



Installations and Logistics 2030

February 2023

BOTTOM LINE UP FRONT

Installations and Logistics 2030 (I&L2030) follows the form and function of the previously released Force Design 2030 (FD2030) reports, Talent Management 2030 (TM2030) reports, and Training & Education 2030 (T&E2030). This document is framed in a manner consistent with those earlier reports, charting the way ahead for our Marine Corps Installations and Logistics Enterprise (MCILE) — the system of installations, organizations, and capabilities that enables force generation, power projection, employment, and sustainment of ready Marine forces. Like other FD2030 efforts, it is based on iterative planning and experimentation from our campaign of learning, and therefore, will be updated on an annual basis.

In recent years, we have identified logistics as the “pacing function” for operations. Among the seven warfighting functions, logistics most dictates the tempo of operations and the operational reach of a unit. No other warfighting function more profoundly affects our ability to persist in contested spaces.

However, over the past several decades, our MCILE has primarily supported land-based operations from secure, fixed positions in a logistically mature theater. Meanwhile, our installation commands and operational commands are not integrated enough to support and sustain expeditionary forces in the future operating environment.

To succeed on tomorrow’s battlefields, we will need a logistics enterprise fully integrated with the broader objectives of FD2030, capable of supporting multi-domain and distributed operations in contested environments. Our stand-in forces (SIF) must be able to persist forward. Currently, our logistical capabilities are under-resourced and do not meet the demands of our future force to succeed on future battlefields.

This document serves as the primary reference for how we will logistically support the future force. It captures the concepts, capabilities, and tasks we need to develop and execute to support naval expeditionary forces in the future operating environment. It directs change across much of the doctrine, organization, training/education, materiel, leadership/communications synchronization, personnel, and facilities (DOTMLPF) spectrum; change that will begin with the following objectives:

- Create Global Logistics Awareness
- Diversify Distribution
- Improve Sustainment
- Make the Installations Ready for a Contested Environment
- Develop Logistics Professionals for 21st Century

While our current approach — informed by decades of experience — worked well in the past, it is insufficient to meet the demands of the future operating environment, particularly when contested across all domains. I&L2030 is the next logical step in our FD2030 process, and it will be implemented with the same energy as its companion efforts: TM2030 and T&E2030.

A SHARED UNDERSTANDING

As with any planning effort, we start with problem framing. This entails developing a shared understanding of the operating environment — in this case, viewed through a logistical lens — followed by an objective assessment of our current capabilities and an analysis of challenges that confront us from the tactical to strategic levels.

THE FUTURE OPERATING ENVIRONMENT

While it may be too early to assert with complete confidence, it appears many of our assumptions about the future operating environment are being validated by the ongoing conflict in Ukraine. In short, we have witnessed a numerically superior force struggle to sustain itself and protect supply routes against persistent attack and disruption. We cannot afford to ignore these lessons. The proliferation of precision strike weapons, combined with the willingness of strategic competitors to employ gray zone activities, will continue to erode the operational logistics advantage we have maintained for decades. We have spent the better part of twenty years conducting strategic and operational logistics in a permissive environment. While we were challenged tactically, it was not to the degree we can expect from a peer competitor. To achieve a logistical advantage, we will have to fundamentally change the way we view sustaining our forces.

At the operational and strategic levels, we can anticipate our potential adversaries will attempt to interfere with our deployment and sustainment plans by targeting all elements of the MCILE and the Fleet Marine Force (FMF) both kinetically and non-kinetically. The proliferation of technology poses a specific threat to Marine Corps installations. The ability to easily acquire and adapt off-the-shelf, commercial technologies (e.g., drones) or interfere with wireless-based environmental and access control systems continues to increase risk across Marine Corps infrastructure.

At the operational and tactical level, the proliferation of precision weapons implies Marines will be required to sustain forces in a more creative and increasingly distributed manner. The legacy approach of sustaining forces from secure, fixed locations will fall short in the face of long-range precision fires and persistent intelligence, surveillance, reconnaissance, and targeting (ISR-T). Naval expeditionary forces will be contested from home station to theater. Stand-in forces, already forward, will need the ability to persist, transition, and

prevail, while retaining the ability to be low signature, mobile, and relatively easy to sustain and maintain. The characteristics of this future operating environment require a comprehensive campaign plan to transform the MCILE to meet these new challenges.

CMC AND DEPUTY COMMANDANT FOR INSTALLATIONS & LOGISTICS ASSESSMENT OF THE MCILE

Despite significant effort from supremely talented Marines and civilians in recent years, the MCILE is not yet organized, trained, or equipped to sustain expeditionary forces across all domains as envisioned by *A Concept for Stand-In Forces, Littoral Operations in a Contested Environment, and Expeditionary Advance Base Operations*, nor in traditional crisis response scenarios. Year after year, exercises, wargames, and experiments have demonstrated and validated this assessment.

Some of the factors contributing to this assessment are:

- Sustainment systems and nodes are not compatible with joint logistics enterprise (JLEnt) capabilities.
- Excessive focus on tactical logistics without sufficient understanding of the linkages to operational and strategic logistical systems or the processes and platforms critical to tactical logistics execution.
- Poor visibility of the logistics enterprise due to legacy, compartmented information technology (IT) systems.
- Dependence on fixed site distribution nodes, such as ground combat service support areas and intermediate staging bases.
- A heavy, ground-based, crewed, and wheeled fleet of vehicles tethered to bulk liquid energy storage and distribution capabilities.
- The absence of air, surface, ground, or undersea unmanned and uncrewed distribution mechanisms.
- An industrial base with two halves: one “legacy” that supports old systems, and another that is very high end, yet fragile due to a lack of depth.
- Supply chains built strictly for efficiency and not resiliency in a globally contested environment.
- Under-resourced, non-integrated, and “brittle” bases and stations that are not organized, trained, or equipped to support operational commanders.

