

Musicians of Mars in Multiple Domains: Expanding Combined Arms in the Twenty-First Century 從多領域作戰觀點 看21世紀美陸軍精進兵種協同作戰之道

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*To get harmony in battle, each weapon must support the other. Team play wins.
You musicians of Mars ... must come into the concert at the proper place and at the
proper time.*

-George S. Patton

為取得戰鬥協調性，各式武器必須相互支援。同心協力、合作無間才能獲勝。貴官身為戰爭的主宰，就必須適時、適地躬逢其盛。

-喬治·巴頓將軍

Preface

Over eighty years ago at the outset of World War II, then Maj. Gen. George S. Patton described how he wanted to fight to the 2nd Armored Division using a musical metaphor—an odd choice reflecting the ease with which the general often combined the profound with the profane. The instruments of battle are different today and so is the operational environment, but the metaphor still rings true. The new version of Field Manual (FM) 3-0, Operations, emphasizes the time-tested combined arms approach to operations, expanded to meet the challenges posed today by threats like China and Russia.¹ Both adversaries possess large, modern militaries that can contest the U.S. joint force through land, air, maritime, space, and cyberspace—an environment in which the U.S. Army has not fought for decades. Army forces meet this challenge through multi-domain operations, the operational concept described in the new FM 3-0: Multi-domain operations are the combined arms employment of joint and Army capabilities to create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders.²

前言

80多年前第二次世界大戰初期，時任少將的喬治·巴頓借用音樂比喻來說明他如何用第2裝甲師作戰這種奇特的作法，顯現出自己的寓教於樂。雖然今日的戰鬥工具與作戰環境都已不同於以往，但這個比喻依然正確。陸軍新版第3-0號教範：《作戰》(FM3-0)強調歷經時間淬鍊的兵種協同作戰方式，能擴展用於因應當前如中共與俄羅斯之威脅構成的挑戰。¹兩者的大型、現代化軍力，可以在陸、海、空、太空及網路空間與美國聯戰部隊一較高下，這是陸軍數十年來從未面臨的作戰環境。陸軍為因應這種挑戰，已發展出多領域作戰概念，新版的FM3-0教範稱其為「多領域作戰是兵種協同部署，陸軍任務是開創並利用相對優勢，以達成所望目標、擊敗敵軍，並為聯戰部隊指揮官鞏固當前戰果。」²

- 1 Huba Wass de Czege, “Lessons from the Past: Making the Army’s Doctrine ‘Right Enough’ Today,” Institute of Land Warfare Publication No. 06-2 (Arlington, VA: Association of the United States Army, September 2006), 15, accessed 1 December 2022, <https://www.ausa.org/sites/default/files/LPE-06-2-Lessons-from-the-Past-Making-the-Armys-Doctrine-Right-Enough-Today.pdf>. This essay provides a guide for how to develop a successful operations doctrine. In it, Wass de Czege noted the importance of minimizing change in doctrine so that it is easier for the force to assimilate it. He wrote that “many key ideas of AirLand Battle merely require recultivation.” 該文提出如何研擬成功作戰準則之指南，作者說明準則儘量少改之重要性，才容易為部隊消化吸收，他認為「我們要做的就是再檢視空地作戰的要項。」
- 2 Field Manual 3-0, Operations (Washington, DC: U.S. Government Publishing Office [GPO], 2022), 1-2.

At the core of multi-domain operations is the expansion of combined arms beyond traditional one- and two-domain approaches to include all domains-land, air, maritime, space, and cyberspace. The multi-domain approach increases options for Army and joint force commanders to create exploitable advantages against enemy forces with peer capabilities. Effective integration of all available capabilities and methods demands leaders who understand doctrine and are masters of their craft. Reading FM 3-0 and other doctrine is essential, but mastery requires application during leader development and training at home station and combat training centers. From its inception in 2016, multi-domain operations were threat informed. The entry point for understanding multi-domain operations is therefore an understanding of the Chinese and Russian threats.

多領域作戰的核心理念是將兵種協同從傳統1~2個作戰領域的交戰模式，擴大到陸、海、空、太空及網路空間等各個層面。多領域的方法使陸軍與聯戰部隊指揮官增加可用選項，以創機造勢來對抗勢均力敵的敵軍，若想有效整合各種可用戰力與方法，領導者必須領會準則並精通用兵之道，閱讀FM3-0教範與其他準則是一切的根本。可是要達到精通，則需要在領導者養成、駐地訓練及戰鬥訓練中心等過程中精益求精。此外，多領域作戰構想係在2016年提出以因應威脅為取向。所以理解多領域作戰的起點就是要了解中共與俄羅斯構成何種威脅。

Challenges Posed by China and Russia

Chinese and Russian military modernization and the proliferation of space, cyberspace, and nuclear capabilities with military applications are the key factors driving change in security policy and doctrine. Although several adversaries can contest the joint force in multiple domains, China and Russia remain the most dangerous. They possess operationally durable formations and capabilities that are resilient and adaptable. Defeating either of them rapidly in a single decisive effort is unlikely. Army forces must therefore be able to mass combat power against multiple decisive points, accrue advantages over time, and defeat enemy forces in detail by creating and exploiting favorable force ratios.³

中共與俄羅斯構成的挑戰

中共與俄羅斯之軍力現代化以及在太空、網路空間和核武等軍事能力的擴增，是推動安全政策與準則改變的要素。雖然有幾個國家可以在各領域與美軍聯戰部隊比肩，但仍以「中」俄最危險。他們有持久作戰的編組與戰力，部隊也具備韌性與適應性，很難單憑作戰主力運用速戰速決之行動來擊敗兩國當中任何一個。因此陸軍必須要在多個決戰點集中戰力、獲取時間累積優勢，以及開創並利用有利兵力比來擊敗

敵軍。³

At the strategic level, China and Russia present different threats and at different scales. However, both adversaries employ standoff approaches, utilizing networked sensor and long-range fires capabilities to deny the U.S. joint force access to strategically valuable areas necessary for force projection and global response from the continental United States. Both nations concluded from U.S. operations against Iraq and Afghanistan that the best way to defend themselves was to prevent enemies from building up combat power close to their borders.⁴ Joint doctrine describes these standoff approaches as anti-access and area denial. Anti-access typically refers to long-range capabilities that prevent the joint force from entering an area. Area denial typically refers to mid- and short-range capabilities that limit a force's freedom of maneuver once they are in an area.

在戰略層次，中共與俄羅斯的威脅與規模各自不同。然而，兩國都運用低調的方式、善用網狀化感測器及長程火力能力等，抵銷美軍聯戰部隊進入從事兵力投射和來自美國本土全球應變兵力所必須的戰略要域。「中」俄歸結美國在伊拉克與阿富汗的戰場經驗得出，最佳防禦之道為避免敵人在邊境附近厚植戰力。⁴美軍聯戰準則將這類旁立式的方式定名為「反介入／區域拒止」：反介入指運用長程武器戰力來避免美軍聯戰部隊進入某區域；區域拒止意指一旦敵軍進入某區域後，用短、中程武器能力來限制其機動自由。

These standoff approaches make China and Russia capable of doing things to the U.S. joint force that we have been able to do to others with impunity since the end of the Cold War. One of the strategic impacts of peer-threat standoff approaches is an increase in the potential cost in terms of money, time, and lives to the joint force and our allies in the event of armed conflict, effectively increasing the threshold at which the United States might respond to provocation with force. By diluting the effectiveness of conventional deterrence, adversaries have greater freedom of action to expand aggression and conduct malign activities, including information warfare. China and Russia continue to advance their interests with limited risk of having to engage U.S. military forces in close combat. The development of multi-domain operations took these strategic considerations into account.⁵

這種旁立式的方式讓「中」俄兩國能對美軍「以其人之道，還治其人之身」，仿效美軍自冷戰結束以來對他國做了卻不受懲罰的事。勢均力敵的旁立式方式的戰略影響之

³ Ibid., p.1-3.

