many of the concepts are poorly scoped in terms of subject area. New concepts often are initiated by bureaucratic fiat vice conceptual need—to fill out a predetermined hierarchy, lend weight to a new office or justify a new assessment. Because of this, concepts often lack a compelling problem in need of solution or a new idea as the basis for improved operations. Concepts often are initiated without a clear understanding of what current doctrine already has to say on the subject. As a result, many of the concepts have little if anything new to contribute and merely rehash established ideas with new terminology. Because they overlap significantly in scope, many concepts offer competing or even contradictory ideas.

The concepts produced by this system have had little practical effect on force development. Operating concepts are revised on a regular basis, but have little, if any, impact on future capabilities. The concept development process seems to exist primarily to perpetuate itself, and I believe we need to review the policy that guides it.

Finally, there is a disconnect between concepts and doctrine. Identified deficiencies in doctrine ought to motivate concept development, but do not. Conversely, the virtuous ideas that do emerge out of the concept development process should be captured systematically in doctrine, but often are not.

My purpose in this paper is to address this problem by presenting my vision for an integrated concept and doctrine development process that will have the desired effect of contributing to more capable joint forces today and in the future.

The Relationship between Concepts and Doctrine

There is a close and complementary relationship between concepts and doctrine.¹ Both constitute knowledge about how military forces ought to operate. Doctrine is accepted corporate knowledge; it is authoritative.² By definition, doctrine provides authoritative guidance on how the organization ought to operate with current capabilities. It therefore provides the basis for current education and training. Doctrine is subject to existing policy, treaty and legal constraints.

¹ Much of this section is adapted from CJCSI 5120.02A, *Joint Doctrine Development System*, p. A-6.

² “**Doctrine**—(DOD) Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application. See also multinational doctrine; joint doctrine; multi-Service doctrine.” *DOD Dictionary of Military Terms*, <http://www.dtic.mil/doctrine/jel/doddict/> [accessed 15Apr09].

By comparison, concepts are not authoritative; they are unproven ideas. Done properly, they propose solutions to challenges for which no doctrine exists or they propose alternatives to existing doctrine. Unlike doctrine, concepts, whether near-term or futuristic, are not restrained by existing policy, treaties, laws—or even the physical limits of existing technology.³ They are free to explore new methods without these restrictions. Concepts provide the basis for experimentation.

Concepts and doctrine both shape organizations. Doctrine does so by providing authoritative guidance on operational behavior. Concepts do so by guiding future force development, which provides the capabilities required to execute doctrine. No doctrine is adequate if capabilities required to execute it do not exist.

While this current-future structure is generally useful, reality is more complicated. While doctrine must apply to current forces, it can still guide force development, especially training and education, but also organization, personnel and even materiel. We cannot afford to reorganize, initiate multi-million-dollar acquisition programs, or reform education and training curricula based on concepts that are not authoritative or even validated. Could the Army and Air Force execute AirLand Battle in 1982 when the doctrine was first introduced? Yes, to a certain extent. Could they execute AirLand Battle more fully and effectively after the fielding of Abrams, Bradley, Apache, JSTARS and precision-guided munitions and after the institution of training and education reforms? Absolutely. Although undeniably a current doctrine, AirLand Battle also guided future force development for both the Army and Air Force.

Conversely, while concepts are generally meant to be future oriented, there are no future military challenges we can envision that have no basis in the present. (If a truly discontinuous challenge were to arise, with no present symptoms whatsoever, we would lack the intellectual mechanisms to anticipate it.) Of necessity, all future concepts focus on challenges that already exist to some extent today. So, we should recognize the reality that concepts and doctrine both have current and future aspects.

Concepts are intended to guide all dimensions of force development. Doctrine is the first among these because it must guide the others. Concepts have the closest relationship with doctrine. While concepts guide the other dimensions of force development indirectly, the relationship between concepts and doctrine is more direct: as concepts gain institutional acceptance, they actually *become* doctrine—and then continue to guide force development as doctrine.