- A consolidated and continental U.S. (CONUS)-based pool of equipment and supplies that is at odds with force generation, deployment, and sustainment requirements

An uncertain future, the threat of peer and near-peer competitors, and developing challenges in all warfighting domains create wide-ranging implications for sustaining the current and future force. To support emerging and future operational requirements against peer and near-peer adversaries, we will have to transform our approach to logistics. Simply put, we have to transition from a force optimized for supporting sustained operations ashore to a maritime force capable of supporting operations in austere, expeditionary, and littoral environments that are contested across all domains.

OUR CHALLENGES

Fundamental change is challenging; accelerating change is even more difficult. However, if the last few years have taught us anything, it is that we can overcome the challenges of the future by unleashing the creativity and imagination of Marines. Seeing the progress they have made in such short order should give us all confidence. Installations and logistics will be no different. We need our logistics community to be aggressive in solving an increasingly difficult problem – sustainment. Accordingly, those engaged in modernizing the MCILE should address the following:

- As part of the JLEnt (which includes the naval logistics enterprise), how do we sustain an untethered stand-in force, particularly across vast distances? How do we adapt what we are learning in the Indo-Pacific to conditions in other operational environments?
- Acquisition programs do not currently consider deployability and sustainability at the tactical edge. Meanwhile, we lack the legal authority to facilitate a robust tactical manufacturing effort (e.g., three-dimensional (3D) printing).
- As we have become more technologically advanced, we have had to rely more on the industrial base to provide maintenance support. We cannot assume or rely on the same level of support in the future. Aviation logistics, ground logistics required to employ precision fires, and the supporting organic industrial base are essential to warfighting readiness and must be integrated into our installation and logistics plans.

- Key force generation, deployment support, and sustainment capabilities on installations are not as resilient as they need to be to withstand foreseeable natural events or attack.
- Many installations' activities cannot be clearly linked to the training and warfighting readiness of the current force and are insufficient for developing the capabilities of the future force.
- Systems and integrated data collection plans need to assist commanders in visualizing available logistical resources to expedite and improve decision-making. Specifically, data systems must be functional, protected, and resilient at the tactical edge as part of a fully integrated Marine Air-Ground Task Force (MAGTF), naval, and joint network, not just from home station.
- In support of joint and Service operational concepts, where do we posture our logistics capabilities to sustain the force, particularly when contested globally and regionally? Distribution networks must account for the requirements of the entire joint and combined force, to include reloading critical munitions. They must also account for partner and allied interoperability, including aviation and ship readiness requirements.
- What changes to DOTMLPF are required to produce a force capable of sustaining combat power in contested environments?
- What are the appropriate command and support relationships and associated authorities for our MCILE organizations in the FMF and supporting establishment? How should we organize at echelon for cooperation between installations and operational commands to ensure a rapid response capability?

INSTALLATIONS AND LOGISTICS IMPERATIVES

The past two decades of near unchallenged logistics and sustainment dominance during protracted conflicts in mature theaters have led to procedures and formations that, if continued, will create unacceptable risk to Marine forces in future conflicts. The magnitude of change required to prepare the MCILE to support the future force mandates a fundamental reevaluation of our approach to logistics. Whether discussing legacy capabilities, infrastructure modernization, or personnel and organizational changes, our overall approach will begin with identifying what we must retain, followed by a critical analysis of the legacy systems and capabilities we can divest to generate resources for reinvestment in modern capabilities. Change on the scale the future demands will require a collective effort from across Headquarters, Marine Corps (HQMC), the FMF, the supporting establishment, and the naval, joint, and combat support agencies.

While logisticians are our subject matter experts, ultimately commanders are responsible for logistics.

For commanders to make operational decisions and to best employ and sustain their forces, they will have to become comfortable identifying and managing data and information from multiple sources, regardless of the environment and domain. To get there, we will expand professional military education to emphasize planning and decision-making, ensuring logisticians and commanders are comfortable adjusting sustainment plans based on standard, non-standard, and alternative sources of supply.

Marines must embrace operating in austere environments. Commanders need to ensure Marines have exposure to, and repetition in, sustaining themselves in austere environments. The operational requirements levied on smaller units have the potential to significantly increase their footprint and signature if we are not careful. This means the future force will have to become more self-sufficient and self-reliant, particularly when operating in distributed formations. One way to combat this challenge is to expand military occupational specialty (MOS) development. For example, today's vehicle operator may need to transition from behind the wheel of a manned vehicle to leading an uncrewed convoy or operating a drone. The future logistics force must become better at delivering the right sustainment at the right time to reduce the burden on the warfighter while simultaneously reducing the overall footprint and demand on Marine Corps' and joint logistics chains.

Identify innovative, affordable, and executable solutions as part of the JLEnt to improve resiliency and sustain naval expeditionary forces in a contested environment. Over the next two years, we will forge even closer ties with the Navy and other services, defense support agencies, defense industrial base, and our allies and partners to increase resiliency, capability, and capacity. This will provide a greater range of options for our commanders. In seeking new capabilities, we must be willing to forgo the perfect solution and instead seek the solution that meets threshold requirements and improves interoperability. Adopting this approach will allow us to provide prototype capabilities to the FMF sooner and iterate through experimentation and wargaming. We will also reinvigorate our ability to operate with and sustain from naval shipping while developing a modernized supply and globally positioned network (GPN) that supports crisis response and operations across the competition continuum.

Engage talent management initiatives to bring different perspectives and add depth to the installations and logistics community.

Our approach to talent management will provide the opportunity to shift talent currently residing in other parts of the Service into the logistics combat element (LCE) and MCILE. Meanwhile, through close coordination with Manpower and Reserve Affairs (M&RA), Training and Education Command (TECOM), and the JLEnt, we will increase training and education opportunities for our logistics community to better posture our Marine and civilian workforce to succeed against the multi-domain challenges of the future operating environment. We will simultaneously engage with the Marine Corps Warfighting Laboratory (MCWL) and TECOM to develop and execute wargames centered on sustainment. By incorporating sustainment-focused wargaming into our training and education pipeline, we can give Marines regular repetitions planning for logistics in a contested environment. Fully realized, Marine Corps logisticians will be the preeminent experts in sustaining littoral forces across the competition continuum in distributed, austere, and contested environments.