⁴ Army Techniques Publication 7-100.3, Chinese Tactics (Washington, DC: U.S. GPO, 2021), p.1-10.

一，為在發生武裝衝突時，將提升聯戰部隊及美國盟國在金錢、時間及生命的潛在成本，這也讓美國想以武力回應挑釁行為的門檻更為提升。藉由削弱傳統嚇阻之有效性，「中」俄將有更大行動自由來擴大挑釁，並遂行包括資訊戰在內的惡意行動。兩國可以在持續推進其利益的同時，降低與美軍短兵相接的風險。陸軍多領域作戰已將這些戰略思維納入考量。⁵

At the operational level, there are two basic fights relevant to Army forces: (1) the joint fight, enabled by Army capabilities, to defeat the enemy anti-access and area denial approaches; and (2) the land fight, enabled by joint capabilities, to defeat enemy forces, control key terrain and populations, and accomplish national objectives for joint force commanders. Critical to both fights is the role of Army corps fighting as formations to defeat components of the enemy's integrated air defense system and overall integrated fires command.

在作戰層次，陸軍作戰有兩大要項：一、藉陸軍戰力支援的聯合作戰，以擊敗敵「反介入／區域拒止」之作為；二、藉聯合戰力支援的地面作戰，以擊敗敵軍、掌握地形要點與民眾，並為聯戰部隊指揮官完成國家目標。這兩個作戰關鍵為陸軍軍級作戰的編組，必須擊敗敵軍整體防空系統與聯合火力指揮機構的組成要素。

The tactical challenge also has two components. First is how forward-postured forces will defend critical terrain and joint infrastructure at risk from no-notice enemy aggression and offensive action. Second is how Army forces will conduct expeditionary offensive operations against peer threats employing a layered deliberate defense enabled by global intelligence, surveillance, and reconnaissance capabilities. Threat defenses have many initial advantages, including time to prepare, lines of communications relatively close to their national borders, better understanding of terrain and populations, forces available, and the ability to rapidly mass high volumes of fires. During both defensive and offensive friendly operations, enemy forces will target friendly logistics and command and control (C2) nodes, degrade friendly communications through electromagnetic warfare, and target our will to fight through information warfare. Should deterrence fail, it is likely that Army tactical formations will need to fight and win with an ally while outnumbered and isolated from the rest of the U.S. joint force.

戰術挑戰也有兩個面向：一、前進部署部隊如何防衛關鍵地形與聯合基礎設施，不受敵人積極或攻勢作為之危害；二、陸軍如何對實力相當之敵且有全球情監偵能力支持的重層精密防衛網遂行遠征攻勢作戰。敵防禦部署有許多先天優勢，諸如準備時間、

5 FM 3-0, Operations, pp.1-3, 1-4.



相對靠近國界的交通線、比較熟悉地形與人民、可用之兵力，以及能快速集中大規模火力。在敵我雙方交戰階段，敵軍將瞄準我軍後勤與指管節點、運用電磁戰破壞我軍通信，並透過資訊戰打擊我方意志。倘若嚇阻失利，陸軍戰術編隊與盟國將在兵力不足情況下孤軍作戰，也無法奢望可獲得聯戰部隊的支援。

Multi-Domain Operations by FM3-0

Multi-domain operations are the combined arms employment of joint and Army capabilities to create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders. Employing Army and joint capabilities makes use of all available combat power from each domain to accomplish missions at least cost. Multi-domain operations are the Army's contribution to joint campaigns, spanning the competition continuum. Below the threshold of armed conflict, multi-domain operations are how Army forces accrue advantages and demonstrate readiness for conflict, deterring adversaries while assuring allies and partners. During conflict, they are how Army forces close with and destroy the enemy, defeat enemy formations, seize critical terrain, and control populations and resources to deliver sustainable political outcomes.

FM3-0教範中的多領域作戰

多領域作戰是綜合運用陸軍與聯戰部隊之兵力，為聯戰部隊指揮官創造並運用相對優勢，以達成目標、擊敗敵軍及鞏固戰果，也就是善用陸軍和聯戰部隊能力，以及各領域所有可用戰鬥力，在最低代價下達成任務。陸軍多領域作戰對聯合戰役貢獻之範圍為從競爭涵蓋至衝突連續區間，在未達武裝衝突之競爭下，多領域作戰可成為陸軍優勢、展現因應衝突的戰備及嚇阻敵行動，從而確保盟國與夥伴之安全。在衝突期間，陸軍多領域作戰可用於殲敵、攻敵及潰敵，奪取關鍵地形，控制人口及資源，進而實現可持續性的政治成果。

Army forces conduct operations in support of joint campaigns which for the most part occur as part of a larger coalition operation. Leaders must understand the interdependencies between their own assigned forces and the forces or capabilities provided by others to generate the complementary and reinforcing effects of combined arms approaches. Army forces employ joint and other unified action partner capabilities to the degree they are available. However, because peer threats can contest the force in all domains, Army forces must be prepared to conduct operations when some or all joint capabilities are unavailable to support mission accomplishment.

陸軍在支援聯合戰役之作戰，大多是為大型聯盟作戰行動中之一部。領導幹部必須

理解所屬編制部隊與編制外部隊或各能力彼此依賴之關係，才能產生互補作用、強化兵種協同作戰效能。陸軍應盡其所能運用聯戰部隊與聯合行動中夥伴能力，不過，由於勢力相當之敵可在各方面挑戰美軍，陸軍必須有作戰想定是部分或全部聯合戰力可能無法支援任務。

All operations are multi-domain operations. Army forces employ organic capabilities in multiple domains, and they continuously benefit from air and maritime strategic transportation and space and cyberspace capabilities that they do not control, including global positioning, satellite communications, and intelligence, surveillance, and reconnaissance (ISR). Lower echelons may not always notice the opportunities created by higher echelons or other forces that operate primarily in other domains; however, leaders must understand how the absence of those opportunities affects their concepts of operations, decision making, and risk assessment. During operations, small advantages can have significant impacts on the outcome of the mission, particularly when they accrue over time. Creating and exploiting relative advantages are therefore necessary for all operations, and they become even more critical when opposing sides are evenly matched. A relative advantage is a location or condition, in any domain, relative to an adversary or enemy that provides an opportunity to progress towards or achieve an objective. Commanders seek and create relative advantages to exploit through action, and they continually assess the situation to identify ways to expand opportunities.

所有作戰行動都是多領域作戰。陸軍會在多個領域運用其建制兵力，並得力如海空戰略運輸，以及全球定位、衛星通信和情監偵等太空暨網路能力等許多編制外的支援。基層層級或許不理會由高層層級或其他部隊在主要作戰領域所開創的機會，但領導幹部必須了解錯失時機將會如何影響其作戰構想、決心及風險評估。在作戰中，即使是小利也可以對任務產生重大影響，特別是可以積少勝為大勝。另在所有作戰行動中，創造和利用相對優勢是不可或缺的，尤其是面對不相上下之敵時更為重要。至於相對優勢是指相對於敵人而言，可以是任何領域中的地點或情勢，為實現目標或取得進展而提供的契機。指揮官應透過作戰行動尋求並創造相對優勢，並持續評估戰況以尋找開拓時機的方法。

Army leaders are accustomed to creating and exploiting relative advantages through the combined-arms approach that traditionally focuses on capabilities from the land, air, and maritime domains. The proliferation of space and cyberspace capabilities further requires leaders who understand the advantages those capabilities create in their operational environment. The ability to integrate and synchronize space and cyberspace capabilities at the most effective tactical echelon expands options for creating advantages to exploit.



