

Force Design 2030

Annual Update

May 2022

INTRODUCTION

This report describes progress to date on the United States Marine Corps' Force Design 2030 (FD 2030) modernization effort.

Force Design began in response to known and anticipated changes in the operating environment, many of which were described in the 2018 National Defense Strategy, and affirmed by my predecessor, the 37th Commandant. In his 2019 posture statement to Congress, he described the need to change how the Marine Corps is organized, trained, equipped, and employed in light of the evolving security environment. The changes driving FD 2030, however, originated long before. They are rooted in the 31st Commandant's Hunter Warrior (1997) and Urban Warrior (1998 – 1999) experiments and the 33rd Commandant's Concept for Distributed Operations (July 2005). Each of these helped shape the direction I gave in my Commandant's Planning Guidance (CPG) of July 2019, when I identified Force Design as my top priority. Building on my CPG, I expanded on the need for change in the articles "The Case for Change: Meeting the Principal Challenges Facing the Corps" (Marine Corps Gazette, June 2020) and "Preparing for the Future: Marine Corps Support to Joint Operations in Contested Littorals" (Military Review Online, April 2021), among others. Today, world events emphasize our need to rapidly adapt in order to help the joint force deter, and if necessary, defeat, a peer competitor.

The newly released 2022 National Defense Strategy establishes the importance of the coming "decisive decade," and the need for new approaches to the strategic challenges in our future. The tenets of the strategy—integrated deterrence, campaigning, and build enduring advantages—call for fresh thinking with respect to military capabilities. Due to our close collaboration with the Office of the Secretary of Defense (OSD), Force Design is a modernization effort that, in many ways, anticipated the demands of the strategy. It has been, and will continue to be, characterized by thoughtful balance in addressing the need for rapid change, while understanding and managing the associated risks.

The pacing threat for our Force Design, as directed by the current and two previous presidential administrations, is the Armed Forces of the People's Republic of China (PRC). We are modernizing the Marine Corps using the PRC as a benchmark. However, the Marine Corps

does not have the luxury of focusing on a single threat, to the exclusion of all others, and basing our design on such a narrow point of view. We are building a force capable of executing our concepts, not a force exclusively tailored to them. The Marine Corps remains an expeditionary crisis response force. As I wrote in my CPG, a force composed of highly capable tactical units that can perform combined arms operations at all echelons, enabled by organic air and logistics, is a force that can execute the complex missions defined by our emerging concepts in any potential theater. This remains our overall aim point for Force Design. This report reflects our efforts to modernize, as measured against our directed benchmark, but this modernized force must and will fulfill our crisis response mandate as well.

To reflect FD 2030 progress in previous years, we published updates in March 2020 and April 2021. This year's report explains the current state of our modernization effort by reviewing the progress we have made toward our goals in the past year, providing my direction to the Marine Corps on steps requiring action now, and identifying issues needing further analysis to support future decisions.

This report also summarizes the foundation for Force Design, our Campaign of Learning. The outcomes of its wargames, analyses, experiments, and exercises underpin our investment and divestment decisions, and fully comport with the analytic guidance issued by the Deputy Secretary of Defense. We also take the opportunity this year to highlight how our thinking has evolved after two and a half years.

The report then describes the implications of the above for our objective force and the resulting investment and divestment priorities. As I have stated, I am confident we can achieve the majority of our modernization goals without asking for an increase in our budget topline if we are able to redirect divested dollars toward our priority modernization investments. With the support of Congress, the Office of the Secretary of Defense, and the Department of the Navy, we have made good on this assumption over the past several years and we will need similar support again this year. Similarly, FD 2030 assumes adequate support for its key components such as logistics modernization, amphibious shipping, operational lift, and littoral mobility.

YEAR IN REVIEW

Since our last update in April 2021, Force Design moved forward with the publication of several new concepts, refinement of our organizations, force-onforce experimentation, and the testing and fielding of new systems. This section outlines major highlights in these areas and summarizes progress on actions from last year's report.

The security environment is characterized by proliferation of sophisticated sensors and precision weapons coupled with growing strategic competition. Potential adversaries employ systems and tactics to hold the fleet and joint force at arm's length, allowing them to employ a strategy that uses contested areas as a shield behind which they can apply a range of coercive measures against our allies and partners. Written in response to this environment, the newly published A Concept for Stand-in Forces describes the ways Marines will intentionally disrupt the plans of these potential adversaries and defines Stand-in Forces (SIF) as small but lethal forces, designed to operate across the competition continuum within a contested area as the leading edge of a maritime defense-in-depth. They operate with low signature, are mobile, and are relatively simple to maintain and sustain. The enduring function for SIF is to help the fleet and joint force win the reconnaissance and counterreconnaissance (RXR) battle at every point on the competition continuum. Our recent publication of A Functional Concept for Maritime Reconnaissance and Counter-Reconnaissance describes how the Marine Corps intends to develop needed capabilities in this area. Future publication of A Functional Concept for MAGTF Air and Missile Defense will similarly describe the intended development of air and missile defense.

In the past 12 months, all three Marine Expeditionary Forces (MEF) conducted exercises purposefully designed to refine force employment using emerging concepts like SIF and Expeditionary Advanced Base Operations (EABO) along with newly fielded capabilities. Feedback from the MEFs is a critical element in our historical combat development process and is integral to our Force Design approach today. These exercises had the collateral effect of improving naval integration as the MEFs operated alongside their shipmates in the numbered fleets. In Japan, for example, III MEF exercised with 7th Fleet and our Japanese allies to develop command arrangements needed for Standin Forces operating in a coalition. In California and adjacent waters, I MEF, with assistance from 3d Fleet,

trained 5th Marine Regiment to contribute to sea denial in a maritime littoral environment. This exercise also explored streamlined methods of command and control to complete a digital kill chain from the joint force to Marine units on the ground. On the eastern seaboard from the Florida Keys to the Carolinas, and in Europe, II MEF partnered with both 4th and 6th Fleet to examine innovative naval force reconnaissance and counterreconnaissance constructs, tactics, techniques, and procedures.

The recent activation of the 3d Marine Littoral Regiment (MLR) in Hawaii highlights the pace of progress since April of last year. The live force experiments and limited demonstrations with this new unit will help us refine its design and inform further organizational change. The activation of 3d MLR leverages the return on investment from our divest-to-modernize approach to Force Design, recapitalizing resources to field new formations and capabilities.

Other live force experimentation has focused on infantry battalion modernization and 21st century combined arms. Analysis of multiple events across three infantry battalions from each MEF is providing for a holistic assessment of the strengths and limitations of the proposed design. New capabilities now organic to modernized battalions include loitering munitions, new and enhanced small unmanned aerial systems, tools to help the battalion manage its signature, and the addition of electronic warfare and signals intelligence capabilities. Outcomes from ongoing infantry battalion experimentation will drive recommendations for refinements to the design and implementation of the Service's transition to infantry formations more capable of distributed operations.