Prepare our installations to support the future force.

To posture ourselves against the threat of peer and near-peer competitors, we need to rethink our view of Marine Corps installations. Put simply, our installations must be able to provide the full range of essential services support, infrastructure, and trained personnel that directly link to the emerging requirements of the future force. To achieve these objectives, we will bring

improvements to our installations that more effectively enable service-training, force readiness, experimentation, mobilization, and deployment. Meanwhile, given their impact on our service members and their families, we must adequately resource improvements to installations and facilities that contribute to retention and talent management efforts.

In light of emerging threats, we will reanalyze the force protection warfighting function and reconsider what tasks have to be executed from our bases and stations as we move from competition to crisis to conflict. As we imagine the future of logistics, we anticipate our installations will be required to make greater contributions to the sustainment network in support of the future force, particularly in forward locations. As an example, our Fleet Assistance Program (FAP) model has worked in the past but may not be sufficient moving forward.

The Marine Corps organic industrial base (MCOIB), which includes our supply and maintenance depots, requires modernization to support rapid deployment and sustainment. The ability to supply forces during a rapid transition across the competition continuum will depend upon accurate inventory and supply data and network resiliency from warehouse to warfighter. Additionally, the complex nature of future systems means that our depots must modernize in workforce and infrastructure to meet the demands of the future force. Fully realized, the MCOIB will provide a competitive advantage to the naval and joint force.

Secure additional resources for installations modernization & readiness. Ready and resilient installations are a critical requirement today and into the future. Years of under-funding the installations portfolio has resulted in a funding shortfall across the Future Years Defense Program (FYDP) in the billions of dollars. Earlier decisions to take near-term risk in these accounts and shift resources to support readiness-related accounts have resulted in longer-term systemic risks to the Service that we must address. Beginning in 2023, we will engage in a comprehensive and informed infrastructure recapitalization that directly contributes to the requirements of the future force. This will require additional funding, and while it will take more than one FYDP to accomplish, the foundation must be laid today.

OBJECTIVES & DIRECTED ACTIONS

OBJECTIVE 1: CREATE GLOBAL LOGISTICS AWARENESS

Findings from FD2030 planning and wargames indicate that to achieve resilient logistics networks, we need to view and understand our logistics resources differently than we have in the past. We will need tools to help commanders visualize logistics resources in space and time across the JLEnt. This will give us the ability to provide sustainment and distribution options based on threat, inventory position, and protection requirements. To achieve this effect at the speed of conflict in a fight against a peer or near-peer adversary, we must be:

- **Sensor-Based:** Integrated sensors will provide accurate, enterprise-wide visibility and accountability to predict requirements and manage distribution platforms.
- **Data-Driven:** Integration of trustworthy, quantifiable, and measurable data from reliable sources will support rapid and flexible decision-making.
- **Networked:** By integrating with MAGTF, naval, and joint architectures, we will maximize data availability to the warfighter while denying access to an adversary.
- **Interoperable:** Future systems will be designed with interoperability as a core capability to assist in bridging the gaps between disparate networks.
- **Resilient, Regenerative, and Secure:** We must have alternative means to identify logistics requirements and adjust resources when the adversary is able to disrupt or compromise our primary logistics system.

Directed Actions

1. **NLT 1 July 2023,** Deputy Commandant (DC), Combat Development & Integration (CD&I), in coordination with DC, Installations and Logistics (I&L) and DC, Information (DC, I), will refine requirements for a logistics information technology system capable of leveraging accumulated data to assist initiatives like conditions-based maintenance and accurate readiness estimates, and assess the total cost of ownership.

2. NLT 1 September 2023, DC, I&L will identify resources required for real-time visibility of friendly information essential to installations and logistics preparation of the battlefield. *Consider: sensor requirements, diagnostic input, automated identification technology, and in-transit visibility.*
3. NLT 1 September 2023, DC, I&L, in coordination with DC, CD&I and DC, I, will refine logistics systems requirements to reduce bandwidth and system latency in order to sustain deployed forces in a denied, degraded, intermittent, or limited environment. As part of this effort, identify options to integrate existing and developing logistics command and control capabilities with naval, joint, and coalition networks.
4. NLT 1 January 2024, DC, I&L will provide recommended changes to command and support relationships and the associated authorities that tie FMF operations to the naval, joint, and coalition networks. As part of this effort, DC, I&L will make a formal recommendation to CD&I to either retain logistics-related IT structure or transition it to CD&I or DC, I.

Issues Requiring Further Analysis

- A. Artificial Intelligence. How do we leverage artificial intelligence (AI) and automated, data-informed decision-making tools used by the commercial sector for global inventory management, distribution prioritization, and conditions-based maintenance?

Desired Endstate. Achieve global logistics awareness, defined as when the MCILE can rapidly and accurately identify warfighter requirements, determine available resources, and allow for dynamic and adaptive fulfillment.

OBJECTIVE 2: DIVERSIFY DISTRIBUTION

Diversifying distribution refers to creating options in the methods, nodes, and modes available to the MCILE in staging, delivery, retrograde, and recovery of assets and logistics services to deployed forces. This objective addresses the need to capitalize on both existing and emerging distribution capabilities to support geographically dispersed forces in contested environments.

Generating sustainment webs with multiple distribution networks and options for support, underpinned by multi-domain delivery methods will require transforming our current organizations, processes, and methods of distribution, which are primarily land and aviation based. We will advance from a predominately ground-based, manned and crewed, wheeled-vehicle fleet to a mix of crewed and uncrewed, manned and unmanned, air, surface, subsurface, and ground capabilities with variable payloads and ranges that can be owned, leased, or contracted based on the situation.

By capitalizing on emerging capabilities, we can transform and diversify our distribution methods. By developing a family of lightweight platforms with different levels of autonomy at a price where the loss of a platform is acceptable if the mission dictates, we can prioritize sustainment of the force over survivability of the platform. Distribution in a contested environment will require a hybrid approach that gives commanders options. To sustain a distributed naval expeditionary force, we will need distribution capabilities that are interoperable, scalable, efficient, and unpredictable.