陸軍領導幹部已習於運用傳統的兵種協同方法，即運用陸、海、空三個作戰領域的各種能力創造並運用相對優勢，至於在太空與網路作戰領域的能力運用，則需要進一步理解這些能力在作戰環境中可創造之優勢。在最有作戰效能的戰術層級上配合太空與網路的協同作戰，以增加開創優勢的選項。

Multi-domain operations fracture the coherence of threat operational approaches by destroying, dislocating, isolating, and disintegrating their interdependent systems and formations, and exploiting the opportunities these disruptions provide to defeat enemy forces in detail. Army forces therefore require timely, accurate, relevant, and predictive intelligence to understand threat characteristics, capabilities, objectives, and courses of action. Intelligence initially drives what combinations of defeat mechanisms commanders pursue as they employ the capabilities of their forces in space and time against enemy forces. Army forces combine maneuver and targeting methods to defeat enemy formations and systems. Army forces employ maneuver to close with and destroy enemy formations in close operations. Targeting generally sets priorities for information collection, fires, and other key capabilities to disintegrate enemy networks and systems. Leaders execute the targeting process to create advantages that enable freedom of maneuver and exploit the positional advantages created by maneuver. Targeting is a key way for leaders to integrate the joint capabilities required to create depth in the battlefield and protect friendly formations.

多領域作戰乃藉殲滅、擾亂、孤立、瓦解敵之相互支援武器系統與軍隊，以及利用時機從細節處打擊敵軍等手段，以打破敵作戰之連貫。因此，陸軍需要及時、準確、相關與可預測情資來了解敵方之特徵、能力、目標及行動方案。指揮官要在時間與空間上達成巧妙用兵，取得對敵之勝利，情報在戰事初始時扮演了重要推手，接下來陸軍要結合運用機動與目標處理程序來打擊敵人編組與體系。陸軍運用機動接敵並於近接地區作戰中摧毀敵之編組，目標通常設定以各種情報蒐集、火力及破壞敵軍網整個體系之重要能力。領導幹部執行目標處理程序是為了開創機動自由的優勢，並利用機動創機造勢。標定目標是領導幹部統合聯合戰力的重要方法，如此才能開創戰場縱深並保護我方部隊安全。

Meeting the Challenge: Multi-domain Operations

Multi-domain operations are the Army's contribution to joint campaigns that achieve sustainable policy outcomes. All operations depend, in some way, on capabilities and operations through multiple domains. Multi-domain operations apply at every echelon, though in different ways. Corps and above typically have the lead role in allocating or integrating joint and Army capabilities, which are inherently multi-domain, into their subordinate formations. Divisions

may play an integrating role as well in some instances. However, even when a formation is not allocated joint capabilities, it must be aware of the threats posed by enemy capabilities from all domains and take appropriate measures to mitigate them. Preserving combat power requires a high level of situational awareness and physical exertion, which are imperatives in FM 3-0.

面臨挑戰：多領域作戰

多領域作戰達成實質政策所望效果是陸軍對聯合戰役之貢獻。在某種程度上，所有作戰都需要靠各種領域中的能力與作為。多領域作戰以不同的方式適用於各個層級。軍級及以上單位層級通常須發揮主導分配，或整合聯合與陸軍之能力加入到他們的下級部隊，本身就是多領域，師級在一些情況下也可以發揮整合的作用。然而，即使某一編組未具備聯合作戰能力，也必須理解敵人來自各個領域所構成的威脅，並採取適當反制措施。保存戰力要具備高度的戰況覺知能力與適切相關作為，也是FM3-0教範強調的重點。

Multi-domain operations are built on the foundation of a joint and combined arms approach to operations in a coalition environment. The operational concept emphasizes the need to understand the effects and processes for employing all available capabilities. FM 3-0 provides a model to help leaders view the operational environment through five domains, understood across three dimensions-physical, information, and human (see figure). Multi-domain operations focus on large-scale combat operations but describe how Army forces integrate operations as part of joint campaigns during competition, crisis, and armed conflict in complementary and reinforcing ways. Four tenets and nine imperatives guide the conduct of operations, providing options for how leaders apply and preserve combat power against specific challenges posed by peer threats. Multi-domain operations emphasize the use of defeat mechanisms and defeating enemy forces in detail while maintaining the cohesion of friendly operations. FM 3-0 describes how Army forces integrate deep, close, support, and rear operations within and between echelons to generate combat power and employ it to the greatest possible effect against enemy forces.

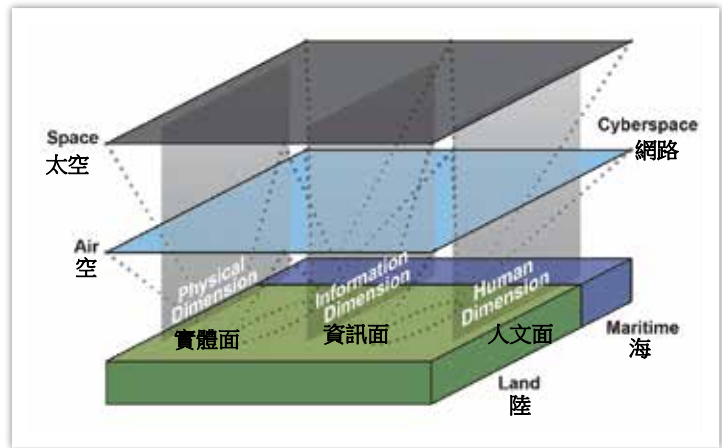
多領域作戰是建立在聯合軍、兵種的協同作戰方式基礎之上。作戰構想強調必須理解運用所有可用能力的效能與程序。FM3-0教範為領導幹部提供一個示意圖，讓他們能從5個作戰領域(陸、海、空、太空、網路)及其所形成的3個維度(實體面、資訊面、人文面)來檢視作戰環境(如圖)。多領域作戰雖聚焦於大型作戰，但也說明陸軍如何在競爭、危機及武裝衝突期間，以互補強化方式將各部作戰行動整合至聯合戰役之中。多領域作戰所列的4項教條與9條守則為作戰行動之指導，讓領導幹部得以從中選擇適切作法，以運用並保存戰力來應對勢均力敵者所造成的特定挑戰。多領域作戰強調運用各種戰術戰



法，在維持友軍作戰的凝聚力之同時，澈底擊敗敵軍。FM3-0教範說明陸軍應如何整合各層級之間的深遠、近接、支援與後方地區作戰，以生成有形之戰力，發揮其最大功效來對抗敵人。

Combined Arms

Expanding combined arms is at the core of what makes multi-domain operations a step forward. The complementary and reinforcing effects created through the combined arms employment of capabilities from different domains are unlocked through the integration and synchronization that occurs during the operations process. Integration is about determining which formations at which echelon require which capabilities to achieve their assigned objectives, and then allocating those capabilities. Synchronization is about applying combinations of those capabilities in time and space to create dilemmas for which the enemy has no good solutions. Leaders integrate and synchronize conventional forces, multinational forces, special operations forces, irregular forces, and all available unified action partners. Each contributing member of the expanded combined arms team has strengths that the others can reinforce and limitations that the others can mitigate. Understanding how different types of capabilities work together and employing them in ways the enemy does not expect is critical to success against opponents expecting us to be predictable.