Leveraging expertise across the total force, we established the Marine Innovation Unit (MIU), a Marine Corps Reserve formation whose work will complement that of our Marine Corps Warfighting Laboratory (MCWL) by accelerating advanced technology development for the Marine Corps. Reserve Marines in grades sergeant through colonel will be assigned to this unit on the basis of their expertise in areas like artificial intelligence, data science, human systems, advanced manufacturing, quantum computing, autonomy/robotics, space, supply chain management, cyber, synthetic biology, energy and materials sciences, and other technology fields. This initiative allows us to tap the diverse talent

pool in Marine Forces Reserve and this new unit, in collaboration with MCWL, will integrate research from multiple advanced disciplines into Force Design and related efforts.

This year we fielded systems and introduced prototypes across the Marine Air-Ground Task Force (MAGTF). For example, in August during LARGE SCALE EXERCISE-21 in Hawaii, we partnered with the Navy to successfully demonstrate our new Navy Marine Expeditionary Ship Interdiction System (NMESIS), launching two Naval Strike Missiles from a Joint Light Tactical Vehicle (JLTV)-based, Remotely Operated Ground Unit for Expeditionary Fires (ROGUE-Fires) carrier, striking a moving maritime target at over the horizon range. In cooperation with the Strategic Capabilities Office and the Navy, we also conducted a ground launch of a Tomahawk Land Attack Missile mounted on a remotely operated mobile launcher.

We also successfully tested a prototype expeditionary air and missile defense system, the Medium Range Intercept Capability (MRIC), at New Mexico's White Sands Missile Range. Other prototyping efforts accelerated requirements processes and informed solution development in key areas, to include automated recognition of naval targets using small unmanned aerial systems. While the complete inventory is too large to list here, these examples illustrate how our Marines are advancing our capabilities with new systems.

We examined multiple aspects of the MAGTF and emerging concepts through extensive wargaming. Outcomes from logistics-focused games drove elements of our design and Campaign of Learning. Our capstone Service game, EXPEDITIONARY WARRIOR 21, informed the Distributed Maritime Logistics Operations concept currently in development in partnership with the Navy, and shaped our logistics experimentation campaign plan. Both the ENIGMA and EXPEDITIONARY WARRIOR 22 Part I wargames tested concepts for operations in the information environment and 'gray zone' competition below the level of traditional armed conflict. These wargames inform the soon-to-be-published Marine Corps Doctrinal Publication 8, Information, and underpin critical thinking in support of refining MLR design and Infantry Battalion Experimentation.

We completed directed actions and discrete tasks from last year's Force Design Annual Update, to include publication of A Concept for Stand-in Forces, publication of functional concepts for both MAGTF Integrated Air and Missile Defense and multi-domain reconnaissance

and counter-reconnaissance, and development of a program to assess and analyze the full cost of modernization based on planned investments. We moved aggressively on other directed actions with complex interdependencies, such as 2d Marine Division's acceleration of experimentation with maritime, multidomain reconnaissance constructs and activities; an examination of operational logistics that leverages a new Fleet Marine Forces (FMF) Logistics Command; and, generation of new personnel models to mature the force. The progress we are making through each of these longer-term actions is incorporated into our Campaign of Learning, in support of which we published a classified Service Level Experimentation Campaign Plan; an unclassified version will be released in the second quarter of CY 22. Most importantly, the progress we've made has resulted in new capabilities that are already in-demand by combatant commanders. One such example is the creation of Task Force 61/2 (TF 61/2) by the Commander of 6th Fleet.

KEY FINDINGS FROM THE CAMPAIGN OF LEARNING

INCLUDING DIRECTED ACTIONS AND IDENTIFICATION OF ISSUES REQUIRING FURTHER ANALYSIS

This section describes the steps we are taking to deepen the Campaign of Learning, which is the analytic foundation for Force Design. It also provides an overview of the adjustments we are making after more than two and half years of learning. It then articulates the learning points derived since the last report that apply across Force Design as a whole. This section concludes with outcomes learned in major functional areas and the directed actions and issues requiring further analysis that resulted from them. The Deputy Commandant, Combat Development and Integration (DC, CD&I), will continue to track and report progress of these actions and issues.

This past year we invested in the Campaign of Learning itself by taking a more structured approach to collaborating with partners and by applying sophisticated modeling and simulation methods and tools. This is reflected through the refinement and analysis of mission engineering threads we developed in partnership with the Navy. This work included support from Naval Information Warfare Center (NIWC) Pacific and NIWC Atlantic and others, and deepened the analytic underpinning of our investment decisions. Achieving a significant milestone in June, we broke ground on the Marine Corps Wargaming and Analysis Center at Quantico, VA. Once complete, the Center will provide next-generation technologies to help us better visualize the threat environment and maintain competitive advantages over adversaries.

Outcomes from our Campaign of Learning over the past two and a half years caused us to make adjustments in our initial Force Design, particularly in the following areas:

• Our FD 2030 communication has not been effective with all stakeholders. While we are modernizing the Marine Corps using the pacing threat as our benchmark, we have consistently said that a modernized Marine Corps **must** still be capable of performing global crisis response operations. Regardless, we must do better in explaining to all stakeholders the analytic rigor underpinning our Force Design choices, and how a modernized Marine Corps will perform our traditional roles and functions in the future.

- Force Design communications were weighted too heavily toward the MLR. Feedback from FMF exercises has shown that, in most cases, task-organized MAGTFs perform Stand-in Force missions. The MLR is a component of that larger effort.
- Reconnaissance and counter-reconnaissance missions at scale, such as those envisioned against the pacing threat, are MAGTF missions. The MEF is a reservoir of capabilities we will use to task-organize for these missions. Our exercises and the forward deployed use of our concepts repeatedly emphasize this point.
- As we activate 3d MLR and conduct further experimentation, our initial observations linked to A Concept for Stand-in Forces, especially for reconnaissance and counter-reconnaissance, indicate we focused the MLR too much on lethality and not enough on sensing, the ability to make sense, maneuverability, and deception. While our initial assumptions about the value of the MLR to the FMF and fleets were anchored on the enhanced lethality it could provide via long-range fires, further analysis demonstrates the even greater value of resilient sensing and enabling of kill chains.
- The size and composition of the infantry battalion remains the subject of continuous experimentation via three battalions—one each from our three Active Component divisions. Our initial planning concluded a reduction from an existing personnel strength of 896 to approximately 735 was suitable and sustainable. Over the previous 24 months, force-on-force experimentation has demonstrated that infantry battalions of 800 to 835 personnel are optimal. We will continue to refine the structure of the infantry battalion through decisions informed by our experimentation.
- As a result of continued experimentation and the refinement of our objective force, cannon battery capacity will be sustained at seven batteries, which is an increase in two batteries over initial plans. Along with the seven High Mobility Artillery Rocket System (HIMARS) batteries, these 14 combined batteries are sufficient to satisfy traditional requirements of a MEF engaged in sustained operations ashore.

