Indo-Pacific Theater Design Working Paper 3

Four Paths to the Grid

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About this Project

Indo-Pacific Working Papers are products of the on-going US Army War College (USAWC) study on US Indo-Pacific Command (USINDOPACOM) theater design. The project identifies and assesses the opportunities, challenges, paths to implementation and risks associated with the Army adopting four transformational roles in the USINDOPACOM Area of Responsibility (AoR) over the next decade. The 2020 USAWC report *An Army Transformed – USINDOPACOM Hypercompetition and US Army Theater Design* argues that the Army should adopt the transformational roles of *grid*, *enabler*, *multi-domain warfighter*, and *capability and capacity generator* because of an "urgent [Joint Force] change imperative in the Indo-Pacific region." That change imperative stems from the study's principal finding that US Joint Forces are out of position "physically, conceptually, and in terms of deployed and anticipated capabilities" for hypercompetition with an aggressive People's Republic of China (PRC) rival.

The project directors will release Indo-Pacific Working Papers as a series of Army War College analyses over 2020 and 2021. Papers in this series will offer specific recommendations to US senior leadership as to how the US Army, as part of the larger Joint Force, might operationalize the four transformational roles over the next ten years. Army embrace of the four transformational roles now and through the next decade is a necessary first step for US Joint Forces to thrive in persistent hypercompetition with China and, if necessary, prevail in armed hostilities in the event of escalation. Working Papers in this series are intended to elicit feedback and comment from a wide audience.

INTRODUCTION

An earlier report by the Army War College identified the need for the Army to adopt four transformational roles to succeed in the Indo-Pacific region.¹ Adoption of these roles is essential to Army success as well as wider Joint Force success. Public remarks by Army leadership over the past eighteen months suggest high-level recognition of the need for Army transformation to meet the challenges in the Indo-Pacific.² This working paper highlights how the Army could prioritize its initial efforts to adopt two of the four roles identified in earlier work: The Army as the grid and Army as the enabler in the Indo-Pacific region. Both roles are adaptations that would rapidly enhance US military competitiveness in the region.

The role of the grid sees the Army establish a distributed, resilient, and mutually reinforcing network of expeditionary base clusters, hubs, and nodes (defined in "Footprint and Presence," below) as the foundation for regional Army, Joint, and partner nation operations. The role of enabler calls for Joint-focused Army change specific to USINDOPACOM in the areas of mission command, protection, sustainment, movement, and intelligence and information.

This paper presents four distinct paths the Army can pursue to begin realizing the grid and enabling roles: an Army-specific approach, an approach paired with a single additional US service, a path merging Army multi-domain and enabling efforts with those of a key ally, and a Joint and Combined path integrating and enabling the comparative advantages of all key US and allied stakeholders into single unified path. The paths here are not the only options but represent four ways of thinking about the complexity and potential impact of adopting the grid and enabler roles.

Common elements of the four paths are presented here, based on the five elements of theater design employed in previous studies. Path-specific attributes are described in the description of each path. The five elements of design are:

1. **Strategy and operational concepts:** A vision for the employment of military capabilities and forces for the purpose of contributing to or achieving specific strategic and operational objectives.

¹ Nathan Freier et al., An Army Transformed: USINDOPACOM Hypercompetition and US Army Theater Design, 1st ed. (Carlisle, PA: US Army War College, 2020),

https://publications.armywarcollege.edu/pubs/3731.pdf.

² "The Army's Strategy in the Indo-Pacific," Brookings (blog), December 16, 2019, https://www.brookings.edu/events/the-armys-strategy-in-the-indo-pacific/; Sean Kimmons, "Army Chief of Staff Discusses Arctic Strategy, Indo-Pacific Presence," U.S. Indo-Pacific Command, January 22, 2021, https://www.pacom.mil/Media/News/News-Article-View/Article/2480647/army-chief-of-staffdiscusses-arctic-strategy-indo-pacific-presence/.

- 2. **Footprint and presence:** The physical and virtual disposition and reach of capabilities and forces relative to their intended employment and missions.
- 3. **Forces and capabilities:** Manned and unmanned formations and tools employed or employable in pursuit of specific military ends.
- 4. **Authorities, permissions, and agreements:** Formal and informal inter- and intra-government policies, arrangements, and agreements governing the control, employment, positioning, movement, and partner relationships of military forces.
- 5. **Mission command arrangements:** Governing structures and networks that enable the formal and informal exercise of authority and direction over military forces and capabilities.³

The four paths described below share a common end objective: an Army capable of enabling a distributed, agile, and dynamically employed joint force in the Indo-Pacific region. Elements common to all paths will be presented first, followed by individual path descriptions. The paths are presented from least- to most-complex, with successive paths incorporating the attributes of the preceding paths.