作戰環境的領域與面向剖析圖

資料來源：FM3-0教範。

兵種協同

擴大兵種協同是使多領域作戰往前邁進的核心。運用來自不同領域的兵種協同能力，創造互補和強化的效應，在作戰過程中經由整合與協同讓各個領域能力得以發揮的關鍵。整合是指在各級的編組需要賦予何種能力來達成所望目標，接著是如何妥善分配這些能力；協同作戰是指在時間與空間上運用這些能力的組合，讓敵陷入一籌莫展的困境。領導幹部必須在常規部隊、多國部隊、特戰部隊、非正規部隊及所有可用的聯合行動盟友身上運用整合與同步。經擴大的兵種協同中的成員彼此之間可以互補並消弭侷限性。我軍若能體會各種不同能力如何組合運用的方式，敵人將無勝算可言，更無法預測我方之行動。

Leaders must understand how their formation and capabilities enable the higher

headquarters, adjacent units, and the joint campaign. They also must understand how capabilities and formations they do not control can enable their operations. Success demands leader commitment to the highest possible level of subject-matter expertise across branches and occupational specialties. Leaders must further understand how to balance effectiveness and efficiency when integrating or allocating capabilities across Army echelons in a risk-informed manner. This reality means that our point of departure, regardless of at what echelon one is assigned, is a clear understanding of the operational environment in terms of friendly and adversary assigned areas and their areas of influence.

領導幹部必須了解編制內的編組與能力，並如何與上級司令部、鄰近單位及聯合戰役相互配合，還必須了解編制外的編組與能力將如何有助於他們的作戰。成功需要領導幹部儘可能具備跨兵種的專業知識及業管專長。況且他們必須更進一步了解在已知風險情況下整合或分派陸軍各梯隊時，如何進一步在作戰效能與效率間取得平衡，也就是說我們的出發點是藉此讓各級部隊都能清楚了解敵我賦予之區域及其影響範圍的作戰環境。

Understanding the Operational Environment: Domains and Dimensions

Multi-domain operations requires that leaders understand their operational environment through the five domains and their physical, information, and human dimensions. “A domain is a physically defined portion of an operational environment requiring a unique set of warfighting capabilities and skills.”⁶ Leaders do not need to understand every technical aspect of joint or Army capabilities, but they need to understand how they can be employed in mutually beneficial ways, and how to request those capabilities to support operations on land. Likewise, Army leaders at echelons above brigade need to advocate for the employment of Army capabilities to create freedom of action for the other service components of the joint force.

理解作戰環境：領域與面向

多領域作戰要求領導幹部透過5個作戰領域以及其實體、資訊和人文各層面來了解作戰環境。「領域是實質上定義一個作戰環境所需成套之戰鬥能力與技術。」⁶ 領導幹部雖然不需知道每項有關聯合作戰或陸軍作戰能力的技術面向，但他們要理解如何以相互利用的方式運用這些技術，以及如何申請這些能力支援地面作戰。同樣地，陸軍旅級以上各級領導幹部應提倡運用陸軍能力，以利為聯戰部隊中的其他軍種組成部隊開創行動自由。

6 Ibid., p.1-18.



Although physical characteristics define the domains, multi-domain operations emphasize the importance of factors beyond the physical. FM 3-0 notes that “ understanding the physical, information, and human dimensions of each domain helps commanders and staffs assess and anticipate the impacts of their operations. ”⁷ Although most Army operations initiate action through the physical dimension, they ultimately must influence (through the information dimension) to impact the adversary’s will (the human dimension). FM 3-0 also emphasizes the continued importance of intangible factors for friendly forces, like leadership and the mission command approach to C2.

誠如前述，領域是由實體特徵定義的，但多領域作戰強調的重要因素不只於此。FM3-0教範指出，「了解各作戰領域各項的實體面、資訊面及人文面，有助於指揮官與參謀評估並預測其對作戰行動的影響。」⁷雖然大部分陸軍作戰行動大多是以實體面發起，但最後必定會影響(經由資訊面)到敵人意志(人文面)。FM3-0教範也強調無形因素對我軍作戰持續影響的重要性，諸如領導統御與任務式指揮對指管層面產生影響力。

See Yourself: Generating and Applying Combat Power

The warfighting functions and dynamics of combat power play a key role in helping leaders see their units and understand how to employ capabilities against the enemy to best effect. FM 3-0 identifies six warfighting functions: Command and Control, Movement and Maneuver, Intelligence, Fires, Sustainment, Protection.⁸ FM 3-0 modifies the combat power model. It aligns the definition of combat power with the joint definition and emphasizes what lethal and disruptive means can be applied against the enemy. It changes the components of combat power from “ elements ” to “ dynamics ” to reinforce the idea that combat power consists of variables that are interactive and subject to changes in the environment. FM 3-0 deliberately differentiates the dynamics of combat power from the warfighting functions. It defines combat power as “ the total means of destructive and disruptive force that a military unit/formation can apply against an enemy at a given time (JP 3-0) ” and identifies the dynamics of combat power as the following: Leadership, Firepower, Information, Mobility, Survivability.⁹

看見自己：戰力生成與運用

作戰職能與動態戰力，在協助領導幹部檢討該單位及理解如何最有效運用各項能力來對抗敵人，有其關鍵之角色。FM3-0教範定義出6項作戰職能：指揮與管制；部隊運

⁷ Ibid., p.1-21.

動與兵力運用；情報；火力；持續性；防護，⁸該教範對以往戰力模型做了調整修訂。如此一來，可以讓戰力定義與聯合作戰定義保持一致，也強調可以對敵使用哪些致命性與破壞性手段。它將戰力的組成架構，從「靜態因素」轉變為「動態因素」，以強調戰力是由不同變數組成，並受環境的交互作用影響。FM3-0教範刻意將戰力動態因素從作戰職能區分開來，而JP3-0聯戰準則將戰力定義為「軍事單位／編組在特定時間可以用來對付敵人的全面毀滅性與破壞性力量的手段。」至於戰力動態因素的界定如下：領導統御、打擊力、資訊、機動、存活率。⁹

See the Enemy: Threats and Their Methods

Army forces conduct operations oriented on the threat. The threat is always thinking and adapting, so understanding the threat is a continuous requirement during operations. FM 3-0 notes, “Threats faced by Army forces are, by nature, hybrid. They include individuals, groups of individuals, paramilitary or military forces, criminal elements, nation-states, or national alliances.”¹⁰ China and Russia combine five broad methods to achieve their objectives during competition, crisis, and conflict:

1. Information warfare is the use of information activities such as cyberspace operations, electronic warfare, psychological operations, disinformation campaigns, and other deception operations to achieve objectives.

2. Systems warfare is the use of networked mutually supporting systems, like Integrated Air Defense Systems and the Integrated Fire Complexes, to achieve objectives. Threats protect their own systems while disintegrating their opponent's systems.

3. Preclusion is the use of standoff approaches to deny the joint force access to strategically important areas.

4. Isolation is the use of national instruments of power to separate coalition partners, components of the joint force, or forward positioned forces from external support.

5. Sanctuary is the positioning of threat forces beyond the reach of friendly forces.¹¹

China and Russia apply the threat methods in different ways at the operational and tactical levels. Leaders use the threat methods to better understand enemy tactics, anticipate enemy actions, and evaluate friendly courses of action.