- We originally planned to divest three MV-22 medium tiltrotor squadrons (VMMs) from the Active Component, which would have resulted in a total of 14 squadrons of 12 aircraft each. However, detailed analysis demonstrated that 16 squadrons of 10 aircraft each better satisfies joint force requirements and better supports Service needs to organize, train, and equip. In particular, this force structure simplifies the formation of a Marine Expeditionary Unit's (MEU) aviation combat element (ACE). This change is reflected in the directed actions in the aviation section of this report.
- In the preceding two and half years, we learned a considerable amount about how to conduct organizational design. As a learning organization, we also perform internal reviews focused on process improvement. This year we will refine the Force Design process to make it more efficient and to ensure we are prepared to take advantage of major investments, such as our Wargaming Center. Continual improvement in our ability to perform organizational design will make the Marine Corps more agile.

The following learning points apply to Force Design as a whole:

- The value proposition of our newest concepts shifted as we learned more over the past two and a half years, from an initial focus on generating organic lethal capabilities through anti-ship missiles and the aviation combat element of the MAGTF, to a more balanced focus that includes persisting forward in a contested area to win the RXR battle and complete joint kill webs. To be clear, this includes the ability to generate lethal effects, an essential part of what Marine forces must and will provide, but lethal effects are not the only value Marine forces offer the joint force.
- Our force-on-force experimentation, specifically the MAGTF Warfighting Exercise (MWX) and Infantry Battalion Experimentation (IBX), demonstrate that the command and control warfighting function is the first among equals, and getting it right is a prerequisite for the warfighting function integration necessary for all-domain actions.

- Through the lens of all-domain operations, reconnaissance is a function focused on sensing to initiate decisive action. It is entirely consistent with our maneuver warfare philosophy of generating tempo via the ability to rapidly make sense of the operating environment, make decisions more quickly than an adversary, and maintain initiative. Counter-reconnaissance is a function focused on denying the enemy's ability to sense and initiate action, disrupting their plans and kill chains. This is consistent with maneuver warfare as it seeks to disrupt enemy decision cycles and induce friction.
- To persist inside an adversary's weapons engagement zone, our Stand-in Forces must be set and sustained by logistics capabilities designed for distributed operations over long distances in a contested environment.
- Certain capabilities must be organic to our Stand-in Forces, such as organic sensors and long-range precision fires to close kill webs when external capabilities are not present or available.
- Stand-in and crisis response forces need organic air and surface operational and tactical mobility to provide joint force commanders a capability that operates with minimal dependence on theater lift assets.
- Reconnaissance and counter-reconnaissance provided by task organized Stand-in Forces support naval and joint targeting and fires across domains. Stand-in Forces' capabilities increase the survivability and effectiveness of the naval and joint force.
- As a complement to maneuver, deception is a core capability necessary to enhance survivability when operating forward regardless of assigned mission. This will require materiel and nonmateriel solutions, to include a focus on refined tactics and associated training.

We have high confidence in our newest concepts, which continue to be tested through wargames, live force experiments, and exercises with the Navy and our joint partners. They support the conclusions that follow and inform the next steps in our iterative campaign of learning. High confidence does not imply that refinement is not required.

CONCEPTS & WARGAMING

We laid the conceptual foundation for our initial modernization by publishing both The Tentative Manual for Expeditionary Advanced Base Operations (TM EABO) and A Concept for Stand-in Forces in 2021. Now, we will broaden our view and consider how forces outside of a contested area contribute, especially in conflict against the pacing threat, and how a modernized Marine Corps responds to crisis. The Marine Expeditionary Unit (MEU) is central to crisis response. It represents a combat credible and operationally suitable force effective for competition, countering gray zone activities, setting conditions for the joint force, and reinforcing our networks of allies and partners. Further, it packs an all-domain "punch" in conflict. Additionally, the MEU is an essential complement to our Stand-in Forces. Future MEUs must have the right mix of capabilities, which requires laying an updated conceptual foundation for employment in the future operating environment, informed by analysis and experimentation.

The modernization of our conceptual foundation also includes updating our approach to all types of amphibious operations. Existing naval and joint doctrine provide useful definitions but must be adjusted to account for changes in the operating environment and connect to the ideas expressed in our newest naval concepts like Distributed Maritime Operations, Littoral Operations in a Contested Environment, and A Concept for Stand-in Forces. We also must clearly describe how modern amphibious operations increase the options available to the naval and joint force in competition and conflict.

Underscoring the iterative nature of Force Design, our Campaign of Learning necessitates that we update *The Tentative Manual for Expeditionary Advanced Base Operations*.

Directed Actions

 Develop a "Concept for 21st Century Amphibious Operations" to describe the manner in which Fleet Marine Forces conduct the full range of military operations no later than 1 January 2023. The Marine Corps Warfighting Laboratory (MCWL) will publish an article on the subject no later than Fiscal Year (FY) 23 Quarter (Q) 1 to create a shared understanding.

- 2. Publish version two of *TM EABO* by 1 January 2023. MCWL will publish an article on the subject no later than FY23Q1 to create a shared understanding of the revision and any substantive changes.
- 3. Update the Service Level Experimentation Campaign Plan and publish an unclassified version no later than 30 June 2022.
- 4. MCWL will publish unclassified executive summaries of all Service-level war game reports related to FD 2030 no later than 1 November 2022 and make these available on the FD 2030 website. Going forward, MCWL will publish unclassified versions of all Service-level war game reports within 90 days of event completion.

Issues Requiring Further Analysis

- A. <u>MEU Modernization</u>. Continue to explore concepts for modernizing the MEU.
- B. <u>Logistics</u>. In accordance with recommendations originating from the ongoing MWX, the Service must develop concepts for resilient logistics webs in a contested environment with multiple options for support, to include distribution networks, and multi-domain delivery methods.

COMMAND AND CONTROL, INTELLIGENCE, AND OPERATIONS IN THE INFORMATION ENVIRONMENT

Campaign of Learning activities, such as our ENIGMA and EXPEDITIONARY WARRIOR 22 wargames, revealed gaps that inhibit the FMF's ability to conduct steady-state RXR campaigning to enable MAGTF, naval, and joint awareness, threat characterization, and posture. These shortfalls are currently addressed via *ad hoc* relationships and networks, but such informal solutions result in episodic, inconsistent engagement and actions. Therefore, our command arrangements require examination to ensure that our Stand-in Forces remain in a readiness posture that does not require changes in command and control or structure to rapidly transition from competition to conflict.

We believe that in a conflict with a peer adversary, first moves may be in space and cyber, so we must enable our Stand-in Forces, MEUs, and MEFs to integrate with, and have access to, those capabilities now. We can streamline and simplify much of the coordination burden at the headquarters level if we re-organize and re-focus some of our structure, which we will do in the future with the creation of the Marine Corps Information Command (MCIC).

Our Campaign of Learning confirms what we have long known intuitively: access and placement matter. Assigning liaison officers within naval, joint, combined, and interagency organizations—those with authorities and permissions—will allow us to gain kill web tempo and agility.