Directed Actions

5. NLT 1 September 2023, CD&I, in coordination with I&L, will develop a plan to modernize the tactical ground mobility fleet with platforms that are rapidly deployable and have sufficient payload capacity to meet the demands of distributed forces.
6. NLT 1 September 2023, DC, CD&I will identify the capability requirements for the multi-domain tactical distribution network to sustain a force in a dispersed and contested maritime operating environment. *Consider: ground tactical vehicles, littoral surface and subsurface connectors, unmanned ground and aerial systems, and emerging space capabilities.*
7. NLT 1 September 2023, DC, CD&I in coordination with DC, Aviation will expedite requirements development and acquisition of Unmanned Logistics System-Air (ULS-A) Medium and Large with sufficient range and payload capacity to support distributed forces in a contested maritime environment.
8. NLT 1 September 2023, DC, I&L will define how the Service's tactical distribution network connects with the JLEnt in order to inform force design and force development.

9. NLT 1 January 2024, DC, I&L, in coordination with DC, CD&I, will update the appropriate orders and publications to capture ongoing MCILE transformation.
10. NLT 1 January 2024, DC, Plans, Policies, and Operations (PP&O), in coordination with the Service component commands (MARFORs), will implement a plan to increase naval engineer partnering and exercises to validate the proposed pioneer battalion, with specific focus on assured mobility and transportation support for the inside force at advanced naval bases (ANBs) and expeditionary advanced bases (EABs).
11. NLT 31 March 2024, DC, CD&I will experiment with and adjust concepts that facilitate the integration of existing maritime platforms as afloat staging or expeditionary advanced base operations (EABO) support platforms (e.g., aviation logistics support ships, surrogate vessels, etc.) to increase resilience with supply, command and control (C2), and forward maintenance capabilities.

Issues Requiring Further Analysis

- B. Medical Care. Considering our experiences over the last few decades, we must reevaluate all aspects of forward resuscitative care, damage control resuscitation, and medical logistics for FMF operations, actions, and activities considering future operating concepts. While building from existing capabilities may be useful in some situations, it may not be effective in all operational environments in the future. We will explore what allies and partners have done to support remote locations with health services and trauma care, like the Australian Defence Force operating in the Northern Territory.

Desired Endstate. The Marine Corps has diverse distribution capabilities that provide multiple options for assured sustainment in contested environments. These capabilities accelerate the movement and increase the endurance of supported forces, while mitigating the threat by creating unpredictable supply routes and increasing resiliency.

OBJECTIVE 3: IMPROVE SUSTAINMENT

The current sustainment construct relies on deliberate, multi-modal movement of equipment and supplies across a linear logistics and supply chain, requiring large warehousing and trans-shipment nodes to break down, consolidate, and repackage shipments for delivery to the end user. Our supply chains have been developed for efficiency, not effectiveness. **One broken link in the supply chain can result in an untethered force.** While tactical Marine formations are designed to be self-sufficient, this is only for a limited period. Instead of relying on a singular, vulnerable chain, we must build a more resilient supply web that can adapt to temporary broken links or obstructions. Improving sustainment will demand global logistics solutions that are non-linear and distributed, have a smaller physical footprint at any one site, and limit the vulnerability of forward forces.

As discussed in *A Concept for Stand-in Forces*, meeting sustainment requirements in contested areas will require Marines to plan for multiple methods of sustainment across each of the six functions of logistics. To provide this flexibility to forward forces, we will reimagine planning and execution for the logistics warfighting function and how it aligns to support the other warfighting functions. When feasible and appropriate, we will leverage demand reduction principles and technologies to reduce requirements and cumbersome stockpiles. Based on the operating environment, these may include on-site power generation, tactical manufacturing, modernized maintenance, and “forward provisioning” of commodities (a.k.a. 21st century foraging).

At the Service level, the MCOIB is the platform for regenerating ground combat power with depot maintenance, storage of ready capability sets, and prepositioning (afloat and ashore) programs that are critical to Marine Corps expeditionary readiness. As the Service-level inventory control point and supply depot responsible for managing these programs, Marine Corps Logistics Command (MARCORLOGCOM) must improve its ability to anticipate changing operational requirements and adapt to meet the challenges of force modernization. Although MARCORLOGCOM has been executing a MCOIB Modernization Plan developed in conjunction with the July 2019 *Senate Report on the Readiness of the MCOIB*, this plan predates FD2030 and needs to be revised to ensure alignment with current Service-wide modernization efforts.

ENSURING GROUND EQUIPMENT READINESS

We will ensure ground equipment readiness across the force by improving capabilities for global visibility of enterprise equipment inventory management, weapons system life cycle support, and depot-level maintenance. Additionally, we will improve our globally-positioned storage programs to ensure combat-ready equipment and supplies are available for crisis response, wartime contingencies, or other emergent global or regional requirements on short notice.

SUPPORTING EXPEDITIONARY LOGISTICS

We must ensure materiel sustainment at the enterprise level without diminishing logistics support and services at the tactical level. In fact, healthy enterprise-level sustainment capabilities will directly translate into improved tactical support and services. Managing contributions to the JLEnt using war reserves, employing a GPN to ensure global responsiveness, managing support to allies and partners, and strengthening relationships with the defense industrial base will remain areas of focus in this effort.

MODERNIZING AND RIGHTSIZING THE MARINE CORPS ORGANIC INDUSTRIAL BASE (MCOIB)

The directed actions in the FD2030 Annual Report from May 2022 will change the future equipping strategy and likely impact how and where MARCORLOGCOM executes storage and depot maintenance for the enterprise. MARCORLOGCOM must take steps to reassess, reprioritize, and reduce requirements to ensure alignment with our modernization objectives. In the future, MARCORLOGCOM will likely hold fewer assets at Albany and Barstow as the enterprise divests equipment and capabilities, while repositioning others through the GPN.