While concepts have the express purpose of improving joint effectiveness, including changes to doctrine, not all doctrinal change requires a concept. Doctrine evolves continuously and incrementally, and the process for making these evolutionary changes is well established and generally functions effectively. When these changes exist within the framework or paradigm of existing doctrine—for example, when they constitute changes in emphasis or clarifications or elaborations of existing doctrinal statements—there is no need

³ Although the further they stray from current restraints, the further they are from being currently executable.

for a new concept.⁴ Such changes are merely improvements to the existing doctrinal paradigm. It is only when an existing doctrinal framework is nonexistent, deemed inadequate or a new framework is argued to be superior that a new concept is required.

Finally, it is important to recognize that military concepts do not exist in a vacuum. Others read or pay attention to military concepts and may not discriminate between authoritative doctrine, mature concepts, and interesting but undeveloped notions. Senior military leaders need to exert a certain discipline in the way they articulate concepts, especially unofficial ones (discussed later). Carelessness risks encouraging political leaders to make employment decisions that fielded capabilities cannot support.

The Vision for Concept and Doctrine Development

I envision an integrated concept-doctrine development system with three tiers:

- Doctrine—authoritative guidance that has been validated by experience and accepted by the institution. It guides the conduct of current operations, but also informs training, education and other aspects of force development.
- “Official” concepts—a small number of mature concepts accepted into the Joint Operations Concepts (JOpsC) family of concepts, which are subjected to evaluation by a variety of methods including experimentation, practical experience, and professional discussion. If validated, they are transitioned into doctrine.
- “Unofficial” concepts—a variety of white papers, “think pieces,” or other conceptual documents which are exploratory in nature, less mature than official concepts, and do not carry the weight of JOpsC concepts. Unofficial concepts are not part of the JOpsC family, but those that demonstrate potential can be turned into official concepts.

The intent here is to establish a high standard for official concepts—which impact force development—without discouraging more exploratory conceptual work.

All concepts will be written to solve compelling, real-world challenges, current or envisioned. These concepts will be initiated when doctrine is nonexistent⁵, can be established as inadequate, or a case can be made for a superior alternative. To ensure that concepts add value to existing knowledge and do not merely repeat existing doctrine, any concept development effort should start with an understanding of the doctrinal baseline and a clear identification of the doctrinal deficiency or opportunity being addressed. Doctrinal requirements thus will guide concept development, while concepts will inform doctrinal change.

As opposed to having arbitrary time horizons, since concepts will focus on solving actual and emerging problems, a concept will apply from the time that problem is identified until the problem is solved by approved doctrine. Operational problems range

⁴ For the seminal treatment of paradigms and paradigm change, see Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996).

⁵ Including a potential problem that has not occurred yet, but has been forecast as possible.

from those that are immediately pressing to those that are not expected to manifest themselves fully for decades, and our concept development system should have the flexibility to deal with the full range.

Concepts will be written clearly and simply, using doctrinal terminology whenever possible—and particularly avoiding trendy buzz-phrases—to facilitate their transition into doctrine. They will be clearly distinguishable from current doctrine—not rehashing doctrine, but proposing an alternative to existing doctrine. Concepts will treat those aspects of the subject area for which they propose changes; they will not repeat those things that are already addressed in doctrine and remain unchanged. They will be subjected to validation through a variety of methods including formal experimentation, practical experience, analysis, and professional debate. If they gain acceptance, they will be transitioned expeditiously to doctrine—and certainly not revised cyclically.

Establishing the Requirement for a New Concept

The basic criterion for a new concept is the diagnosed existence of a current or future real-world challenge that is compelling. The more specifically and concretely this challenge can be framed, the better. The noted military historian Williamson Murray asserts in *Innovation in the Interwar Years* that the factor “that occurred in virtually every case [of successful military innovation] was the presence of specific military problems the solution of which offered significant advantages to furthering the achievement of national strategy.”⁶ Frederick Kagan, in *Finding the Target: The Transformation of American Military Policy*, similarly emphasizes the importance of focusing on a specific problem: “States have most commonly revolutionized their own militaries, or even war itself, not by setting out to do so but by trying to solve concrete technical, procedural, and strategic problems they faced.”⁷