STRATEGY AND OPERATIONAL CONCEPTS

Each of the four paths described here assumes that the Army will continue to pursue multi-domain capabilities and formations (e.g., Multi-Domain Task Forces) consistent with its current vision and modernization documents.

The paths share three strategic objectives:

- 1. Establish a more hypercompetitive US posture in the Indo-Pacific;
- 2. Seize the strategic initiative from the pacing rival, China; and,
- 3. Restore a favorable military balance that complicates rival planning and expands Joint Force options.

A hypercompetitive posture is one that enables a Joint Force commander to generate and exploit transient military advantages while accepting that permanent advantage is no longer realistic. Seizing the strategic initiative will require both policymakers and Joint Force commanders to have a range of flexible and rapidly available options to shape regional perceptions, not just respond to other states' actions. Restoring a favorable military balance involves integrating the first two strategic objectives to

³ The Army uses Mission Command where the Joint Force would use command and control.

provide US leaders with a set of military options to prevail rapidly in conflict, if necessary. Ideally, these options would extend also to support for allies.

FORCES AND CAPABILITIES

Each path anticipates that the Army will operate the grid with scalable, task-organized, expeditionary forces purpose-built from the sub-components of larger units. In this way, large, standing Army formations are force providers for more tailored mission-specific capabilities in the theater. Such task-organized forces are aggregated for unique missions and employed across the theater in ways that are fundamentally different from current practice. Enabling the grid will require that Army-provided functions to the supported force include: protection, sustainment, movement, command and control, and intelligence, surveillance, and reconnaissance.

Each path will require minimum essential enabling capability. Enabling forces would be composited and scalable. As a starting point, they would provide the required functions to monitor a hub and its associated nodes. As needed, they could then prepare locations for transition to a fully operational status.

The enabling capability may be permanently assigned and rotationally deployed as required. The precise size and composition of an enabling capability will depend on the number and anticipated function of the operating locations it supports. The concept is similar to how the current Security Force Assistance Brigade and Special Forces Groups are organized, regionally aligned, and employed.

A tailorable enabling capability will scale with the operational demands of the locations it supports. Thus, a more active or more complex set of locations will require additional enabling capability to support ongoing or expected missions. Task-organized Army enablers are anticipated to be expeditionary, employing some combination of prepositioned assets and deployable capability. They also need to be purpose-built to operate effectively in a distributed manner with a small footprint, guided by commander's intent.

FOOTPRINT AND PRESENCE

As an end-state, the paths share the objective of establishing and operating a network of clusters, hubs, and nodes that extends across the entirety of the Indo-Pacific region.

- Clusters represent operational regions that include at least one hub and several nodes. Clusters are expected to be mutually supporting though able to operate independently when needed.
- Hubs are critical theater entry points. They are also key locations for theater mission command and large-scale theater sustainment. A hub enables multiple operational nodes.

• Nodes are discreet operating sites from which the Army, sister services, and foreign partner forces conduct widely distributed operations.

The Army footprint in the grid is envisioned to be light and biased toward expeditionary forces, yet robust enough to achieve targeted objectives and expand as necessary. By engaging in deliberately dynamic presence, the footprint would ebb and flow to meet mission objectives in a manner consistent with the 2017 national defense strategy's call to "be strategically predictable, but operationally unpredictable."⁴ Such presence also provides a more sustainable approach to achieving a goal of the 2021 Interim National Security Strategic Guidance, of ensuring "military presence is most robust in the Indo-Pacific..."⁵ Leveraging a dynamic footprint requires a fundamental change in how, and at what echelon, Army forces are missioned, task-organized, and employed.

Hubs and nodes would be maintained at various states of operational readiness. For brevity, those states are described here as cold, warm, and hot. The three levels correspond to the degree of function needed in a given operating location at a given time. The operating grid and its enabling forces are anticipated to be active only as needed to accomplish their mission.