看見敵人：敵威脅與敵作法

陸軍作戰指導是因敵制勝。敵人總是不斷思變求變，所以了解威脅是在作戰過程中

8 Ibid., p.2-1.

9 Ibid., p.2-3.



持續不斷的要求，誠如FM3-0教範指出，陸軍所面對的威脅在本質上是混合的，包含個人、個體組合團體、準軍事或軍事部隊、犯罪分子、民族國家或國家聯盟。¹⁰ 中共與俄羅斯在競爭、危機及衝突期間為達成其所望目標，統合運用以下五大方法。

一、資訊戰：使用如網路空間作戰、電子戰、心理戰、假訊息戰及其他欺敵作為來達成目標。

二、系統戰：使用如整體防空體系與整合各種火力等相互支援系統來達成目標。敵在防禦自身作戰系統的同時，也會破壞對方的系統。

三、排除：使用僵持方法來拒止美軍聯戰部隊進入戰略要域。

四、孤立：運用國家力量工具讓聯盟夥伴、聯戰部隊組成兵力、前進部署部隊等無法獲得外部支援。

五、隱匿：將敵對兵力部署於友軍能力所不及之處。¹¹

中共與俄羅斯在作戰與戰術層級往往交互運用這些方法，所以領導幹部必須深入理解敵人在這些方法上所運用的戰術、預期行動，從而評估我軍應採取何種行動方案。

Operations During Competition, Crisis, and Armed Conflict

Multi-domain operations are the contribution of Army forces to joint operations and typically involve allies and partners. Harnessing the advantages provided by the joint force and our multinational partners is a critical consideration in every context. The strategic contexts-competition, crisis, and armed conflict-help commanders understand their role in the context of a joint campaign and prepare for their missions. During competition, Army forces counter adversary activities and demonstrate warfighting credibility through training and interoperability with allies and partners. This activity sets conditions for successful combat operations, recognizing that there is no extra time to prepare for conflict-Army forces deter conflict by continuously preparing for it. During crisis, Army forces provide options to joint force commanders to deter further aggression and protect national interests. During armed conflict, Army forces defeat enemy forces and control key terrain and populations. Regardless of strategic context, Army forces continuously consolidate gains in support of the joint force so that it achieves sustainable political outcomes.¹²

在競爭、危機及武裝衝突期間的作戰

多領域作戰是陸軍部隊通常涉及盟國與夥伴對聯合作戰的貢獻。在每個情境中，思考如何善用聯戰部隊及多國夥伴至關重要，在競爭、危機及武裝衝突等不同戰略背景

¹⁰ Ibid., p.2-6.

¹¹ Ibid., pp.2-7~2-12.

下，協助指揮官了解他的單位在聯合戰役中所扮演的角色，以從事戰備整備工作。在競爭期間，陸軍藉由跟盟國和夥伴之間的訓練及作業互通性，展現可恃作戰能力並反制敵之活動。作戰成功的先決條件是必須認知到不可能有額外時間為衝突預作準備，這意味著陸軍要在平時就做好持續準備，才能嚇阻衝突。在危機時，陸軍為聯戰部隊指揮官提供選項，進一步嚇阻侵略行動並維護國家利益。在武裝衝突時，陸軍反制敵軍並掌控地形要點與人口。不管在哪一個戰略背景下，陸軍都將持續鞏固戰果，以支援聯戰部隊達成所望的持續性政治成果。¹²

Fundamentals of Multi-domain Operations: Tenets and Imperatives

Tenets and imperatives characterize effective operations and help guide leaders through the operations process. Four tenets characterize desirable qualities of operations: agility, convergence, endurance, and depth. They all link to the core idea of combined arms employment of all available combat power from multiple domains to create and exploit advantages.

1. Agility encompasses many considerations. Agile commands transition rapidly between phases, contexts, and task organizations. Agile leaders devise operational approaches designed to exploit fleeting windows of opportunity. Agile forces rapidly disperse to hinder enemy targeting, rapidly concentrate when required, and adapt more rapidly than the enemy as conditions change.

2. Convergence ensures that echelons above brigade employ all available Army and joint capabilities to maximize relative combat power in ways that create opportunities to defeat capable enemy forces. Convergence creates opportunities for maneuver and close operations but requires agile Army forces to rapidly exploit those opportunities.

3. Endurance reflects the ability to absorb the enemy's attacks and press the fight over the time and space necessary to accomplish the mission. It is a function of protection, sustainment, and managing tempo.

4. Depth applies combat power throughout the enemy's formations and the operational environment, securing successive operational objectives and consolidating gains for the joint force. Operations in depth disrupt the enemy's preferred approach, disintegrate the interdependent elements of enemy systems, and make enemy forces vulnerable to defeat in detail.¹³

多領域作戰之基礎：4項教條與9條守則

12 Ibid., pp.1-14~1-16.



教條與守則將形塑有效作戰行動，並有助於在作戰過程中指引領導幹部，其中有4項教條可以界定所望作戰水準，分別是敏捷、聚合、持久及縱深，這些與兵種協同的核心理念相符合，也就是運用來自各個領域的所有戰力來開創並奪取優勢。

一、敏捷：經緯萬端。在階段、情勢、任務編組之間敏捷的指揮權轉移。敏捷的領導幹部要能利用稍縱即逝的戰機。敏捷的部隊能迅速分合，以避免遭敵鎖定，同時在戰況改變時也能靈活調度。

二、聚合：可以確保有效運用旅級以上層次之兵力與聯合戰力，發揮戰力最大化，同時創機造勢擊敗敵軍。聚合也為機動與近接地區作戰開啟機會，但需要敏捷陸軍部隊才能利用此稍縱即逝的戰機。

三、持久：我先可承受敵人攻擊的能力，然後隨著時空因素轉變下，反而持續形成作戰壓力，迫敵於不利狀況應戰，其中涉及到防護、支援及管理作戰節奏之功能。

四、縱深：意指在面對敵之編組與作戰環境中運用戰鬥力，確保接連達成各項作戰目標並鞏固聯戰部隊戰果。縱深作戰是破壞敵行動方案，瓦解敵體系中相互支援的要素，從而在細節上發現擊敗敵軍的弱點。¹³

Nine imperatives describe what units must do to win at acceptable cost on the modern battlefield. They are derived from the principles of war but are tailored to current challenges. They should heavily inform how we develop our leaders and train our formations because they must drive the necessary cultural change to prevail during large-scale combat operations in the twenty-first century. The nine imperatives are as follows:

1. See yourself, see the enemy, and understand the operational environment.
2. Account for being under constant observation and all forms of enemy contact.
3. Create and exploit relative physical, information, and human advantages in pursuit of decision dominance.
4. Make initial contact with the smallest element possible.
5. Impose multiple dilemmas on the enemy.
6. Anticipate, plan, and execute transitions.
7. Designate, weight, and sustain the main effort.
8. Consolidate gains continuously.
9. Understand and manage the effects of operations on units and soldiers.¹⁴

9條守則說明單位在現代戰場上應如何以可接受成本來取勝，這些規範起源於戰爭原則以適用於當前之各種挑戰。我們領導人之培育與部隊之訓練應借重這些原則，在這些原則指引下，他們才能推動單位文化變革，從而在21世紀大規模作戰行動中剋敵制

13 Ibid., pp.3-2~3-7.

勝。9條守則內涵說明如下：

- 一、知己知彼，了解作戰環境。
- 二、要不斷地觀察並預想與敵遭遇的各種情況。
- 三、開創並利用相關實體、資訊及人文優勢，以鎰稱銖。
- 四、儘可能以最小部隊主動接敵。
- 五、讓敵人陷入各種困境。
- 六、預判、規劃及執行各種轉機。
- 七、指定、權衡及維持主力作戰。
- 八、持續鞏固戰果。
- 九、了解並管理作戰對單位及士兵之影響。¹⁴