With depot maintenance, enterprise storage, and prepositioning requirements changing, MARCORLOGCOM will explore options to right-size capacity through a variety of means. As priorities and focus shift toward the Indo-Pacific region, MARCORLOGCOM will likely have to shift capacity and resources from CONUS locations to forward locations. Right-sizing MCOIB facilities and locations is critical to providing relevant, cost-effective capacity to meet the demands of the future force.

A redesigned and modernized plan to sustain the force in the future operating environment includes:

- Naval, Joint, and Combined Force Logistics Integration: Fully leveraging the integration of partner, allied, joint, and interagency support capabilities and agreements, to include organic industrial bases.
- Improved Inventory Management: Better leveraging demand planning and predictive forecasting to create flexibility and provide greater material readiness outcomes for operational commanders.
- Agile Sustainment Pathways: Enhancing use of existing transportation methods and distribution networks and expanding use of nontraditional sources of maintenance and supply (e.g., operational contracting support, tactical manufacturing, and forward provisioning).
- Demand Reduction Principles: Implementing planned supply discipline, practicing in austere environments, improving use of energy reduction technologies and alternative energy sources (e.g., hybrid and/or electric) and incorporating them into our acquisition planning, and reducing sustainment packaging to minimize loads and support delivery via smaller platforms.
- Modernized Prepositioning: Transitioning to a GPN that integrates afloat/ashore capability to enable day-to-day campaigning, rapid response to crises and contingencies, and deterrence.

Directed Actions

12. NLT the spring Executive Off-Site (EOS), DC, I&L will brief the challenges and opportunities associated with executing the six functions of logistics at the tactical, operational, and strategic level in order to create a detailed, shared understanding of the current state of the MCILE.
13. NLT 1 June 2023, I&L, in coordination with combatant commanders and the intelligence community, develop a logistics intelligence preparation of the battlespace brief for the Indo-Pacific region in order to support concept and capability development. Provide a recommended timeline for similar efforts in other areas of responsibility (AOR).

14. NLT 1 June 2023, CD&I, in coordination with I&L, will revise the *Sustaining the Force in the 21st Century* functional concept in order facilitate capability development.
15. NLT 1 July 2023, DC, I&L, in coordination with Marine Corps Systems Command (MCSC), will update Service policies to support increasing use of local and tactical manufacturing (e.g., advanced manufacturing, 3D printing, and tactical fabrication).
16. NLT 1 July 2023, DC, I&L, in coordination with DC, Aviation, will provide a plan to enable rapid aviation maintenance and readiness via wireless internet-enabled hangars and flightlines.
17. NLT 1 August 2023, based on the results of wargaming, experimentation, and exercises, DC, CD&I and DC, PP&O with the input of MARFORPAC and DC, I&L, will propose a refined organizational structure for command and support relationships, and the associated authorities, vital to sustaining forces in the Indo-Pacific Command (INDOPACOM) AOR. *Consider a subordinate logistics command to III MEF that includes the C2 of bases and installations as well as general support and sustained tactical-level logistics support to III MEF.*
18. NLT 1 September 2023, DC, CD&I, in coordination with DC, Aviation and DC, I&L, will conduct an assessment of FD2030 directed actions to Marine wing support squadrons and a capability gap analysis of aviation ground support (AGS) and aviation logistics (AVLOG) capability requirements to inform future force requirements. Specifically assess redesigning and assigning AVLOG and AGS capabilities to facilitate installation-based aviation operations in lieu of expeditionary operations. This assessment should also include an INDOPACOM-specific analysis.
19. NLT 1 September 2023, DC, Programs and Resources (P&R), in coordination with DC, I&L, will identify resources required for the GPN that integrates afloat and ashore platforms to enable rapid transition from competition to crisis or conflict.
20. NLT 1 September 2023, DC, CD&I will refine requirements for expeditionary utilities (e.g., fuel, water, and mobile electric power) that are scalable and have a low signature with reduced energy demands. Whenever possible, experimentation with these capabilities should include our installations.
21. NLT 1 September 2023, DC, CD&I will provide a Service-level concept for logistics in the contested environment that addresses how the MCILE sustains the force and integrates with the JLEnt.
22. NLT 1 October 2023, DC, CD&I, in coordination with DC, I&L, CG, MCSC, and CG, TECOM, will initiate fielding expeditionary fabrication and tactical manufacturing capabilities to the MEFs with relevant training and authorities to enable forward manufacturing at the lowest possible level.
23. NLT 1 October 2023, DC, I&L will identify policy changes to supply, contracting, and acquisition directives to expand opportunities for forward provisioning of supplies and services to reduce distribution demand.
24. NLT 1 December 2023, the Medical Officer of the Marine Corps, in coordination with DC, I&L, will identify policy changes to medical directives to improve tactical casualty care and patient evacuation.
25. NLT 1 December 2023, DC, I&L will update the MCOIB modernization plan with a refined scope, cost, and schedule for depot optimization changes that align with future force equipment readiness requirements and the GPN. Anticipate the need to provide an initial five-year plan with resource requirements during the upcoming testimony season.
26. NLT 1 January 2024, DC, CD&I, in coordination with DC, I&L, will redefine the Marine Corps war reserve program. *Consider: weapon system types and quantities, relationship to forward operating stocks, and equipment readiness conditions related to global responsiveness.*

27. NLT 1 January 2024, DC, I&L will develop options and processes to reduce supply demand (particularly fuel) through more precise requirements determination, advanced analytics in supply chain management, conservation of resources, improved maintenance practices, and increased energy efficiency.
28. NLT 1 January 2024, DC, CD&I, in coordination with DC, I&L, will update concepts, capabilities, and training for expeditionary field feeding at the platoon and company levels by leveraging local sources of supply in lieu of packaged/prepared meals.
29. NLT 1 January 2025, DC, PP&O will coordinate with the combatant commands, Navy counterparts, and the Joint Staff to leverage cooperative security locations that enable ANB/EAB activities, assure access, and contribute to deployment and sustainment of the FMF.