A cold facility is dormant. It may or may not have prepositioned stocks present depending on mission and size. It may have no US presence, or a limited number of US or partner forces present in the event the location requires an increase in activity and readiness. Cold facilities are expected to be able to transition quickly to warm or hot status to support use by US and partner forces for routine or contingency demands.

Warm facilities operate with a greater number of personnel and capabilities present. They are capable of a minimum level of sustained operations. Warming up hubs and nodes activates minimum essential mission command, protection, and sustainment architecture and restores essential lines of communication. These actions also enable a more rapid transition to a hot operational status as required. A hot location is fully operational for its intended purpose.

AUTHORITIES, PERMISSIONS, AND AGREEMENTS

In each path, US forces are envisioned to operate primarily from foreign countries. This is only possible with appropriate authorities, permissions, and agreements both internal to DoD and between the United States and the host nation. To the extent these arrangements do not currently exist, the paths assume that they will be resolved by

⁴ "Summary of the 2018 National Defense Strategy of the United States of America" (U.S. Department of Defense, January 19, 2018), p 5, <u>https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf</u>.

⁵ Joseph Biden, Interim National Security Strategic Guidance (The White House, 2021), https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf., 15.

2028. For those arrangements that do currently exist, the paths assume these arrangements will continue through 2028.

Each path also describes operations that differ significantly from current US Army, Joint, or combined practice. The highly detailed nature of some of these arrangements are beyond the scope of this paper, though new or updated arrangements will likely include: transportation, supply and refueling, and electro-magnetic spectrum management. These will need to be refined through further operational planning and exercises to fully realize the grid and enabler roles consistent with each of the paths.

MISSION COMMAND ARRANGEMENTS

Each path relies on distributed mission command arrangements. This study anticipates that the future Indo-Pacific operating environment will pose significant challenges to mission command and secure uninterrupted communications. Often, widely distributed forces will have to operate independent of detailed contact with their higher headquarters. Under such conditions, local commanders will need to make decisions about the priorities and objectives for their formations absent real-time direction, possibly for extended periods. For the Army overall, this will require greater implementation of pre-cleared concepts of operation; nodal, redundant theater-level command and control; and, optimally, greater comfort with and implementation of mission-oriented orders. This paper concurs with earlier recommendations for new and evolved organizational structures to begin meeting such challenges but does not address its salience to the four described paths.⁶

The remainder of this paper will provide descriptions of each of the four identified paths.

THE FOUR PATHS

The four paths presented here represent different ways the Army could initiate efforts to move toward the grid and enabler roles. Each path incorporates the features described above in the five elements of theater design. Presented from simplest to most complex, each path incorporates the attributes of the preceding paths.

ARMY PATH

The Army Path represents a first step in a building-block approach to a transformational Army and Joint Force theater design. Consistent with current Army transformation plans, the Army Path has three distinct features. Aspects of each feature carries through subsequent paths. Features of the Army path include:

⁶ Nathan Freier et al., An Army Transformed: USINDOPACOM Hypercompetition and US Army Theater Design, 1st ed, p 85, (Carlisle, PA: US Army War College, 2020), https://publications.armywarcollege.edu/pubs/3731.pdf.

Focus on enabling Army Multi-Domain Operations (MDO). The Army's multi-domain warfighting formations will be deployed throughout the theater. Each multi-domain formation is expected to have inherent mission command, intelligence and targeting, long-range precision fires, air and missile defense, and cyber/electronic warfare elements. The Army Path envisions the Army enabling and sustaining its own multi-domain operations from distributed grid locations. Army support to other services would continue under conventional operating models, however, Army enabling would prioritize Army forces and operational concepts first.

Scalable enabling capability to accommodate MDO and legacy INDOPACOM

demands. Develop a scalable Army-specific enabling capability that prioritizes delivery of: mission command, protection, sustainment, movement, intelligence, and information. The functions are necessary for Army forces to support (in priority): the contingency employment of multi-domain warfighting capabilities; the continued land-based defense of the Korean peninsula; and, distributed Army operations throughout the Indo-Pacific region. Compared with current Army practice, these scalable Army enabling capabilities would be more modular and more easily combined (and deployed) in tailored force packages at lower echelons. Some would be permanently assigned to and routinely operating in the theater and some would be deployed rotationally on demand.

