

PILLAR 4: INFRASTRUCTURE SUSTAINMENT



SECTION 1: PROVIDING CAPABLE BASES AND STATIONS



INTRODUCTION

Logistics is a fundamental element of Marine Air Ground Task Force (MAGTF) expeditionary operations. The MAGTF expeditionary logistics capability supports a balanced, multi-capable force that is integral to the strategic direction described in Marine Corps Vision and Strategy 2025. Marine expeditionary forces are self-contained and self-sustained forces that have everything necessary to accomplish the mission — from individual equipment to expeditionary airfields and medical treatment facilities. These forces are structured to meet a wide range of contingency operations and possess the logistics capabilities needed to initiate an operation, sustain forces, and reconstitute for follow-on missions.

MAGTF Expeditionary Logistics includes the information systems, equipment, and processes to train, deploy, employ, and sustain Marine forces across the range of military operations. Enablers include:

- Electronic Maintenance Support System
- Family of Combat Field Feeding Systems
- Family of Field Medical Equipment
- Family of Power and Environmental Control Equipment

These are key for continuous MAGTF operations on a distributed battlefield. The Marine Corps vision of the future requires fundamental changes in the way we provide logistics support to our MAGTFs.

INSTALLATIONS AND MILITARY CONSTRUCTION

Marine Corps bases and stations represent an irreplaceable national asset today and as far into the future as we can project. They are fundamental to combat readiness, particularly the pre-deployment training, launching, sustaining, and reconstituting of Marine operating forces. In 2025, Marine Corps installations will provide an even higher quality training environment directly supporting the Total Force in Readiness through acquisition and maintenance of essential training facilities. Additionally, those bases and stations are and will continue to be integral to the quality of life of Marines, Sailors, and their families through provision of a range of support facilities and related infrastructure.

The operation and maintenance of these installations, as well as their future development and use, require planning, wise investment, and sound execution. Numerous Corps-wide efforts are underway to ensure Marine Corps installations are ready, responsive, and capable of meeting current and future support requirements.

The Marine Corps has more than \$58 billion and 133 million square feet worth of facilities that are used to train, house, and provide excellent quality of life for Marines and their families. Examples of these facilities are barracks, runways, sewage treatment plants, roads, and electrical lines. These facilities are used to perform mission-essential tasks and must be appropriately maintained. Adequately sustaining facilities is the highest facilities management priority.

The Marine Corps has a multi-faceted Military Construction program that is addressing: baseline infrastructure improvements, operational and quality of life projects at existing installations, and the Defense Posture Review Initiative to move Marines to Guam. The FY 2013 proposal of \$741 million is critical to maintaining and improving installations and providing adequate facilities both in the continental United States and overseas.

INFRASTRUCTURE SUSTAINMENT

Facilities sustainment supports the Marine Corps mission by ensuring facilities are maintained and repaired so that they can effectively be used for their designated purposes. As resources overall and Military Construction funds in particular, become more constrained, the Marine Corps will continue to rely on the sound stewardship of existing facilities and infrastructure to support mission requirements. In FY 2013, the Marine Corps has programmed facilities sustainment funding at 90 percent of the Department of Defense (DoD) Facilities Sustainment Model, resulting in a facilities sustainment budget of \$653 million. Even this relatively strong commitment could result in some facility degradation according to the DoD model. Since FY 2004, the Marine Corps has been able to execute more than 90 percent of the Office of the Secretary of Defense Sustainment Model each year, and it is possible that such opportunities to exceed our initial programming objectives for facilities sustainment will again arise in FY 2013.

INSTALLATIONS ENERGY



The Marine Corps recognizes the operational imperative to address an energy strategy at all levels of leadership and in all theaters of operation, from our “Bases to the Battlefields.” Critical to this is a shared

“ethos” within our force that efficient use of vital resources increases combat effectiveness. We must educate and inform everyone who lives, trains, and works on our installations — energy users — about their daily impact on the energy footprint and then provide them with tools to manage and improve their energy and water use. Awareness starts with an understanding of the value of energy, at home and deployed, and ends with accountability. In the end, we increase installation energy security while reducing the cost of purchased utilities.