Finally, we have learned from our experiments and exercises that we need to adjust how we perform command and control (C2) across the MAGTF to achieve integration with naval and joint forces. Our aviation C2 organizations and tactical employment concepts are well-defined and recognized by the joint force. We are considering new C2-specific formations using our approach to aviation C2 as a model. Accordingly, we will leverage Marine aviation C2 in our Campaign of Learning to further inform and develop command and control across the MAGTF; related C2 directed actions and issues requiring further analysis are captured in the aviation section of this report.

Directed Actions

- 5. Develop a concept of employment for Service assigned and Service retained forces to integrate and campaign within the global and theater response frameworks.
- 6. Develop a deployable 3-star Joint Task Force Headquarters (JTF HQ) in II MEF.
- 7. Develop options for the creation of a Marine Corps Information Command (MCIC).
- Establish a restricted officer Primary Military Occupational Specialty (PMOS) for a Command and Control Interface Control Officer.
- 9. Establish an Air Control Company in 3d Marine Aircraft Wing (MAW) to support experimentation.
- 10. Wargame a MEF construct supported by a multi-domain C2 brigade.
- 11. Revise command and control and planning doctrine to reflect gaps in multi-domain operations.

Issues Requiring Further Analysis

- C. <u>Reserve Augmentation</u>. Conduct a study of total force integration (Active Component/ Reserve Component) approaches and alternatives to determine Reserve augmentation requirements for a deployable, 3-star JTF HQ in II MEF.
- D. Reconnaissance and Counter-Reconnaissance (RXR). Identify critical dependencies, including, but not limited to: command arrangements, staff functions, and certifications that will enable the Service to conduct reconnaissance and counter-reconnaissance operations, and activities and investments with the fleet, joint force, interagency, and allies and partners below the threshold of armed conflict.
- E. Reconnaissance and Counter-Reconnaissance Liaison Officers (RXR LNO). Recommend placement of organic Marine Corps enablers and liaison officers needed to enable enduring reconnaissance and counter-reconnaissance and rapid integration of Marine capabilities into theater crisis response.
- F. Multi-Domain C2 Command or Brigade. Conduct a more thorough analysis of this recommendation, create a notional table of organization (T/O) and table of equipment (T/E), and present findings and recommendations to DC, CD&I.
- G. Operations in the Information Environment (OIE) Doctrine. The Service lacks adequate OIE doctrine or training standards. This leads to a lack of awareness, education, and experience often reflected in commanders and staffs grappling with operating in a multi-domain environment and applying and integrating information capabilities at MWX. DC, I and TECOM must build upon the foundation created by MCDP 8 and produce the requisite doctrinal foundation for OIE.

MANEUVER, MOBILITY, AND FIRES

Maritime maneuver is of supreme importance. Littoral mobility remains a significant gap, a conclusion repeatedly validated across Campaign of Learning activities. Our Stand-in Forces require organic operational mobility, such as the Light Amphibious Warship (LAW), plus a mix of crewed and uncrewed vessels to support multi-domain reconnaissance and scouting, counter-reconnaissance and screening operations, small unit maneuver, and lethality in support of sea denial and sea control. Littoral mobility requires further analysis to develop a better understanding of the specific capabilities needed by maneuver elements of the MAGTF, to sustain Stand-in Forces by connecting with the Navy's Combat Logistics Force, provide small craft for local littoral mobility, and more. This will require a mix of vessels that are complementary to, but different from amphibious warships. We must conduct a thorough analysis to understand and resource all aspects necessary to realize these capabilities, to include manpower and training, as we consider resourcing these as requirements.

FD 2030 envisions the activation of MLRs in III MEF only. While we do not currently plan to create MLRs in I and II MEF or Marine Forces Reserve (MARFORRES), every MEF and MARFORRES will modernize through our Force Design process, to include developing the ability to conduct tasks associated with sea denial.

The activation of 3d MLR and associated experimentation plan will help us answer a series of questions within Force Design. These questions include whether a modernized infantry battalion is the correct base unit for the MLR, or whether the base unit should be a reconnaissance or artillery battalion; the correct amount and type of organic sensors needed in the MLR; and the essential tasks for this formation and how those will drive future training and force generation. At present, 3d MLR will maintain an infantry battalion as its base unit to facilitate experimentation. We also expect MLR experimentation to heavily inform the LAW program specifically and operational mobility in general, and help us determine the correct echelon of command in the MEF for the Long Range Unmanned Surface Vessel (LRUSV).

Our light armored reconnaissance (LAR) battalions must transition from their current ground vehicle-centric approach to an all-domain mobile reconnaissance approach. Sole reliance on armored ground vehicles for reconnaissance is too limiting, especially in complex littoral environments. Attributes such as reconnaissance, surveillance, targeting beyond the line of sight, littoral

mobility, and equipment that integrates with special operations and joint forces are needed. Our Campaign of Learning developed some initial options that will serve as the foundation for further experimentation so that we can determine the right mix of capabilities needed at the various echelons in each MEF, as well as the Reserve Component.

The LAR transition will directly affect our Ground Combat Tactical Vehicle Strategy (GCTVS). Choices made in the maritime mobility discussion above will also affect the GCTVS, as will its integration with our uncrewed systems roadmap. We must continually refine this strategy to ensure it is operationally suitable and logistically supportable.

Last year's report reflected our prioritization of fire support, to include long-range precision fires and organic precision fires for our infantry battalions. These systems are beginning to enter the inventory, and experiments and exercises with them are revealing their strengths and limitations. To ensure our updated approach to fires leaves no unnecessary gaps, we will conduct a holistic study of MAGTF fires to enable sound prioritization for future resource decisions and science & technology (S&T) efforts.

Directed Actions

- 12. Provide and sustain bridging solutions for littoral mobility for MLR experimentation and training until the LAW is fielded.
- 13. Experiment with alternatives to the core element of the MLR to determine if the Littoral Combat Team should be a modernized infantry battalion, as currently planned, or another formation such as an artillery battalion or reconnaissance battalion.
- 14. Refine the MLR Mission Essential Task List no later than 1 September 2022.
- 15. Experiment with a maritime reconnaissance/counter-reconnaissance capability in 1st LAR Battalion, guided by the November 2021 Ground Board proposal, to inform the development of a larger capability for the Stand-in Forces.
- 16. Initiate the transition of LAR battalions to mobile reconnaissance battalions aligned with the November 2021 brief to the Marine Corps Ground Board. Start with 2D LAR and

build off their efforts with TF 61/2. Mobile reconnaissance battalions do not have to be mirror-imaged.

- 17. Publish an updated and refined GCTVS that reflects evolving reconnaissance/counter-reconnaissance approaches, particularly the LAR to mobile reconnaissance battalion transition and the Uncrewed Roadmap. Review and validate all assumptions regarding programmed or potential future capabilities, such as the Amphibious Combat Vehicle (ACV)-30 and Advanced Reconnaissance Vehicle (ARV).
- 18. Produce a detailed plan to ensure appropriate sensors are organic to our operating forces. Refine associated acquisition objectives and fielding plans, as necessary.
- 19. Refine Stand-in Force requirements for maritime mobility.
- 20. Conduct a holistic MAGTF fires study to identify any gaps in all-weather fire support coverage. The study will recommend ways to mitigate gaps and will recommend priorities for resourcing solutions and related S&T efforts.