Modest Expansion of expeditionary posture options. Of the four paths, the Armyspecific path requires the smallest expansion of the theater-wide enabling network of clusters, hubs, and nodes. Such expansion would need to go beyond current Army posture to the extent that it sufficiently underwrites the distributed employment of deployed Army forces.

ARMY-AIR FORCE PATH

This section frames a path where the Army prioritizes enabling sustained Air Force operations in addition to MDO. It represents the most distributed form of Army support to another single service. The same concepts could be applied to an Army-Navy and/or Army-Marine Corps effort.

The Army-Air Force path builds on the requirements of the Army path to expand the type, geographic scope, level of task-organization, and theater distribution needed to enable the grid. This path continues Army support to other services, though recognizes that the scale of effort to support the Air Force may impact Army ability to support the Navy and Marine Corps at expected levels.

Focus on enabling Army MDO and Air Force agile combat employment. The current Air Force operating concept, Agile Combat Employment, describes distributed,

dynamic employment of Air Force assets from geographically dispersed locations.⁷ At its most aggressive, ACE envisions that the Air Force could operate from any airfield in the Pacific. These operations currently rely on Air Force transportation aircraft tasked to link up with combat aircraft to provide fuel, ammunition, and other necessary supporting equipment. Many of those transportation assets would be in high demand for other missions, especially given transit-times across the Pacific. Integrating Army enabling functions with Air Force ACE concepts could reduce redundancy and free up assets for higher-priority missions.

Scalability sufficient to dynamically support small units at great distances.

Effective Army enabling of the Air Force will require the Army to have an internal ability to be where needed, when needed, with what is needed. Army enabling support to Air Force ACE across the Indo-Pacific theater will demand that the Army develop a more expeditionary mindset and an ability for greater task organization at lower levels of decision making and action. Together, these would significantly enhance Army capability for distributed operations.

Large expansion of expeditionary posture options. Distribution of Army forces at a scale to support ACE will require disaggregation of formations and aggregation of functions in ways not currently practiced by or comfortable to Army leaders. It will also require integration of niche Air Force capabilities in Army task-organized formations, as well as the routine employment of Army and Air Force capabilities under each other's command-and-control arrangements.

Greater coordination and integration with the Air Force. Developing and sustaining the inter-service links to enable dual-service coordination will require senior-level attention. Inter-service coordination will be improved with extensive coordination and exercising in advance. To the extent the service operations are integrated, it will be necessary for the Army and Air Force to continue pursuing the best combined solutions through additional concept development and experimentation.

ALLY PATH (JAPAN)

The Army-Japan Self Defense Force (JSDF) Path builds on the Army-Air Force path to illustrate how the Army could conduct MDO and also enable allied Joint operations in ways that are institutionally more complex than the previous paths, though conducted in a smaller geographic area. This path envisions Army forces enabling MDO and JSDF conducting operations within the Japan theater of operations. This path is a single example of a path also applicable to other U.S. allies in the Indo-Pacific region.

⁷ "Annex 3-99 Department of the Air Force Role in Joint All-Domain Operations (JADO)" (United States Air Force, October 8, 2020), https://www.doctrine.af.mil/Portals/61/documents/Annex_3-99/Annex%203-99%20DAF%20role%20in%20JADO.pdf.

As with previous paths, Army support to other services would remain operative. However, the extent to which the Army provides that support would be affected by the demands placed on it by enabling Army MDO and JSDF operations.

Focus on enabling a JSDF-developed concept. Much as the Army-Air Force path describes Army actions to support MDO and Air Force concepts of operations, the Army-JSDF path envisions the Army working to enable a JSDF-developed concept of Joint Operations. Providing such support has all of the challenges of the dual-service approach compounded by both cross-cultural communications and the need to support multiple allied military components simultaneously.

Scalability and mission-tailoring to enable a single regional partner in a set geographic region. Scalability for the Army-JSDF path will occur in a limited geographic area, relative to the Army-Air Force path. Greater complexity in the Army-JSDF path will derive from supporting multiple services and doing so with language and cultural differences. The added complexity will likely place a high premium on co-locating operations centers to ensure information is passed (both directions) in ways that allow timely decisions by both US and JSDF commanders. As in the case of the Army-Air Force path, the Army-JSDF path will likely require integration of niche JSDF capabilities into Army formations and Army capabilities integrated under the operational control of JSDF forces.