The USMC Expeditionary Energy Strategy provides additional guidance and specific actions to implement the strategy. There are five key enabling concepts to implementation: awareness and accountability; measuring and improving performance; energy efficiency as a component of planning; proactive employment of new technologies; and energy security and environmental stewardship. These actions will enable the Marine Corps to implement the Deputies Management Advisory Group strategies to: invest in energy efficiency; develop an energy ethos; and reduce conventional energy dependence.

FACILITIES ENERGY INVESTMENTS

Our investments support enabling concepts by putting metering and meter data management systems in place to make energy usage information available to Marine units on our bases as well as to our facilities managers. We are also making significant investments in basic facilities infrastructure to improve the efficiency of our existing buildings and the energy consuming systems in them. New construction is efficient and cost effective to meet requirements for energy efficiency and sustainability. Installation Commanders will make operational improvements as appropriate using improved information on energy use. These efforts will provide a comprehensive approach for achieving energy efficiency standards and goals.

We are partnering with private companies to provide secure, cost effective, renewable power taking ad-

vantage of incentives available to our private partners, which allows us to meet renewable energy mandates. Where practical, these efforts will improve energy security for our installations and the country by reducing reliance on foreign energy sources.

GARRISON MOBILE EQUIPMENT (GME)

GME provides commercially available equipment supporting installation transportation requirements such as transportation, firefighting, rescue, construction, and material handling. The fleet includes over 14,000 vehicles.

The Marine Corps has an aggressive program for petroleum fuel reduction and conservation in the GME fleet. The Service repeatedly exceeds the requirements of the Energy Policy Act of 1992 Alternative Fuel Vehicle acquisition requirements and has been a leader in the Department of Defense and other Federal agencies in the adoption of efficient vehicle technologies and the use of alternative fuels, including electricity, E85, compressed natural gas, hybrids, biodiesel, and hydrogen.

RANGE MODERNIZATION/ TRANSFORMATION (RM/T)

DESCRIPTION

The RM/T program modernizes major Marine Corps live training ranges with a dynamic training system capable of real-time and post-mission battle tracking, data collection, and the delivery of value-added after-action reviews. Interface with installation command and control training centers — including the Battle Staff Training Facility, Combined Arms Staff Trainer, and Battle Staff Simulation Center — will facilitate the production of multiple scenario events that deliver relevant and realistic training. Integrating live and simulated training technologies, the fielded capabilities actively enhance live-fire, force-on-target, and force-on-force training through extensive after-action

reviews with ground-truth feedback, realistic representation of opposing forces, and enhanced range and exercise control capabilities.

OPERATIONAL IMPACT

RM/T aligns Marine Corps live training with the tenets of Training Transformation–Joint National Training Capability and Joint Assessment and Evaluation Capability. Instrumentation allows service and joint virtual and constructive forces to interact with Marine Corps live training forces from distributed locations. Eventually expanded to incorporate coalition forces, Marine Air Ground Task Force (MAGTF) live training in open and urban terrain is enhanced by providing capabilities to conduct realistic training. This will exercise all battlefield operating systems, and allow continuous assessment of performance, interoperability and identification of emerging requirements.

PROGRAM STATUS

Sponsored by the Range and Training Area Management Division, Training and Education Command, and managed by Program Manager Training Systems, Marine Corps Systems Command, RM/T is the final integrated design of live training programs of record that upgrade Marine Corps training capabilities in an incremental manner. Development and production efforts are under way for urban training environments, ground position location systems, instrumented tactical engagement simulation systems, opposing force threat systems (including targets), and data collection systems to instrument the live training environment at multiple Marine Corps bases and stations.