Issues Requiring Further Analysis

- C. Micro-grids. How do we integrate micro-grid and micro-network capabilities to facilitate distributed, small-unit operations? Can we use existing capabilities on our installations to inform this effort?
- D. Forecasting. How do we forecast vulnerabilities in the defense industrial base that will impact our ability to sustain forces forward and maintain combat readiness? Although based on anecdotal evidence, initial analysis suggests sustainment requirements at the tactical edge must receive greater consideration in all Service acquisition programs.
- E. Medical. Where are the gaps in health readiness, casualty care, and patient evacuation based on the global posture of the Defense Health Agency and United States Transportation Command?

Desired Endstate. A Marine Corps sustainment web that is integrated with the JLEnt and includes: a) a logistics laydown that assures sustainment of stand-in forces; b) a MCOIB agile enough to maintain high equipment readiness of the force; and c) a GPN that assures global responsiveness.

OBJECTIVE 4: MAKE THE INSTALLATIONS READY FOR A CONTESTED ENVIRONMENT

As our Service manager of installations, Marine Corps Installations Command (MCICOM) promulgates Service-level policies governing installations and facilities while providing training and operations support, logistics, information technology services management, facilities support, installation protection, command and staff support, and community services. This is a global mission that spans 25 Marine Corps installations and includes: 25,197 family housing units; 82 mess halls; 28,745 buildings on 2.5 million acres; 36 runways across 10 airfields; and 1,780 ranges and training areas.

As we adapt to the demands of all-domain battlefields, advancements in technology, and the challenges of peer and near-peer competition, our installations will play an even greater role supporting our warfighting concepts than in recent past. Smart, resilient, networked installations will provide stand-in forces with enhanced capabilities to recover quickly from attack, persist in contested spaces, and sustain distributed formations across multiple axes.

While the MCILE defines the aimpoint — the specific installation infrastructure and services required by the future force — installation master plans provide the detailed practical path forward to achieve installation-related infrastructure modernization efforts. MCICOM's most critical responsibility will be aligning installation management and support efforts to the critical requirements of the future force, ensuring we build the resiliency necessary to defend against current and future threats. To focus on FMF readiness and warfighting capability, we will plan installation management actions and resource allocations with the filter of mission assurance to build resiliency and ensure continuity of operations.

Due to the emerging and expanding threats facing our installations, we must ensure force protection efforts enable continuity of operations, protection and safety of our families, and our forces to meet operational requirements. This will include a full review of existing plans, to include identifying gaps between current installation capabilities, capacities, and C2. We will identify solutions for any identified deficiencies.

BUILD RESILIENCY IN A CONTESTED ENVIRONMENT

Supporting the FMF and future force means our installations, infrastructure, and services must be adaptive and resilient. This means they can prepare for, respond to, and recover from all types of hazards and threats, including destructive weather, effects of climate change, cyber intrusion and attacks, and kinetic strikes.

Encroachment, environmental concerns, energy requirements, and effects of climate change are all factors that impact our installations' ability and capacity to meet the training and operational needs of the future force. In light of these facts, we will need to continually improve our energy resiliency for mission assurance aboard installations.

Bearing in mind development constraints as well as other environment planning and compliance challenges, MCICOM will ensure that currently available training areas and ranges are preserved and modernized as necessary to support the evolving training requirements of the future force.

REVIEW THE DISTRIBUTION CAPABILITY OF INSTALLATIONS

To intelligently disperse Marine Corps capabilities in support of force generation activities and to support employment of the force in contested environments, we will need to complete a top-down review of where capabilities are positioned and services are provided across the globe. Given the emerging threats of peer and near-peer competitors, some capabilities are vulnerable in their present location or posture and may need to be repositioned according to the principle of avoidance articulated in *A Concept for Stand-in Forces*. Meanwhile, other capabilities may need to be repositioned forward to metaphorically move the factory to the frontline. This will allow us to leverage technology like adaptive manufacturing, reduce transportation cost and time, and create resilient supply webs.

IMPLEMENT FORCE DESIGN

Our installations and military construction (MILCON) planning have not kept pace with the rest of the Service's FD2030 efforts. The new and updated equipment sets and weapons systems we have acquired through modernization require updated, expanded, enhanced, and/or new facilities, training areas, and ranges. These changes will require additional resources to ensure

we can house, maintain, and train on them. Examples include: training areas to support extended range missile systems, ranges capable of supporting all-domain operations, storage for munitions, maintenance areas for advanced weapons systems, and additional secure facilities for sensitive compartmented information.

MCICOM will support the MCILE by developing installation capacity and capabilities that contribute to current and future naval and joint distribution networks. New organizational structures and equipment sets will require MCICOM to plan and program for modernization of relevant installation infrastructure through recapitalization, MILCON, and planned and preventative maintenance. This includes supporting MARCORLOGCOM and MCOIB modernization. We will also be prepared to support the requirements of the Fleet Readiness Centers so essential to aviation readiness.

ENABLE FMF READINESS

MCICOM will continue to support force generation and warfighting readiness requirements. This includes critical requirements associated with personnel, supply, maintenance, and training readiness. MCICOM's efforts, from providing services to capital investments, will shift to align with the changing priorities of the FMF over time, linking installation readiness to our tenant's critical requirements. However, readiness must balance unit training requirements with the establishment of a GPN. We need to explore innovative approaches to storing equipment to facilitate rapid deployment of forces.

MCICOM supports all aspects of Service-level training via both infrastructure and services. As directed in T&E2030, MCICOM will support TECOM's efforts to modernize the installations' ability to support the FMF with live, virtual, and constructive training requirements through Project Tripoli. MCICOM will also continue to support CD&I and MCWL's Service Level Experimentation Campaign Plan.

IMPROVE QUALITY OF LIFE TO ENABLE TALENT MANAGEMENT

Our bases serve as the bedrock of support and services provided to our individual Marines and their families. As such, they are a vital component to enabling retention and supporting Service-wide talent management efforts. As talent management efforts drive the Service toward a more mature force, MCICOM will ensure quality of life related services evolve to meet the needs of Marines and their families.