The second imperative-account for constant enemy observation and all forms of contact-is one that affects every rank and military occupational specialty in our Army. It addresses the importance of not presenting lucrative targets to enemy fires. As FM 3-0 succinctly states, “That which can be detected can be targeted for attack and killed.”¹⁵ Units must employ combinations of capabilities and techniques to ensure dispersion, cover, concealment, camouflage, masking of electromagnetic radiation signatures, operations security, and deception. Accounting for continuous enemy observation operationalizes protection, which is ultimately an outcome requiring continuous leader attention to the realities of the increasingly transparent operational environment.¹⁶

第二條守則指出必須不斷觀察敵情，預想與敵遭遇的各種情況，是一條影響到我軍所有階級與軍職專長的原則。它指出不要被敵人發現我方成為脆弱目標之重要性。誠如FM3-0教範簡明扼要的說：「能為敵發現的目標就會被攻擊與摧毀。」¹⁵單位必須將戰力與戰技結合，以確保部隊的分散、掩護、隱蔽、偽裝、電磁輻射信跡掩蔽、作戰安全及欺敵等作為。由於對敵持續觀察才能實現防護力，最後結果將需要領導幹部持續關注日益透明的作戰環境。¹⁶

Defeating Enemy Forces

Defeat in detail is concentrating overwhelming combat power against separate parts of a force rather than defeating the entire force at once.¹⁷ Defeating an evenly matched, adaptive enemy operating with complex capabilities and formations in a single, decisive effort is highly

14 Ibid., p.3-8.

15 Ibid., p.3-10.

16 Ibid., pp.3-10~3-13.

unlikely. FM 3-0 therefore provides an approach to defeating enemy forces in detail. Defeating enemy forces in detail allows commanders to bring superior combat power to bear against portions of a potentially superior enemy force and the systems that enable it, like integrated fires commands and integrated air defense systems. Commanders apply combinations of defeat mechanisms to do so. As FM 3-0 describes, “Multi-domain operations fracture the coherence of threat operational approaches by repeatedly destroying, dislocating, isolating, and disintegrating their interdependent systems and formations, and exploiting the opportunities to defeat enemy forces in detail.”¹⁸

擊敗敵軍

打敗的精義就是集中壓倒性戰力將敵人分而殲之，而不是一次將敵人全殲。¹⁷要在一次決定性作為中，擊滅一個勢均力敵並能以各種複雜的能力與編組，機動靈活的敵軍是極不可能的，所以FM3-0教範提供一種擊敗敵軍的精義，即是讓指揮官擁有優勢戰力，以對抗部分潛在的優勢敵軍及其背後的軍事體系，如聯合火力指揮機構與整體防空體系。指揮官必須運用諸般打擊手段達成目標。誠如FM3-0教範所述，「多領域作戰藉由反覆殲滅、擾亂、孤立、瓦解敵相互支援武器系統與編組，以及利用時機從細節處打擊敵軍等作法，以打破敵人的作戰核心。」¹⁸

Operational Framework

Battlefields are chaotic environments. Enemy and friendly forces are intermingled, with friendly units often separated by long distances or operating under different commands. Commanders use the operational framework to help impose order and focus on the forces they control and to manage the application of violence. FM 3-0 describes the operational framework as “a cognitive tool used to assist commanders and staffs in clearly visualizing and describing the application of combat power in time, space, purpose, and resources in the concept of operations (ADP 1-01).”¹⁹ The three models commonly used to build an operational framework are assigned areas; deep, close, and rear operations; and main effort, supporting effort, and reserve.²⁰ Leaders should not take an overly rigid approach to the operational framework. They should only use models when they apply and should feel free to adapt a model to the unique requirements of a situation. If an entirely different model better suits their needs, then they must coordinate higher and lower to ensure each echelon understands and follows the same approach. When adapting models, leaders must ensure that their framework still nests with their

17 Army Doctrine Publication 3-0, Operations (Washington, DC: U.S. GPO, 2010), p.3-19.

18 FM 3-0, Operations, p.1-3.

higher echelon's framework.

作戰架構

戰場是複雜混亂的環境，敵我交錯其間，友軍部隊往往相隔甚遠或是分屬不同的指揮。指揮官要使用作戰編組架構來協助命令下達，以利管控所屬部隊及暴力之使用。FM3-0教範將作戰架構定義為：「一項用於協助指揮官與參謀的認知工具，在清楚地呈現作戰構想中描述的戰力在時間、空間、目的及資源方面之運用(ADP1-01準則)。」¹⁹ 作戰架構之建立通常區分以下3種模式：一、指定範圍；二、深遠、近接及後方地區作戰；三、主／主力作戰、支／協力作戰部隊與預備隊。²⁰ 領導幹部不可對作戰架構的制定僵化。他們應善用上述3種模式，並根據特定情況需求自在地使用最適當的模式；如果是一個不同模式較符合實際需求，他們應完成上下協調，以確保各級理解並能遵守相同方法。當在適應新的模式時，領導幹部要確保其架構仍在較高層梯隊的框架底下。

Commanders consider mutual support between subordinate forces when assigning areas. Mutual support can include supporting ranges between weapons and capabilities. It also includes consideration of the supporting distances between units. Corps and divisions operating along multiple axes will have noncontiguous subordinate formations. When a higher echelon assigns noncontiguous assigned areas, it maintains responsibility for the risk associated with the areas for which it does not assign responsibility. An assigned area may be an area of operations, a zone, or a sector depending on the type of operation and level of control required by the higher echelon. Assigned areas should be large enough to support subordinate maneuver and their ability to distribute forces to mitigate the effects of enemy targeting. However, they should not extend too far beyond subordinate areas of influence, which would impose uncertain or excessive levels of risk on the subordinate formation. When an echelon retains areas it also retains the associated risk with those areas. During noncontiguous operations, leaders must continuously assess the risk in those retained areas, especially regarding C2 and sustainment nodes.

當在指定區域時，指揮官要思考所屬部隊之間的相互支援，包括武器與能力之間的支援範圍，還要考量的是單位之間的支援距離。在多個作戰軸線下的軍與師級，其所屬編組會呈現不連貫性，而且當上級部署在非相鄰的指定區時，必須承擔那些未劃分責任區的風險。一個指定區域可能是作戰地區、地帶或地段，端視遂行哪種作戰行動或是上級所要控制的範圍而定。而且幅員要夠大，才能讓所屬部隊有空間機動並分散部署，以

19 Ibid., p.3-23.

20 Ibid.



減少被敵鎖定。不過，指定區域幅員也不宜超出所屬部隊的勢力範圍，才不會對軍隊造成不確定性或過高的風險，因為當一個梯隊占領某個區域時，就要承擔與這些區域相關的風險。再者，在非相鄰／連接地區作戰行動期間，領導幹部要持續評估占領區的風險，尤其是關於指揮管制及支援節點等事項。

Within assigned areas, commanders organize their operations in terms of time, space, and purpose by synchronizing deep, close, support, and rear operations. Divisions and higher may also echelon their formations according to deep, close, support, and rear areas because of the size and scale of their operations during large-scale combat. The focus on “operations” in this version of FM 3-0 helps clarify a unit’s role in terms of purpose-areas define a unit’s location; operations define a unit’s purpose.