A parallel effort is enhancing the RM/T Data Collection System (Marine Corps-Instrumented Training System) to provide interface of Improvised Explosive Device and Joint Counter Radio controlled Improvised Explosive Device Electronic Warfare System surrogate devices with live training audiences and to extend the R/MT Data Collection System functions from exercise design through playback and after-action review.

HOUSING

BACHELOR ENLISTED QUARTERS (BEQ)

Bachelor housing is one of the Commandant's top Military Construction priorities. The Commandant's BEQ Initiative, initiated in 2006, provided more than \$2.7 billion in construction funds to correct barracks space shortfalls, implement renovations, and provide collateral equipment. These initiatives will eliminate existing BEQ space deficiencies and inadequate barracks and achieve the Marine Corps desired "2+0" assignment standard by FY 2014.

The new BEQs will be highly modern living facilities for Marines and Sailors and will include rooms with improved aesthetics and bathroom configurations, enhanced recreation and laundry areas and will be designed to optimize climate control and energy efficiency.

FAMILY HOUSING

By September 2007, the Marine Corps had privatized all family housing units where it was economically advantageous and authorized (for example, military housing legislative authorities prohibit housing privatization at overseas locations). Privatization of housing was done to provide better quality homes, community support facilities, and maintenance services that were not possible through the Military Construction, and Operations and Maintenance processes of the past. In early 2011, there are more than 22,000 units of housing privatized and less than 1,000 Marine Corps-owned and -managed units remaining.

The Marine Corps has leveraged private financing to government investment at a ratio of approximately 4 to 1. This has enabled the Marine Corps to quickly and significantly upgrade family housing infrastructure and improve housing management. As a defining metric, the family housing occupant satisfaction levels continue to be much higher than when the housing units were owned by the Service. Housing referral, the process of assisting military families to find housing, is still retained by the government.

Constructing deficit housing will continue through 2014, principally at Camp Pendleton, CA; Camp Lejeune, NC; and Marine Corps Air Ground Combat Center, Twentynine Palms, CA. New units constructed at these facilities will be modern and energy efficient, and will continue to improve the quality of life of Marines, Sailors, and their families.

ENVIRONMENTAL, NATURAL, AND CULTURAL RESOURCES STEWARDSHIP

The Marine Corps serves as custodian and steward of approximately 2.3 million acres of some of the most environmentally sensitive and diverse areas of the country and the world, including large portions of the Mojave and Sonoran Deserts, some of the last remaining sub-tropical rain forest in Asia, and numerous fresh and saltwater waters and wetlands. These lands provide areas where our Marines live and train as well as habitat for an abundance of wildlife species, including 59 federally listed threatened and endangered plant and animal species. These same lands contain a diversity of cultural resources, including archaeological sites; historic buildings, structures, and objects; cultural landscapes and resources of traditional, religious, or cultural significance to Native American tribes or Native Hawaiian organizations. These resources reflect thousands of years of human activity, including

important developments in our Nation's history and the role of the military in that history, and embody our shared historical experiences. Many of our installations are also located in areas with regional air and water quality issues that require the Marine Corps to meet stringent requirements to ensure environmental protection and improvement and mission success.

Effective environmental management of these resources ensures mission readiness by allowing the Marine Corps to sustain and enhance these lands, while protecting the health of our citizens, Marines, and the valuable resources entrusted to us by our Nation. Land is a finite, valuable commodity. Unless properly managed, Marine Corps lands can become damaged to the point where realistic training can no longer take place. Marine Corps use of land must be sustainable so the Marine Corps may use its lands frequently and repeatedly. In addition, the American people have placed intrinsic values on stewardship of natural and cultural resources. These values have been translated into laws requiring the Marine Corps to protect and preserve human health and the environment. In most instances, Federal and state laws and regulations apply to the Marine Corps in the same way they do to our civilian counterparts. Failure to comply with these laws can lead to fines, penalties, and judicial, legislative, and executive decisions denying the Marine Corps access to land for training.