While much of our focus is on retaining the Marine, more than 23,000 civilians are directly involved in providing support to Marine Corps forces, individual Marines, and their families. As we emerge from the pandemic and look toward the demands placed on our installations to meet the challenges of the future, it is clear that retaining and developing our civilian Marines will be critical to mission success.

Our bases are not stand-alone entities; they are deeply intertwined with the hosting towns, cities, and nations. Just as Marine Corps bases provide surrounding municipalities with employment opportunities, economic stability, tax revenue, and other direct federal funding, our bases rely heavily on nearby service providers, locally sourced goods and materials, regional utilities, and civil infrastructure. These communities, their schools, hospitals, housing, and retail services are also home to most of our Marines and their families.

Seeing ourselves as long-term partners with the communities that host our bases and stations, many of which underpin long-standing national relationships, MCICOM will collaborate with federal, state, territory, tribal, and local communities to find mutually beneficial opportunities to strengthen relationships with our hosting communities while meeting the critical readiness and warfighting requirements of the FMF.

Directed Actions

30. NLT 1 May 2023, MCICOM will provide a detailed report identifying resource shortfalls by installation portfolio and by base/station across the FYDP in order to inform program objective memorandum (POM) planning and testimony.
31. NLT 1 May 2023, MCICOM will publish an unclassified Installations Plan (IPLAN) to create a shared understanding of the MCICOM enterprise. This annually updated reference document should mirror the scope and scale of the Aviation Plan (AVPLAN) and provide readers with an understanding of resources framed across time, to include MILCON; facilities sustainment, restoration, and modernization; and, critical services by base/station.
32. Beginning with the development of POM-25, DC, I&L will implement a repeatable, data-informed process for prioritizing resources by region and base/station aligned with the critical support functions they provide to

meet modernization requirements, support FMF and tenant readiness, build resiliency, and enhance Service efforts to retain talent.

33. NLT 1 July 2023, PP&O, in coordination with I&L, will define the role of installations in Service operational concepts and combatant command operational plans, to include defense support of civil authorities.
34. NLT 1 July 2023, DC I&L will study and provide recommendations on how to improve barracks management in order to improve quality of life and provide better-maintained living quarters. This study should compare both contracted and government-led initiatives, like the Navy's Pacific Beacon concept.
35. NLT 1 September 2023, DC, I&L will develop a resiliency assessment and recovery plan by base/station regarding force protection; critical energy and utilities support; airfield operations; training range support; and command, control, and communications.
36. NLT 1 September 2023, DC, I&L will define the direct linkages between installation portfolios and functions and FMF unit readiness and warfighting requirements.
37. NLT 1 September 2023, DC, CD&I, in coordination with DC, I&L, will identify opportunities to accelerate capabilities development by leveraging the installation to provide repetitions in controlled environments and inform the campaign of learning.
38. NLT 1 September 2023, DC, I&L will explore the use of construction-scale additive manufacturing for deliberate, sustainable construction and recovery after attack or a destructive weather event.
39. NLT 1 January 2024, DC, I&L, in coordination with DC, I, will provide a comprehensive assessment of the installation communications grid and cost estimate for modernization in order to support FD2030 and POM planning.

Issues Requiring Further Analysis

- F. Retention. What are the direct linkages between quality of life services for our Marines, Sailors, and their families (e.g., Marine Corps Community Services, healthcare, barracks, housing, etc.) and retention?

Desired Endstate. Marine Corps installations are:

- a. Ready to meet Service-directed requirements in support of FMF operations in a contested environment;
- b. Effectively linked to the requirements of FMF training readiness and are resourced accordingly;
- c. Accepted by the broader naval enterprise as critical to naval campaigning and FMF warfighting;
- d. Contributing to naval and joint force sustainment efforts in a contested environment;
- e. Supporting Service-wide talent management efforts; and
- f. Building effective partnerships with the communities that surround and support our installations.

OBJECTIVE 5: DEVELOP LOGISTICS PROFESSIONALS FOR THE 21ST CENTURY

There is no resource more precious or more critical to the continued success of our Corps than our Marines and civilians. Today, our senior logisticians have a wealth of combat and deployed experience that we must leverage to develop the knowledge and understanding of those who are just now entering our ranks. We have a unique opportunity to adapt their collective experience into future concepts and doctrine, and will do so by incorporating past lessons and best practices into our training and education curricula. While processes and procedures may change, the mission of the people within the MCILE to support and sustain the readiness and warfighting capability of the force under any conditions will not.

TALENT MANAGEMENT

In support of our talent management efforts, leaders across the MCILE will have to reexamine how we identify and retain the right Marines and civilian professionals to enable logistics sustainment operations as well as plan and execute installation management and support. Our enduring objective will be to employ the right people with the right tools to meet the demands of the future force in a contested environment.

Career progression for logisticians also plays a key role in sustaining a ready Marine Corps. We will develop career education and training progression paths to create well-rounded logisticians that understand the

challenges of sustaining forces in contested spaces more broadly. Serving in the FMF alone is not enough for logisticians to achieve this understanding. FMF tours should be complemented by tours at installations and across the JLEnt. We must also address critical billet parity. To attract the talent necessary to create the depth in understanding how to operate in contested spaces, we need to give the same weight to key installations, MARCORLOGCOM, HQMC, and joint billets as we do to critical FMF billets.

TRAINING AND EDUCATION

I&L will continue its partnership with TECOM to construct an enduring method for training, education, and development of active and Reserve Marines, and our civilian workforce. We will leverage joint training, commercial training, and web-based educational platforms to help our personnel become more fluent in joint logistics and better skilled at integrating the logistical capabilities of other services, agencies, allies and partners, and functional combatant commands.

In order to improve organic capabilities and increase capacity for forward, distributed forces without also increasing the footprint, we will need to man units with a balance of specialists and "multi-disciplinary expeditionary logisticians." With that in mind, we are experimenting with merging several MOSs. As an example, we are assessing merging the 2161 (machinist) and 1316 (welder) MOSs, and incorporating techniques for advanced manufacturing, to create a single fabricator MOS.