Understand, test, and—where possible—anticipate needed changes to Authorities, Permissions, and Agreements. Efforts to coordinate operations with allies consistently surface new issues that need to be resolved. An undertaking as complex as the Army-JSDF path will almost certainly do the same. Identifying as many issues as possible in advance of a crisis will require regular exercising, consultation, and potentially diplomacy to work through challenges as varied as import of equipment and materiel, communications spectrum management, or politically sensitive areas previously unrecognized in the alliance.

JOINT AND COMBINED PATH

The Joint and Combined Path represents the most complex path for Army INDOPACOM theater design. It incorporates the best features of the previous three paths while providing an enabling platform for a new transformed Joint Warfighting Concept (JWC). The Joint and Combined path's highlights include:

Enable theaterwide Joint and combined operations as a service main effort. In addition to enabling Army employment of its multi-domain warfighting formations, a Joint and Combined path in INDOPACOM provides a resilient Army-enabled platform for successful prosecution of theater-wide Joint and Combined operations.

This work assumes that a new unified Joint concept for theater competition and conflict will not start from scratch. Rather, it will combine the best characteristics of extant U.S.

service concepts like MDO, ACE, Distributed Maritime Operations, and an evolved Expeditionary Advanced Base Operations.⁸

Potential conflict with China is the pacing challenge for all of the service concepts. The Indo-Pacific theater, however, presents a wider range of potential Joint and Combined military demands. These include response to widespread natural or human catastrophe, escalation of force against North Korea, and support to allies and partners in countering terrorists, insurgents, and gray zone operations. In combination, these demands require a theater design with maximum depth, resilience, agility, and redundancy.⁹

Extreme scalability, tailorability, and Joint integration. In INDOPACOM, a deep, resilient, agile, and redundant Joint Force theater design would almost certainly rely on a comprehensive, Joint-focused Army enabling foundation. To realize a Joint and Combined path, the Army will need to adopt even more innovative organizational models than previously described. The number of actors, span and type of locations, and diversity of locations will also necessitate smaller, mission-tailored Army teams operating at distance from higher headquarters. A Joint and Combined path will require the highest degree of cross-component and multi-national integration of the four paths.

Thus, Army enabling capability and the supporting Joint competencies essential to a new JWC should have the ability to rapidly scale, tailor, and integrate according to specific mission requirements. Further, they should be of sufficient depth, resilience, agility, and redundancy to allow for the sustained employment of Joint Forces in dynamic all-domain operations from an adaptable Army enabled grid.

A theater-wide network of expeditionary clusters, hubs, and nodes. The Joint and Combined path necessitates the most extensive network of Army-enabled clusters, hubs, and nodes. At peak maturity, the Army-enabled grid would provide the theater Joint Force commander with a catalogue of expeditionary operating locations maintained on a routine basis at various states of readiness. With the benefit of significant operational preparation of the environment and frequent exercises, Army enabling capabilities would set conditions for the on-demand activation and deactivation of grid locations according to the theater commander's guidance and Joint Force operational plans.

⁸ See: "Agile Combat Employment: A Leaner, Meaner Force," Kadena Air Base, accessed January 6, 2021, https://www.pacaf.af.mil/News/Article-Display/Article/2094128/agile-combat-employment-a-leaner-meaner-force/; U.S. Navy, "A Design for Maintaining Maritime Superiority" (U.S. Navy, December 2018), https://www.navy.mil/navydata/people/cno/Richardson/Resource/Design_2.0.pdf; U.S. Marine Corps, "Expeditionary Advanced Base Operations," accessed September 17, 2019, https://www.candp.marines.mil/Concepts/Subordinate-Operating-Concepts/Expeditionary-Advanced-Base-Operations/.

⁹ See Freier, et al, "An Army Transformed", 33-34.

CONCLUSION

Any path individually would be difficult to implement operationally and culturally. Though difficult, the paths represent a clear way for the Army to contribute to achieving vital U.S. interests in the Indo-Pacific region. Neither on-demand contingency integration of US service concepts or a Joint Force "satisficed" solution that combines easy, but parochial, service interests is likely to succeed at preparing US forces to deter or prevail when needed.

The paths in this paper are presented as plausibly sequential steps toward implementation of a fully Joint and combined path. In reality, Indo-Pacific military demands will likely call for parallel planning, implementation, learning, and adaptation to effectively meet both the theater's high priority and urgent need for transformational change.