在指定區域內，指揮官根據時間、空間及目的來整合深遠、近接、支援與後方地區作戰。因此在大型作戰中，師／軍(含)以上階層可以根據深遠、近接、支援與後方地區作戰的規模大小，適切編組所屬梯隊。FM3-0教範置重點於說明「作戰」，將有助於釐清單位在目的上之角色——劃分單位確實位置；界定單位作戰所望目的。

Seizing and defending contested land areas require close operations and typically involve close combat or the threat of close combat. Close combat is the highest risk activity for conventional forces. Deep and rear operations are generally conducted to enable success during close operations and establish favorable conditions for maneuver in close combat. Deep operations are tactical actions against enemy forces, typically out of direct contact with friendly forces, intended to shape future close operations and protect rear operations. Close operations are tactical actions of subordinate maneuver forces and the forces providing immediate support to them, whose purpose is to employ maneuver and fires to close with and destroy enemy forces. Rear operations are tactical actions behind major subordinate maneuver forces that facilitate movement, extend operational reach, and maintain desired tempo.²¹

高敏感性地區之奪取與防禦將必須從事近接地區作戰，往往會涉及近接戰鬥或是面對近距離戰鬥威脅。近接戰鬥為傳統部隊的最高風險活動。縱深與後方作戰行動一般是為了協助在近接地區作戰期間獲致成功，並為近接戰鬥的機動建立有利條件。「縱深作戰」為對抗敵軍的戰術行動，通常不會與我方友軍接觸，旨在形塑未來近接地區作戰並保護後方作戰；「近接地區作戰」為所屬機動部隊及提供直接支援部隊而形成的戰術行動，旨在運用機動與火力來接近並摧毀敵軍；「後方作戰」為在主要所屬機動部隊後方的戰術行動，旨在有利移動、擴大作戰範圍及維持所望的作戰節奏。²¹

21 Ibid., pp.3-27~3-31.

Because Army forces will fight in contested communications environments, the mission command approach to command and control is more essential than ever. One way in which commanders enable disciplined initiative and the ability to assume risk is by describing each echelon's role in time, space, and purpose. FM 3-0 provides some general considerations: During large-scale combat operations, brigade combat teams (BCTs) and divisions generally focus on defeating enemy maneuver formations. Corps and higher echelons generally focus on defeating enemy integrated air defense systems and portions of the enemy's integrated fires command according to the JFC [joint force commander's] plan and priorities.²²

由於陸軍將在充滿張力地區的通信環境下作戰，任務式指揮的指管方法遠比以往任何時候都來得重要。指揮官實現有紀律主動作為與承擔風險的方式之一是律定各梯隊在時間、空間及目的之角色。我們可以參照FM3-0教範所提出的一般想法：在大型作戰期間，旅級戰鬥隊(BCTs)及師通常著重於擊敗敵機動編組；師／軍(含)以上階層一般會根據聯戰部隊指揮官(JFC)之計畫與優先事項，著重於擊敗敵整體防空系統及打擊敵聯合火力指揮機構。²²

Corps fight their divisions, divisions fight their brigades, and brigades fight their battalions. Each higher echelon seeks to set conditions for its subordinate formations to achieve their assigned objectives while providing them the resources, guidance, and situational awareness to do so. Corps and divisions fight as formations, which requires an integrated approach to deep, close, support, and rear operations-no echelon can afford to have a myopic focus on one part of the battlefield.

軍為師，師為旅，旅為營而戰。每個上級都試圖為所屬編組奠定作戰條件，讓下級編組在達成所望目標過程中，可以獲致資源、指導及戰況覺知等支援。軍與師作為一個作戰編隊，必須對深遠、近接、支援與後方地區作戰採取整合方法，換言之，任何一個層級都不能只專注於戰場的某一部分，否則將顧此失彼。

Consolidating Gains

The 2017 FM 3-0 introduced the idea of consolidating gains, and the 2019 Army Doctrine Publication 3-0, Operations, continued to clarify the necessity to do so. The 2022 version of FM 3-0 affirms the importance of continuous consolidation of gains as an imperative and key consideration for operations during competition, crisis, and armed conflict. Consolidating gains

22 Ibid., p.6-10.

achieves the ultimate purpose of the operations Army forces conduct. It is not a phase-it is the exploitation of tactical objectives for strategic outcomes. Consolidating gains requires leaders to conduct operations with the end state in mind and take the actions required to achieve that overall end state as rapidly as possible. Consolidating gains starts with a clear description of the purpose of an operation and shared understanding for how to achieve it. Then, as units achieve objectives and defeat enemy forces, they take action to make their gains more permanent. Consolidating gains may start out as a small unit consolidating on an objective. It can include a division assigning a brigade the mission to defeat a bypassed enemy force to set conditions for stability operations. Asking an ally or partner to conduct essential stability tasks in an urban area would be a potentially effective means of consolidating gains.

鞏固戰果

2017年版FM3-0教範引進鞏固戰果的理念，2019年版FM3-0教範繼續強調這個必要性。2022年版FM3-0教範確認在競爭、危機及武裝衝突期間，持續鞏固戰果之重要性，並視之為一個必要且關鍵的作戰考量。鞏固戰果成為陸軍部隊遂行作戰之最終目的。它並不是一個階段，而是擴大戰術目標的戰果成為戰略成果。鞏固戰果需要領導幹部在遂行作戰時考慮最終狀態，並在採取行動時儘可能快速達成整體的最終狀態。鞏固戰果首先要清楚說明作戰目的，並就如何實現達成共同理解，接著當部隊達成目標並擊敗敵人後，應採取行動讓戰果更為鞏固持久。鞏固戰果可以從小部隊鞏固某一目標開始，也可以是師指派旅去擊敗過境敵軍任務，以利奠定綏靖作戰基礎，至於要求盟國或夥伴執行城鎮區內重要的綏靖任務，也可以是鞏固戰果的有效手段。

Higher echelons request resources to increase the scale and accelerate the tempo of consolidating gains. Their access to host nation forces, joint fires, security force assistance capabilities, special operations forces, civil affairs, public affairs, engineers, and space and cyberspace capabilities provides opportunities to coalesce and expand the success of subordinate units. During major campaigns and operations, consolidating gains is the yardstick that drives toward transition of responsibility for areas and populations to other legitimate authorities and, ultimately, sustainable policy outcomes. During post-conflict competition, Army forces continue to consolidate gains for the joint force, expanding or maintaining stability of the desirable conditions.

上級請求增加資源來擴大自身規模，並加速鞏固戰果的作戰節奏。他們從包含地主國部隊、聯合火力、安全部隊援助能力、特戰部隊、民事事務、工程人員，以及太空和網際空間能力，這些讓所屬部隊得以匯聚戰力並擴大戰果。至於在重大戰役與作戰期間，鞏固戰果為一個衡量標準，決定了區域的責任轉移與人民是否移交給其他合法當

局，甚至還涉及可持續性政策成果。在衝突後的競爭期間，陸軍部隊持續為聯戰部隊鞏固戰果，擴大或維持所望情勢之穩定。

Maritime Environments

A decade after the Pacific Pivot, it is critical that Army doctrine begin to account for the unique considerations of operating in maritime environments like the Indo-Pacific theater.²³ Policy paper addresses many of those considerations, and likewise describes aspects of operating in the Arctic, which is also heavily influenced by the maritime environment. Operating in maritime environments requires the employment of joint and Army capabilities in mutually supporting ways. Sustainment, communication, protection, and mobility are challenging for land forces in maritime environments and require an even higher level of integration with the joint force. The land component may often support the air and maritime components, which is a switch from what Army forces have been accustomed to in recent decades. Maritime operations depend on land forces to secure bases, ports, and maritime choke points. Land forces enable air and maritime operations with surface-to-surface and surface-to-air fires while allowing the joint force to retain or seize critical landmasses and infrastructure.²⁴