Issues Requiring Further Analysis

- H. <u>Sea Denial</u>. Based on MLR experimentation, identify the appropriate composition of sea denial capabilities in I MEF and II MEF, and support decisions on the activation of MLRs in III MEF.
- I. <u>LRUSV</u>. Based on MLR experimentation, determine the right echelon of command (MLR, Division, or MEF) for the LRUSV and where it is best postured (Hawaii, Guam, Okinawa, or other).

INFANTRY BATTALIONS

Infantry will continue to locate, close with, and destroy adversaries through fire and maneuver, but the range of options for how to locate, how to close, and how to destroy is expanding. These new means give infantry increased lethality and greater range of purpose. Today, the ability of infantry to operate distributed, with reduced logistical footprint and low signature, while employing a wide range of direct and indirect fires, invests this arm with new-found relevance.

Experimentation and training over the past year demonstrates what some in the Service have known since the days of the Hunter Warrior Experiments of the late 1990s—distributable light infantry with access to organic intelligence, surveillance, and reconnaissance (ISR) and strike create advantage and extend the area of influence of every small unit.

Our continued experimentation demonstrates that infantry and LAR battalions that field teams or small units with the organic ability to sense, decide, and shoot have a competitive warfighting advantage on a modern battlefield. If those small units also possess an organic long-range precision fires capability (light miniature attack munitions (LMAMs), etc.), then this shortens the kill chain dramatically and enables that unit to out cycle the enemy. These observations are also being demonstrated on global battlefields for all to see.

Ensuring our small units, especially our infantry squads, are led by the most well-trained and capable infantry Marines has been a goal of every Commandant. Our force-on-force experiments support this goal, which is informing individual and collective training adjustments. Additionally, our experiments have revalidated that unit cohesion creates advantage.

Fielding Multi-purpose Anti-armor Anti-personnel Weapon Systems (MAAWS) and loitering munitions within our small units provide the close-combat lethality enhancements long-envisioned by infantry Marines. While our company commanders will retain access to 60mm mortars for use depending on their estimate of the situation, force-on-force training repeatedly demonstrates the range, precision, and lethality of the new systems outperform 60mm mortars.

Directed Actions

- 21. Experiment with the hunter-killer platoon concept as part of the continuing IBX campaign and provide findings and recommendations at the Executive Off-Site (EOS).
- 22. Experiment with a swarming unmanned aircraft system (UAS) capability in I MEF and provide findings and recommendations at the EOS.

Issues Requiring Further Analysis

J. <u>Snipers</u>. Our initial re-organization of the infantry battalion disaggregated the sniper platoon and added one sniper team per

company. Our force-on-force exercises have identified other options to organize this capability. Continue to evaluate the merits of each possible construct and provide a formal recommendation no later than 1 September 2022.

K. <u>81MM Mortars</u>. At present, 81s are to be dispersed across the battalion with two tubes per company. The battalion commander can decide whether aggregation is required depending on the mission and threat. Some suggest that 81s should be aggregated back into a platoon within H&S Company. Continue to evaluate the merits of each construct and provide a formal recommendation no later than 1 September 2022.

AVIATION

Our aviation combat element remains central to all we do, both as a Stand-in Force and in response to crisis. To that end, we have restructured our MV-22 squadrons to provide adequate capacity for Service commitments, equipped to seamlessly serve as a MEU ACE. We will return to a 16 MV-22 squadron construct with 10 aircraft per squadron. Within the ACE, the Marine Air Control Group (MACG) remains the most capable command and control formation across the MAGTF. Experiments and exercises across all three MEFs indicate there are important efficiencies and synergies to be gained by combining the functions of the tactical air operations center and direct air support center into a single Multifunctional Aviation Operations Center. Also, the capabilities provided by the Common Aviation Command and Control System, especially its ability to communicate with joint systems, such as Link 16, have been used to integrate all elements of the MAGTF into the joint fight. We must benchmark the functions provided by the MACG to inform and improve an increasingly complex solution to support the MEF. A first step is to resource the technical expertise to manage network architectures across the MEF with the stand up of a new PMOS for an Interface Control Officer. We will also create an Air Control Company in 3d Marine Aircraft Wing to provide an organization we can use to examine how to apply aviation C2 across the MAGTF.

Our Campaign of Learning indicates we need to understand more clearly how aviation logistics should integrate with our Marine Corps logistics enterprise (MCLE), especially for distribution across large theaters of operation. We also believe we can achieve improved outcomes in aviation by incorporating Reserve Component squadrons into Active Component air groups, and will conduct limited experiments to test this premise.

Our Campaign of Learning also indicates that our future uncrewed aviation capabilities must expand and increase dramatically. While we stand up MAGTF Unmanned Aerial System, Expeditionary Aircraft (MUX) and Medium Altitude Long Endurance (MALE) unmanned aerial vehicle (MUX/MALE) capability in our Marine Unmanned Aerial Vehicle Squadrons 1, 2, and 3, our next set of uncrewed capabilities will focus on logistics, manned/unmanned teaming, and higher end tactical systems. This approach will be informed by the significant experimentation and prototyping that has already begun, and as reflected in our recently drafted Uncrewed Roadmap.

Directed Actions

- 23. Incorporate the aviation-specific components of the Service's Uncrewed Roadmap into the Aviation Plan.
- 24. Reorganize our tiltrotor capacity by transitioning from 14 squadrons of 12 aircraft each to 16 squadrons of 10 aircraft each.
- 25. Perform Active Component/Reserve Component integration proof of concept in 2d MAW by incorporating VMM-774 into an Active Component Marine Aircraft Group in FY 23.
- 26. Publish unclassified aviation threat and future operating environment assessments in order to create a shared understanding with external stakeholders and assist decisionmaking.
- 27. Conduct a formal review of the Marine Aircraft Wing T/O and Marine Aircraft Group HQs staffing and training as a battle staff, and adjust training accordingly.

Issues Requiring Further Analysis

L. <u>Aviation Logistics</u>. Analyze naval aviation supply and distribution mechanisms for potential incorporation into our ground logistics solutions.

LOGISTICS

The challenge of providing distribution and sustainment in the context of our emerging concepts makes logistics the pacing function for both modernization and operational planning. Logistics will be contested—in some respects, it is being contested now—by peer and near-peer competitors, along the entire length of the supply chain. Thus, over the past two years, our Campaign of Learning closely examined our logistics enterprise. To modernize the force, the MCLE must adapt to balance priorities and resources to set and sustain the MAGTF, while delivering adequate readiness levels. Logistics modernization requires a critical assessment of material readiness and the MCLE's force posture, sustainment models, and C2 arrangements.

We need systemic change in logistics. Planning teams have developed potential solutions that support our emerging concepts, but much more work remains. Some recommendations are decision ready, while others require further analysis and experimentation that is central to the Service Level Experimentation Campaign Plan.