Going forward, training will emphasize signature management, persistent ISR-T, stand-off weapons proliferation, and limited access to infrastructure and reach-back sustainment capabilities. But this type of realistic, comprehensive training should not be limited to FMF logisticians. As described earlier, the threats to our installations are equally challenging. We will identify those operational tasks to be performed by our bases and stations and build training programs complete with individual and collective tasks, conditions, and standards.

Finally, the MCILE civilian workforce is comprised of some of the best and brightest personnel in federal service. Recruiting, hiring, and retaining the best talent at Marine Corps installations and our maintenance and supply depots is critical to meeting the challenges of operating in an ever-changing environment. We must ensure there are sufficient opportunities to hone leadership skills and develop the necessary talents for individual career development. Each civilian job

series will be reviewed and assessed for potential adjustment to ensure integration and implementation of new processes and technology. Likewise, we will need to improve and expand the competencies of all civilian employees, from entry level to senior executive.

Directed Actions

40. NLT 1 April 2023, CG, TECOM will provide a tentative schedule for updates to Marine Corps Tactical Publication (MCTP) 3-40B, Tactical Level Logistics and MCTP 3-40C, Operational Level Logistics, as well as the development of a MCTP 3-40X, Strategic Level Logistics. These doctrinal publications will be informed by experimentation and operational lessons learned over the preceding three years, the changing character of warfare, advancements in technology, and future force organization, concepts, and capabilities.
41. NLT 1 July 2023, CG, TECOM will review the curricula at Expeditionary Warfare School, Command and Staff College, and the School of Advanced Warfighting to ensure sufficient course work is dedicated to the subject of logistics.
42. NLT 1 July 2023, CG, Marine Air Ground Task Force Training Command (MAGTF-TC) will produce a detailed, unclassified, logistics-centric lessons learned report from recent Service-level force-on-force exercises in order to inform logistics training and educational efforts.
43. NLT 1 July 2023, CG, MAGTF-TC will increase opportunities for evaluating tactical logistics units as part of Service-level training exercises (SLTE) in order to broaden the training audience.
44. NLT 1 July 2023, CG, TECOM will add local sustainment instruction and evaluation to programs of instruction (POI) at Infantry Training Battalion, The Basic School, and professional military education institutions.
45. NLT 1 August 2023, CG, TECOM will develop options to expand participation in Advanced Expeditionary Logistics Operations Course to military professionals outside of the logistics community, as well as sister service and foreign students.
46. NLT 1 September 2023, CG, TECOM will review and update advanced training POIs and curricula across MAGTF-TC to ensure a common understanding of contested logistics across all communities.
47. NLT 1 September 2023, CG, TECOM, in coordination with DC, I&L, will identify opportunities and determine resource requirements for advanced logistics education programs across the JLEnt and in civilian academia.
48. NLT 1 September 2023, DC, I&L will define the scope and determine the resources necessary for civilian training and education to meet the future requirements of the MCILE.
49. NLT 1 September 2023, CG, MCICOM will identify the total civilian personnel (CIVPERS) requirement by installation portfolio and function in order to ensure delivery of the services and infrastructure support required by the future force. Provide P&R a cost estimate to meet the CIVPERS requirement.
50. NLT 1 November 2023, DC, M&RA will identify grade shaping changes to meet the requirements of the future combat logistics battalions.
51. NLT 1 January 2024, CG, TECOM will update the *Logistics Planners Guide* for use by MAGTF and FMF staffs in order to ensure logistics considerations and challenges are fully integrated into staff planning.
52. NLT 1 July 2024, CG, TECOM will review and update training and readiness requirements by MOS/grade to meet the requirements to sustain the future force in a contested environment.

Desired Endstate. Our Marine Corps expeditionary logisticians, Marines and civilians, are trained and educated to contribute to the training and warfighting readiness of the FMF in contested environments. Commanders and operational planners have increased logistical capability to successfully prosecute a naval and/or joint campaign.

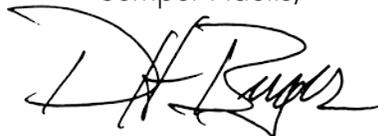
CONCLUSION

Transforming the MCILE is truly a campaign-level effort. As our doctrine states, campaigning is continuous; there is no point where campaign design stops and campaign execution begins. Accordingly, our work across the MCILE will be continuous to support the implementation of force modernization and, ultimately, sustain the future force. Our collective efforts will result in 21st century logistical capabilities prepared to operate across the competition continuum and, in aggregate, contribute to integrated deterrence. We will revitalize and integrate logistics training, education, and doctrine to develop adaptable, critically thinking logisticians who are prepared for the future operating environment.

We will collect assessments of the progress, completion, and continued relevance of the tasks contained in this document bi-annually. Since logistics issues span the purview of many Deputy Commandants, the Director of the Marine Corps Staff will collect the assessments for review. To ensure we are getting the best sight picture, all Deputy Commandants and FMF commanders are directed to prioritize logistics issues in their existing assessment processes. Whether establishing key performance indicators for acquisitions or creating evaluation criteria for operation plans, logistics should be a key assessment measure. Ultimately, our logistics system will be assessed based on Marines' ability to persist in campaigning and win in conflict. We cannot continue to rely on the processes and procedures of yesterday and expect them to meet the challenges and threats of tomorrow.

The logistical challenge in front of us is significant. But the risks of not implementing these changes are clear — the FMF becomes unnecessarily vulnerable, particularly while operating in forward and distributed formations. Transforming our current installation and logistics related capabilities, capacity, and resiliency to support the future force more effectively, while reducing risk to our units, Marines, Sailors, families, and allies and partners is paramount. The time for action is now.

Semper Fidelis,

A handwritten signature in black ink, appearing to read 'D. H. Berger', written in a cursive style.

David H. Berger

General, U.S. Marine Corps
Commandant of the Marine Corps