海上環境

「重返亞太」雖然已過了10年，該是陸軍準則將在印太戰區等海上環境中從事作戰的特殊性納入考量的時候。²³ 政策文件提出許多相關的考量因素，甚至是在北極地區的作戰也深受海上環境所影響。海上環境作戰需要聯合與陸軍部隊的戰力相互支援與互補，而且海上環境不管是在支援、通信、防護及機動等對地面部隊都充滿挑戰，需要與聯戰部隊有更高程度的整合。陸軍近10多年已轉變為作為支援海、空部隊的要角，海上作戰要靠陸軍確保基地、港口及海上咽喉要道，陸軍以地對地及地對空火力支援海、空軍，讓聯戰部隊能控制或奪取關鍵陸地與基礎設施。²⁴

Contested Deployments

Army forces should expect challenges by the threat from home station all the way to their assembly areas overseas. Since World War II, “U.S. military forces conducted uncontested

23 For more on the Pacific Pivot, see Christopher H. Robertson, *The Obama Administration's Pacific Pivot Strategy: An Assessment* (Fort Leavenworth, KS: U.S. Army School for Advanced Military Studies, 25 May 2017), accessed 1 December 2022, <https://apps.dtic.mil/sti/pdfs/AD1039909.pdf>.

24 FM 3-0, Operations, p.7-1.



and generally predictable deployments from home stations to operational theaters because our enemies lacked the capability to significantly affect deploying units at home station or while in transit to a theater of operations. This is no longer the case.”²⁵ Annex C in FM 3-0 describes how we plan to deal with peer threats able to observe, disrupt, delay, and attack U.S. forces at any stage of force projection, including while still positioned at home stations in the United States and overseas. “Commanders and staffs must therefore plan and execute deployments with the assumption that friendly forces are always under observation and in contact” -a multi-domain operations imperative.²⁶

備受關注地區之部署

陸軍應預期從國內基地到海外集結區的整個過程中將面臨挑戰。自第二次世界大戰以來，美軍從國內基地至作戰區的部署行動往往在未具爭議性地區並按部就班，原因在於敵人無法對在國內部署或移防至作戰區的部隊產生顯著影響，然未來可能就並非如此。²⁵ FM3-0教範的附錄C提及美軍應如何規劃並因應實力匹敵者的威脅，因為對方可以在美軍兵力投射各個階段，不管是美軍在國內或是在海外基地，對我方軍隊進行觀察、破壞、遲滯及攻擊等作為。鑑此，指揮官與參謀人員所規劃並執行的部署行動，其假設前提應為我軍部隊將在敵人觀察之下及隨時會與敵接觸——這是多領域作戰重要工作。²⁶

Multidomain Operations into the Future

FM 3-0 is a catalyst for change across the Army. Multi-domain operations doctrine will drive an update to other Army doctrine and influence future force design. Professional military education must account for its tenets, imperatives, and approach to the operational environment. Multi-domain operations will drive changes to collective training at unit home stations and combat training centers. Interoperability with allies and partners is more important than ever before and should address technical, human, and procedural requirements. Our focus must be on being a good ally or partner, not only having allies and partners.

多領域作戰之未來

FM3-0教範是陸軍從事變革的催化劑。多領域作戰準則將推動陸軍其他準則更新並影響未來兵力設計。專業軍事教育必須將多領域作戰的教條、守則及因應作戰環境的方法納入參考。多領域作戰將改變國內駐地與戰鬥訓練中心的組合訓練方式。至於美軍與

²⁵ Ibid., p.C-1.

²⁶ Ibid.

盟國和夥伴的作戰共通性將比以往更為重要，而這種共通性應用以解決技術、人文及程序方面等問題。我們必須置重點於建立優質的盟國與夥伴關係，並非只是擁有這種關係而已。

Just as AirLand Battle doctrine drove a deeper level of air-ground integration by the joint force, multi-domain operations will drive the continued development of tactics, techniques, and procedures for integrating maritime, space, and cyberspace capabilities in support of operations on land. Organizations, such as the multi-domain task force and the theater fires command are first steps. Units must develop and experiment with solutions for how to integrate new capabilities with existing Army and joint structures and processes. The experimentation may result in new or adjusted Army and joint processes or adjustments to our existing organizations. Whatever changes we make as an Army and joint force must be informed by a shared understanding of how we fight, however. That shared understanding starts with our doctrine. This version of multi-domain operations is not the “end of doctrine.” It will continue to evolve as Army forces learn, train, and refine the ideas in FM 3-0 to reach the Army of 2030. Future versions of multi-domain operations will continue to update key ideas and account for new capabilities, informed by the experience of the force.

就像空地作戰準則促成聯戰部隊更深層次的空地整體作戰，多領域作戰也將持續促進戰術、技術及程序之發展，以整合支援地面作戰所需之海上、太空及網路能力。至於第一步要做的是組織層面，例如多領域特遣隊與戰區聯合火力指揮機構，也就是各單位要發展並試行各項解決方案，以利將新能力與當前陸軍做整合並融入聯合架構和程序之中。試行結果可能產生新的或經調整的陸軍或聯合程序，抑或要對美軍現行組織做出調整，無論我們對陸軍與聯戰部隊做出何種變革，都必須基於部隊應如何作戰的共同理解，這種共同理解應從美軍準則開始著手。多領域作戰的版本並不是「準則發展之終點」，隨著陸軍部隊不斷學習、訓練及精進FM3-0教範的理念，該作戰構想將持續演進發展並達成2030年陸軍目標。未來多領域作戰版本除了持續更新重要理念外，還會將基於部隊經驗的新式能力納入。

Patton used the metaphor of an orchestra and the role of each instrument in his “Musicians from Mars” speech to describe the combined arms approach for how he wanted to fight. Across the globe and two millennia earlier, Sun Tzu identified the advantage of combinations in his axioms on music, color, and taste: There are not more than five musical notes, yet the combinations of these five give rise to more melodies than can ever be heard. There are not more than five primary colors, yet in combination they produce more hues than can ever been seen. There are not more than five cardinal tastes, yet combinations of them yield more flavors



than can ever be tasted.²⁷ We know that the observations of these icons of military thought do not provide a magic bullet for how to win wars. Their resonance over time, however, suggests that the idea of employing combinations during war in ways that surprise and overwhelm enemy forces is more than a passing fad. It is, in fact, part of the very fabric of what makes a military organization successful. Leaders who are masters of their craft, able to incorporate all available capabilities in ways that are surprising and overwhelming to enemy forces, can take a modest update to doctrine and turn it into an overwhelming advantage provided by Army forces to the joint force.

巴頓將軍在「戰神音樂家」的演講中使用管弦樂與各個樂器的角色比喻，以描述其所想要的兵種協同方式，至於在2,000年前的中國，孫子在音樂、顏色及味道的格言中指出組合的優勢：聲不過五，五聲之變，不可勝聽也；色不過五，五色之變，不可勝觀也；味不過五，五味之變，不可勝嘗也。²⁷ 我們要知道這些軍事思想格言並無法成為致勝的魔法子彈，但是它們隨著時間所產生的共鳴，將彰顯在戰爭期間運用聯兵理念向敵人發起奇襲並壓制敵軍，不僅僅是適用於以前而已，事實上，這是軍事組織成功的組成要素。精通用兵的領導幹部將能整合各方所有能力，向敵軍發起奇襲與全面性攻勢，他們也應適時更新準則並將之轉換成陸軍提供給聯戰部隊的壓倒性優勢。

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27 Sun Tzu, quoted in Thomas R. Phillips, ed., *Roots of Strategy* (Harrisburg, PA: Stackpole Books, 1985), p.28.