Directed Actions

- 28. Implement a Service-Level Centralized Inventory Management Policy to better leverage demand planning and predictive forecasting, to create flexibility, and to provide greater material readiness outcomes.
- 29. Develop and implement a revised Servicewide equipping strategy, which divests excess inventory and properly sizes the Service against future force demands.
- 30. Establish 18 multifunctional combat logistics battalions, two distribution support battalions, and two material readiness battalions. The multifunctional combat logistics battalions will serve as the base logistics combat elements for the MLRs, MEUs, and other crisis response forces. The multifunctional combat logistics battalions may be task organized with additional capabilities, based on unforeseen operational demands.
- 31. Publish a Marine Corps Installation Support Plan (ISP) incorporating, as appropriate, regional installation support plans produced over the past 12 months, no later than 1 October 2022. This document is intended to be the installations' equivalent of the Marine Corps Aviation Plan.

Issues Requiring Further Analysis

- M. <u>Command Relationships</u>. CD&I will evaluate the merits of a potential command relationship adjustment for CG, Marine Corps Logistics Command (LOGCOM) and make a formal recommendation to the Commandant of the Marine Corps (CMC) no later than 1 July 2022.
- N. <u>Command Relationships.</u> CD&I will examine command relationships for material readiness battalions to determine how to embed LOGCOM capabilities in those battalions to best support the MEFs.
- O. <u>Logistics Modernization</u>. We will continue to execute the logistics portion of the Service Level Experimentation Campaign Plan to determine if the proposed Marine Logistics Group (MLG) re-organization is sufficient to meet operational requirements. These efforts will include experimentation to refine multifunctional combat logistics battalions and MLG functional battalions, and to provide implementation recommendations for the FMF Logistics Command, advanced base concept, pioneer battalion, and expeditionary medical modernization proposals. Provide an in-stride update on FY22 logistics combat element (LCE) experimentation plan findings at the General Officer Symposium (GOS).
- P. Positioning. The characteristics of the future operating environment, combined with imperative to maintain a globally employable force at the speed required to maintain the initiative, requires a holistic examination of our afloat and ashore prepositioning construct. Conduct the necessary planning to develop, resource, and implement a Service-directed Global Positioning Network (GPN) as an integrated afloat/ashore capability enabling day-to-day campaigning, rapid response to crisis and contingency, and deterrence.

TRAINING & EDUCATION

Some of our best insights were provided by the FMF as they teamed with their shipmates in the numbered fleets to experiment, train together, and even employ select concepts and capabilities in deployed environments. Realistic training is driving change across the FMF and improving Navy-Marine integration. Marines are attending Navy training schools to be certified to perform naval tasks such as fire support at sea. Navy units are experimenting with Marine methods, such as the use of low bandwidth/low signature command and control. Fleet units are participating in naval exercises that train Marine Corps units to contribute to sea denial during pre-deployment rehearsals focused on multiple theaters. Navy units are integrating Marine aviation and ground units into undersea warfare exercises. We are also learning how Stand-in Forces' ability to counter high value adversary aviation assets with the right mix of integrated air and missile defenses and sensor cueing is essential to supporting naval maneuver. Numbered fleets recognize, value, and are engaged in exercises and activities tied to Marine Corps modernization. For example, Exercise STEEL KNIGHT, taking place later this year, will include coordinated operations between Marines in the littorals and a Carrier Strike Group at sea. Fleet Sailors and FMF Marines are teaming together to develop solutions for operational and tactical problems.

Our Campaign of Learning helped us recognize that our current range and training infrastructure does not adequately support the combined-arms integration of the new systems we are fielding, such as expeditionary long-range precision fires, loitering munitions, unmanned systems, and electronic warfare capabilities, among others. It also revealed challenges we face with environmental and other local governmental policies and restrictions both in CONUS and overseas. To address this, we initiated "Project Tripoli," which will create a comprehensive venue to train in all domains using state of the art and emerging systems and capabilities. It will build readiness across all echelons of command and throughout the MAGTF and provide venues for experimentation with new technologies and concepts. This live virtual and constructive training environment (LVCTE) will provide the architecture to integrate and render real-time data from instrumented ranges, forceon-force training aids and devices, simulators, and simulations across a deliberately provisioned training network that enables connectivity and interaction across globally disparate training sites.

Directed Actions

- 32. Implement Project Tripoli and provide initial assessments to include identification of any challenges to the CMC no later than 1 September 2022.
- 33. Expand OIE and multi-domain operations instruction in formal professional military education.
- 34. Publish an unclassified MWX report on observations, conclusions, and recommendations from the previous 24 months of force-on-force experiments no later than 1 August 2022.
- 35. Revise MCWP 3-01, Offensive and Defensive Tactics, in accordance with the previous 24 months of lessons learned from MAGTF-Training Command and publish no later than 1 January 2023.
- 36. Publish a doctrinal publication on small unmanned aerial systems (SUAS) no later than 1 April 2023.
- 37. Publish a doctrinal publication on OIE no later than 1 April 2023.
- 38. Create the simulation support necessary for staffs to practice operations in a multi-domain environment.
- 39. Rewrite MCDP 1-0, Marine Corps Operations, to update foundational guidance on Marine Corps actions and activities, and publish no later than 1 April 2023. MCDP 1-0 will provide actionable direction on how an updated tactical system, operating across all domains, enables effective, global operations across the competition continuum. It will serve as the link that ties Marine Corps warfighting philosophy to methods and approaches necessary for success in changing warfare conditions and will orient institutional, training, and education support structure on the people and systems necessary to support and evolve the all-domain, tactical system.
- 40. Review the period of instruction at Expeditionary Warfare School, Command and Staff College, and the School of Advanced Warfighting, as well as MAGTF Staff Training Program instruction, and identify ways to incorporate all domain operations in both education and planning.

Issues Requiring Further Analysis

- Q. <u>Tactical Logistics</u>. Identify ways to increase Service-led training opportunities that employ all functions of tactical level logistics, and connect to operational logistics.
- R. <u>Combined Arms Integration</u>. Analyze the training and education requirements needed to perform the combined arms integration of newly and soon to be fielded systems across all domains, to include environmental and electromagnetic spectrum considerations.
- S. <u>Training Ranges</u>. Analyze the range, training area, and airspace requirements needed to perform distributed operations as described in our emerging concepts such as A Concept for Stand-in Forces and The Tentative Manual for Expeditionary Advanced Base Operations.

TALENT MANAGEMENT

Capitalizing on a decade's worth of studies, books, reports, and academic articles on military personnel reform, we published Talent Management 2030, a report that directs the redesign of our seven-decade old personnel management system to meet the needs of a modern Marine Corps based on our Force Design 2030 vision. We established a Talent Management Strategy Group to further refine and implement the ideas contained in Talent Management 2030. We conducted a Talent Management Integrated Planning Team to orient all elements of HQMC to the problem set and to organize for the work ahead. While some of the ideas contained in Talent Management 2030 will be implemented over a period of years, many initiatives and investments are ready now and will be aggressively pursued. Input from, and outreach to, the fleet will be vital to modernizing our systems, as will synchronizing the efforts of our recruiting, training and education, and manpower enterprises.