This compelling challenge can take the form of either a problem or an opportunity⁸:

- A problem exists if we recognize through experience that doctrine is not working or if the strategic or operational context has changed or is changing fundamentally. AirLand Battle was developed in response to the recognition that Active Defense, the Army’s current doctrine at that time, was inadequate for defeating an echeloned Soviet attack in Europe. *Blitzkrieg* was a direct result of the failure of offensive doctrine during the Great War. The recent *Capstone Concept for Joint Operations (CCJO)* is a response to the fundamentally changing operating environment described in the *Joint Operating Environment 2008*.
- An opportunity exists if some conceptual, technological or other advancement could allow us to operate much more effectively. The Marine Corps’ adoption of

⁶ Williamson Murray & Allan Millett, *Military Innovation in the Interwar Period* (Cambridge, England: Cambridge University Press, 1996), pp. 311-12.

⁷ Frederick Kagan, *Finding the Target: The Transformation of American Military Policy* (New York: Encounter Books, 2006), p. 360.

⁸ John F. Schmitt, *A Practical Guide for Developing and Writing Military Concepts*, DART Working Paper #02-4 (McLean, VA: Hicks & Associates, 2002), p. 12.

maneuver warfare in the late 1980s was not a response to a specific doctrinal problem, but was based on the belief that the combined ideas of high tempo, focus of effort, mission tactics, and low-level initiative offered a superior alternative to existing doctrine. Likewise, recent concepts based on “net-centricity” do not address an identified problem, but reflect the belief that dramatic advancements in information technology, and especially global networking, could make it possible to operate in fundamentally new and more effective ways.

In practice, the challenge may be a combination of both problem and opportunity.

If the challenge can be met by making adjustments within the existing doctrinal paradigm, then no new concept is justified. If we can address a challenge by relatively minor adjustments within the existing doctrinal framework, that is the preferred option. A new concept is justified only if we cannot deal with the problem or opportunity by making modifications within the existing doctrinal framework.

Consequently, a concept should offer a departure from existing doctrine and not merely an evolutionary enhancement of it. To be justified, a new concept should not merely provide value-added to existing doctrine, but should offer a new conceptual paradigm that stands as a clear *alternative* to existing doctrine—and can therefore be evaluated in comparison to doctrine, which thus constitutes a kind of experimental control group.

An important logical implication of this is that if a concept meets this rigorous criterion and is eventually validated by experience and experimentation, then it must result in a dramatic vice incremental change to doctrine. While CJCSI 5120.02A, *Joint Doctrine Development System*, acknowledges that concept-based changes to joint doctrine may be incremental, I suggest that a truly effective concept will have a more fundamental impact. By the above logic, the validation of a concept under these conditions establishes a new doctrinal paradigm with respect to that subject area. In such cases, the use of a joint test publication (JTP) as a final “field test” is appropriate.⁹

It is incumbent on the agent proposing a new concept to make the case that a new concept is required. Within U.S. Joint Forces Command, the Strategy and Policy Directorate (J5), the Joint Training Directorate (J7), the Joint Concept Development and Experimentation Directorate (J9), and the Joint Center for Operational Analysis (JCOA) all have a role in this process. Moreover, once a new concept is authorized, the J9 will take the lead in concept development, but the J7 should participate by providing insight into the adequacies and inadequacies of existing joint doctrine.

There Are Concepts and Then There Are Concepts

Here an important distinction must be made between official joint concepts—those accepted into the JOpsC family—and other conceptual work. While any concept is by definition propositional and non-authoritative, the reality is that any JOpsC concept gains a certain amount of credibility merely by that fact and can have an impact on force

⁹ CJCSI 5120.02A, p. A-6.

development. JOpsC concepts necessarily generate a certain amount of institutional “churn.” The intent here is to establish a strict standard for the inclusion of concepts into JOpsC to ensure that the impact of those concepts is productive. For this reason, it is important that a JOpsC concept not only address a compelling problem, but that it also proposes a solution worthy of consideration as an alternative to existing doctrine.