Directed Actions

41. Provide the CMC with a plan to rebalance recruiting and retention no later than 1 July 2022. To change the "recruit and replace" paradigm, we will implement measures to professionalize our career retention force and further incentivize retaining our most talented Marines. This will allow us "retain and invest" in our most valued asset—Marines.

- 42. Achieve greater average time in Service and thickening of the E-4 to E-7 ranks to support a more mature force, while not disadvantaging or disincentivizing the most talented Marines—who must be allowed to move as rapidly as their talents dictate. Driven by the changes from Force Design, certain communities will require more senior ranks in certain formations. This will allow us to mature the force and meet the aspirations of Force Design.
- 43. Develop a total force "hire to retire" system of modern tools. We will pursue digital modernization of our existing manpower management systems to achieve greater transparency, fidelity, and analysis of manpower data. This will allow us to better match Marines' talents with Service requirements.
- 44. Provide the CMC with options to reduce first term attrition no later than 1 August 2022.

Issues Requiring Further Analysis

- T. <u>Career Paths</u>. Analyze multiple paths to successful careers for our Marines that will balance retention goals with the needs of the Marine Corps and aspirations of Force Design 2030. Provide findings and recommendations to the CMC no later than 1 January 2023.
- U. <u>Quality Spread</u>. Conduct a thorough review of the quality-spread (1/3s model) used at The Basic School for Military Occupational Specialty (MOS) selection. Present findings and recommendations for retention, modification, or replacement at the GOS in late 2022.

IMPLICATIONS FOR THE OBJECTIVE FORCE

As we describe above, our Campaign of Learning identified two broad sets of capabilities required of the Marine Corps. First, it confirmed the enduring need for a force that can respond to both crisis and contingency, addressing a wide range of combatant commander missions worldwide. To that end, our deployed MEUs and CONUS-based forces will remain ready for tasking to address the full spectrum of missions.

Secondly, the Campaign of Learning highlighted the rapidly growing requirement for Stand-in Forces focused on the pacing threat and optimized for campaigning. Stand-in Forces will operate forward, alongside allies and partner, providing persistent RXR, lethal effects, mobility, and command and control in a distributed maritime environment.

III MEF: Optimized as Stand-in Forces in the first island chain, with an enduring function to help the fleet, joint, and combined force win the maritime reconnaissance and counter-reconnaissance battle. Underpinned by maritime mobility, III MEF secures key maritime terrain, gains and maintains maritime domain awareness, and maintains U.S. security guarantees through a persistent, forward-deployed posture that helps defend U.S. interests and support allies and partners. These partnerships are vital in presenting a united front to deter malign actors. In the event of escalation, this force fights to support sea denial and to enable naval and joint force access and targeting to counter Chinese aggression.

Key aspects of III MEF

- In general, III MEF is deployed forward in support of Indo-Pacific Command's (INDOPACOM) campaigning objectives.
- Employs Stand-in Forces capabilities, as they become available.
- Provides the 31st MEU as a ready, mobile force with its associated Amphibious Ready Group (ARG).

I MEF: As our largest Marine Expeditionary Force, it provides significant capability postured to support the Indo-Pacific while preserving capability and capacity to respond to the full range of crisis response missions the President may direct. I MEF retains this capacity and crisis response capabilities to enable us to refine our organizational design as we continue to learn about the future operating environment and evolving threats.

Key aspects of I MEF

- Retains its capability as a MAGTF warfighting headquarters.
- Capable of providing a persistent Southeast Asia MAGTF, with a sea denial capability, operating out of Darwin, Australia, with a rotational force campaigning in support of INDOPACOM objectives.
- Provides MEUs as ready, mobile forces with associated ARGs.

II MEF: As a key part of our Service retained forces, develops a 3-star, JTF-capable headquarters, purpose built for global crisis response operations. This force will be persistently active across national, joint, and allied networks, with an established globally integrated response capability.

Key aspects of II MEF

- Provides a 3-star, JTF-capable headquarters built for global crisis response operations.
- Capable of providing MAGTFs with sea denial capability.
- Provides MEUs as ready, mobile forces with associated ARGs.

Marine Forces Reserve (MARFORRES): MARFORRES is deliberately aligned with II MEF as part of the Service retained global crisis and contingency response force outside of INDOPACOM. MARFORRES will remain focused on providing specialized and general purpose forces in support of combatant commander requirements.

Key aspects of MARFORRES

- Aligned with II MEF and capable of augmenting a 3-star, JTF-capable headquarters.
- Provides access to advanced disciplines through MIU.
- Provides surge support, as required.

PRIORITIZED INVESTMENTS AND DIVESTMENTS

Through our "divest-to-modernize" approach, we deactivate legacy formations and retire systems that are less relevant to create new capabilities designed for success in today's operating environment. While we have maintained steady progress in this effort, more work remains to be done.

Last year, I directed the Deputy Commandant for Programs & Resources (DC, P&R) to develop program assessments on key Force Design investments and conduct cost analysis to ensure Force Design executability through the current and subsequent Future Years Defense Programs (FYDP). This included items such as the fully burdened costing of the Aviation Plan and GCTVS, among others. This is an essential task for DC, P&R again this year to aid us in achieving the investment and divestment priorities outlined below.

INVESTMENT PRIORITIES

1. Amphibious Warfare Ships

There is no other naval platform that provides more flexibility or the ability to operate in a greater diversity of mission sets than amphibious warfare ships. Amphibious warfare ships are one of the cornerstones of maritime crisis response. They persist forward and are globally deployable. A three-ship ARG partnered with a MEU provides a geographic combatant commander with an array of missions across the spectrum of conflict and crisis response. The flexibility of L-Class amphibious ships is also reflected in the need for these platforms to help counter so-called maritime "gray zone" activities and their growing ability to launch uncrewed air, surface, and subsurface vessels.

2. Expeditionary and Seabasing Support Ships

Given our requirements for operational and tactical mobility, we must invest in the littoral maneuver capabilities that will enable the assured deployment and dynamic employment of our forces. In addition to the L-Class ships that are the key to our ability to provide forward-deployed MEUs and to extend influence and combat power ashore, we also require the Medium, Landing Ship (LSM). The LAW program will provide LSM maneuver and mobility for Stand-in Forces campaigning and contributions to integrated deterrence. In aggregate, naval expeditionary force (NEF) formations contribute to a partnered maritime defense in depth and facilitate an integrated kill chain in conflict. While we await the delivery of LSM, which post-dates the planned operational readiness of our

MLRs, we will explore a family of systems bridging plan—including, Expeditionary Transfer Dock (ESB), Expeditionary Fast Transport (T-EPF), Landing Craft Utility (LCU), and leased hulls—that can provide a basic level of mobility. Although not optimal, such vessels will provide both operational capability and a sound basis for live experimentation and refining detailed requirements for the LAW program.