At the same time, it is important not to foreclose other, less mature conceptual exploration. Unofficial concepts can help to clarify the problems we face and can uncover potential candidate solutions worthy of more exploration and development—without the risk of causing unproductive “churn” in the Joint Capabilities Integration and Development System (JCIDS). These unofficial concepts should be designed to promote critical discussion on both compelling challenges and potential solutions. This discussion can take place through sanctioned white papers, on the pages of professional journals, through conferences, or by other means—as occurred when the Marine Corps developed the ideas that eventually became maneuver warfare doctrine. The discussion can expose weaknesses in emerging concepts, as happened with effects-based operations, serving as a mechanism that forces the concepts to improve or fail. I envision an environment in which this competition of ideas identifies those concepts worthy of inclusion in JOpsC.

The Possible Outcomes for a Joint Concept

A joint concept can follow one of three trajectories:

- *Invalidation.* Through experimentation and experience, the joint community may determine that the concept in question does not adequately solve the subject challenge or does not provide a preferable alternative to existing doctrine. In this case, the concept expires. We should keep in mind that an invalidated concept is not a failure. The ultimate objective of concept development is not to get a specific concept approved, but to contribute to improving joint capabilities. An invalidated concept improves knowledge by eliminating certain options from consideration.

- *Partial validation worthy of continued development.* The joint community may conclude that a concept has some potential merit, but that this merit has not been fully demonstrated. In this case, the concept can be returned to the development process for substantive refinement. Ideally, this development would have taken place during the concept’s “unofficial” stage, but it is possible that an official concept can be revisited for refinement. There is danger in this alternative, since it has the potential to repeat the current condition by which concepts are revised without end. Discipline will be required. I see this as an option exercised not routinely, but by exception when a concept is deemed to exhibit genuine, but unrealized, potential.

- *Validation.* The joint community may reach the consensus, supported by experience and experimentation, that a concept provides a value-added alternative to current doctrine. In this case, the concept should be transitioned expeditiously into doctrine via the established doctrinal change process.

Actions

How do we begin to implement this vision? The first, overarching requirement is to regard concept and doctrine development as stages within a single process. Within U.S. Joint Forces Command, this will necessitate close cooperation between the J7 and J9, with support from the J5 and JCOA. Although the J9 will lead the concept development effort, the J7 will participate in all concept development, contributing expertise in the extent and limits of current doctrine. Conversely, J9 will participate in the joint doctrine review process conducted by J7, nominating concepts that are deemed worthy of inclusion in doctrine. The JCOA and J5 will contribute lessons learned and knowledge of the challenges posed by the future operating environment to both stages as necessary.

Since U.S. Joint Forces Command is not alone in developing concepts and doctrine, both J7 and J9 will engage with other stakeholders to promote an integrated concepts-to-doctrine process.

Specific tasks include:

- Establishing a mechanism involving J5, J7, J9 and JCOA for identifying doctrinal deficiencies or opportunities requiring a new concept and coordinating these requirements with the broader concept-development community.
- Establishing a mechanism involving J7 and J9 for determining which unofficial concepts warrant being adopted as official JOpsC concepts and coordinating these determinations with the broader concept-development community.
- Establishing a systematic mechanism involving J7, J9 and JCOA that facilitates the transitioning of validated value-added concepts into joint doctrine.
- Updating policy and instructions to capture these new processes and improvements.

Conclusion

To return to where I began: Ideas matter, sometimes fundamentally. They can matter more than any weapon system, organizational structure or school curriculum. In the military, our ideas are embodied in our concepts and doctrine, which ought to be closely linked. Ironically, a good idea costs nothing, but is much harder to develop than any of these other factors of success. While our doctrine continues to evolve incrementally based on experiences, our concepts have failed to drive increased effectiveness. It is imperative that we do a better job of developing good ideas, communicating them to the operating forces, and supporting them with force development. It is likewise imperative that our concepts focus on compelling problems we face today or will face in the future and that those concepts add value to our existing doctrine.

This paper lays out my vision for how we accomplish that. We have much to do to figure out how to put this vision into effect. Let the good ideas begin.