3. Logistics

For the operations contemplated in A Concept for Stand-in Forces, logistics is firmly established as the pacing function. Having studied this closely in our Campaign of Learning, we have identified numerous organizational, procedural, and policy changes that will better enable logistics operations, as well as significant investments required to set and sustain our forces. Key among these is our plan for a GPN: a modernized approach to the prepositioning strategy that has served us well for many decades. While the overall plan will be the subject of additional analysis to refine requirements, some actions can be taken now to establish conditions for fully enabling this critical capability.

4. Sensors

One role for Stand-in Forces will be to collect and share sensor data as part of naval and joint networks. Our MLRs will possess an organic capability to sense the maritime battlespace in order to gain and maintain custody of targets as a reconnaissance/counter-reconnaissance task and to assure their ability to deliver maritime fires, even when the larger sensor network is degraded or compromised. Experimentation with the MLRs will also inform how we modernize the sensor network across the MEF. The MEF will be the reservoir of sensor capability we draw on when we form MAGTFs. To this end, we will invest in multi-domain sensing capabilities, such as sensor payloads for the MUX/MALE platform, passive ground based sensors, and sufficient Ground/Air Task Oriented Radar (G/ATOR) capacity.

5. Lethality and Kill Web Enhancements

Deterrence in competition rests on a credible capability to hold the adversary's high value assets at risk. We will continue to build on our previous investments in the systems that assure the integrity and lethality of kill webs. These include Naval Strike Missiles, sensor feed cross-domain solutions, satellite communications systems, secure position-navigation-timing systems, "Network On The Move" capability, and medium range interceptor systems.

6. Talent Management

To implement the institutional changes described in *Talent Management 2030*, we must modernize the systems that we employ to manage human resources activities. We are funding an overhaul of our information technology tools and analytic systems to create a webbased talent marketplace, decision support tools for promotion and selection, and a digitized reenlistment process. These improvements will reduce the current, antiquated paper-based methods that are unnecessarily costly in terms of time and effort. The efficiencies that we create through this modernization will improve our ability to develop and manage the Marines who will form the bedrock of the many capabilities described in this document.

7. Infrastructure

Our installations are the foundation for our training and for maintaining the readiness of forward-deployed forces. We will seek the most efficient use of our network of bases, in the U.S. and overseas, as we adapt our operations to the new profile to be established in INDOPACOM via the Defense Policy Review Initiative. We will invest in resilience, ensuring that our installations remain fully capable of launching and sustaining the formations executing RXR.

DIVESTMENTS

Our divestments over the past two and half years resulted in \$16 billion for reinvestment. To date, through the extraordinary support of individuals within the Department of the Navy, OSD, and Congress, we have received back every dollar that we divested, which supports our strategy for modernization. This strategy includes divestment of legacy capabilities to either free up structure for higher priorities or to sundown capabilities that are no longer suitable for the current and future operating environment; ideally, our divestments achieve both. We make divestments to generate resources to apply to our modernization goals without requesting an increase to our budget topline. We do not make Force Design-related divestments to pay for external obligations.

To date, we have divested structure and its associated equipment in a fairly balanced manner. For example, we deactivated an infantry regimental headquarters and two infantry battalions. We also deactivated a heavy-lift helicopter and light/attack helicopter squadron, along with some associated command and control and logistic enablers, which reflects a MAGTF approach to these deactivations. In other areas, we are in the process of divesting one set of capabilities in exchange for another

that will be more relevant, such as exchanging cannon artillery batteries for rocket artillery batteries. Our unit deactivations have enabled us to generate resources for modernization and we are beginning to see this approach bear fruit.

Over the past two years, we reduced our end-strength by approximately 7,000 Marines primarily through the kind of divestments described above. In the next year, we will continue our balanced approach and reduce the number of personnel in the Service headquarters, supporting establishment, and component commands by 15 percent.

We will examine the 13,000 Marines that we source to external billets and we will seek to divest of billets that do not contribute meaningfully to important policy issues, resourcing activities, integrated planning with naval, joint, combined, and interagency partners, or completing joint and combined kill webs.

Regular examination of Stand-in Forces and their conduct of reconnaissance and counter-reconnaissance will prompt us to reassess the GCTVS and current and future investments tied to our ground portfolio. While we must retain appropriate ground mobility capabilities and capacities, the principal theater is maritime and our core competency is naval in nature. Heavy ground vehicles do not align with these priorities because they are difficult to transport and operate in the littorals, they require significant quantities of fuel, and they are challenging to maneuver on fragile host-nation infrastructure.

Finally, in some cases it makes sense to transfer a mission set to another Service or agency, using three basic criteria: (1) the mission remains a valid requirement; (2) the mission is not a Marine Corps core competency; and (3) another Service or agency has a better capability. The Chemical-Biological Incident Response Force (CBIRF) is one such capability—originally established in 1995 as an interim solution to fill a capability gap in the Department of Defense (DoD). Over the past two decades, the joint force and other federal agencies have significantly expanded both capabilities and capacities to contend with threats from chemical, biological, radiological, and nuclear weapons. A focus for the coming year will be to coordinate with the Joint Staff and OSD to examine alternatives that deliver an even greater national-level capability at a sustainable readiness level, without unnecessary duplication.

CONCLUSION

As we move aggressively to modernize the force, it is also important to make clear what is not changing. The Marine Corps' congressionally mandated role as a balanced combined arms team that is "most ready when the Nation is least ready," our ethos, our discipline, and our maneuver warfare approach is not changing. We also remain committed to our time-tested ability to task organize for a given mission, forming into Marine Air-Ground Task Forces that draw on the reservoir of capabilities found in our Marine Expeditionary Forces.

What we learned over the past 12 months confirmed what we reported last year: the Stand-in Force is uniquely positioned to enable joint force access and targeting; sense and make sense of the battlefield; and close kill chains, applying lethal fires, when required, to deter or defeat our adversary. Modernization to produce these capabilities also modernizes the MAGTF, which enhances our ability to perform the full range of crisis response missions that Marines have always been called upon to perform. Our partners in the Navy and joint force are increasingly interested in our efforts, as are our allies and partners as they learn more about what our modernization efforts can offer.

As detailed above, after two and a half years we are far enough into our Campaign of Learning to correct and refine some of our initial assumptions. Change of this magnitude is necessarily an iterative process. We also realize that some level of redesign takes place frequently, whether on the scale of producing amphibious warfare doctrine before World War II or advancing counterinsurgency tactics in Iraq and Afghanistan. We need to continually improve how we go about our Campaign of Learning as well.

This past year, we made some of the tough choices modernization requires but there are more ahead. Despite such challenges, I am heartened by the hard work dedicated to Force Design by our Marines, Sailors, and civilians. Perhaps most exciting is the work our Marines in the FMF are doing in partnership with their fleet and joint shipmates to bring our new concepts to life, refine and improve them, and make them better. We need the efforts of all hands to achieve the best organized, trained, and equipped Marine Corps.

Semper Fidelis,

David H. Berger

General, U.S. Marine Corps

Commandant of the Marine Corps

