Marine Corps Declares Remaining Marines Involved in Aviation Mishap Deceased

MARINE CORPS BASE CAMP BUTLER, Okinawa, Japan – The Marine Corps has pronounced the five remaining Marines involved in the F/A-18 and KC-130 aviation mishap deceased, the III Marine Expeditionary Force said in a Dec. 10 release. The change in status comes at the conclusion of search and rescue operations.

The next-of-kin for the five deceased Marines have been notified.

“Every possible effort was made to recover our crew and I hope the families of these selfless Americans will find comfort in the incredible efforts made by U.S., Japanese, and Australian forces during the search,” said U.S. Marine Corps Lt. Gen. Eric Smith, commanding general, III Marine Expeditionary Force.

“Our most valued asset is the individual Marine. We remain faithful to our Marines and their families as we support them through this difficult time. We ask for members of the public to please respect the family and allow them privacy.”

The KC-130 Hercules was assigned to Marine Aerial Refueler Transport Squadron 152 (VMGR-152, call sign “Sumo”), 1st Marine Aircraft Wing.

“All of us in the Sumo family are extremely saddened following the announcement of the conclusion of search and rescue operations,” said U.S. Marine Corps Lt. Col. Mitchell T. Maury, commanding officer of VMGR-152. “We know this difficult decision was made after all resources were exhausted in the vigorous search for our Marines. Our thoughts are heavy, and

our prayers are with all family and friends of all five aircrew.”

The F/A-18 Hornet involved was assigned to Marine All-Weather Fighter Attack Squadron 242. The aircraft were conducting regularly scheduled training. It is not confirmed that aerial refueling was ongoing when the mishap occurred.

The Marine Corps rigorously investigates all aviation mishaps to identify the causes, learn from them, and mitigate future incidents. The circumstances of the mishap are currently under investigation. There is no additional information available at this time. The identities of the Marines will be provided 24 hours after next of kin have been notified.

ODU, LAVLE USA Announce New Marine Electric Propulsion Laboratory for Newport News

NORFOLK, Va. – Old Dominion University (ODU) is collaborating with LAVLE USA Inc. to establish a new Marine Electric Propulsion Simulation (MEPS) Laboratory, the university announced in a Dec. 8 release. The $12 million, 22,000-square-foot lab will be built on 1.33 acres in the heart of downtown Newport News, Virginia.

The lab will house state-of-the-art equipment to develop marine electric propulsion, advanced energy storage, autonomous systems and associated technologies to advance marine vessels for military and commercial applications. It will also focus on training the current and next-generation workforce supporting the shipbuilding and ship repair

industry.

ODU President John R. Broderick sees the partnership in Newport News as an ideal opportunity for hands-on learning, particularly in one of the region's key industries.

"The university is excited about this project, which has grown from of our digital shipbuilding initiative and aligns with our partners' collective vision for America Builds and Repairs Great Ships," Broderick said. "It is exactly the sort of collaborative research with which ODU wants to be affiliated – it is cutting edge, makes a significant economic impact to the region, supports the region's military, maritime and industrial bases, and provides hands-on training and education for students, industry and naval personnel."

The lab is expected to create at least 25 high-paying jobs including designers, engineers, programmers, and analysts.

LAVLE will design the lab's engineering and building plans for city approval in the first half of 2019. Construction is expected to begin in the summer with occupancy anticipated in summer 2020.

"The advantages of workforce development in Newport News cannot be overstated. In addition to the technical advantages of partnership with ODU and the MEPS Lab, LAVLE USA is extremely excited about the workforce development opportunity where our business will become even more heavily invested. Vessel electrification and hybridization within the region is a critical future market," said Jason Nye, LAVLE CEO.

"We are pleased LAVLE and ODU have selected Newport News as the site of the MEPS Lab," said Mayor McKinley L. Price. "The research and development that will be conducted at MEPS will bring new technology to the commercial and military markets and expand Newport News' role as a center of excellence for maritime innovation and construction."

“The city and EDA are excited to host MEPS,” said Florence G. Kingston, the city’s director of development and secretary/treasurer of the EDA. “We have been impressed by the entrepreneurial approach LAVLE and ODU have displayed during the site-selection process for the lab.”

Marine Corps Officials Look to Micro-Grid to Help Offset Hike in F-35 Energy Costs

SAN DIEGO – The F-35 Lightning II jet will hike Marine Corps Air Station (MCAS) Miramar’s utility costs by 150 percent compared to legacy F/A-18 Hornets, an expense driven by greater power requirements to maintain and operate the highly complex, fifth-generation aircraft, a senior official told a group of energy officials.

But an expanding micro-grid and alternative energy projects could take a bite out of that bigger bill when the F-35 comes online by 2020, Col. Charles B. Dockery, the MCAS Miramar commander, said at a briefing Dec 3.

“We know already our F-35 hangars are burning about 150 percent more energy than the standard Hornet or Harrier hangar that I grew up in, so that’s a concern,” he told California Public Utilities Commission and California Energy Commission members who joined state, city and energy firm representatives for a two-day conference at the San Diego base.

Existing, older hangars can’t fully support the modern, multimission joint strike fighter, which requires hangars with upgraded electrical support. The Marine Corps is in the

process of retrofitting, building or planning for hangars to support the F-35 at its fixed-wing air stations, including Yuma MCAS, Arizona, and Beaufort MCAS, South Carolina, that house the first F-35 operational and fleet replacement squadrons.

The F-35's advanced electronics, navigation, avionics, communications and weapons systems are designed to be a leap in technology and combat power, but the jet is a power hog of sorts when grounded. Compared to legacy aircraft, it draws on more power for maintenance checks, repairs and operations when on the apron or inside hangars, so these must have the proper electrical connections, data networks, communications links, and heating, ventilation and air conditioning systems in aircraft bays.

"There's infrastructure that is required to do some specific maintenance on the lift fan of the aircraft or [that] it requires conditioned air as part of that process," Dockery said, in response to a question about the F-35's increased power support requirement.

"This is a story that's going on across the Navy as we try and rise to this new global power competition," said John A. Kliem, a retired captain and civil engineer and executive director of the Navy's Resilient Energy Program Office.

Miramar's first F-35 hangar is currently under construction and is slated for completion in late 2019. It's one of nine construction projects planned at the air station to support the F-35.

The Marine Corps is buying the single-seat F-35 Lightning II – the F-35B with short-takeoff-and-landing capability and the F-35C for land and shipboard operations – to replace its fleet of Hornets, AV-8B Harriers and EA-6B Prowler jets. So far, the Marine Corps has two F-35 squadrons based at Yuma MCAS and another squadron at Iwakuni MCAS, Japan.

The first F-35C and F-35B jets are scheduled to arrive at Miramar starting in 2020, with Marine Fighter Attack Squadron 314 transitioning from the F/A-18 Hornet to the F-35C and VMFA-225 from its twin-seat F/A-18D Hornets to the F-35B, according to the 2018 Marine Aviation Plan.

Dockery, a veteran F/A-18 naval flight officer, said energy costs for 2020 "is always in the back of my mind." It's among several energy-related and budgetary challenges the air station faces as it looks to stay capable, relevant and modernized to support operational forces.

Two-thirds of the Marine Corps and Navy's air-to-air and air-to-ground and live-fire training ranges are located within one flight's distance from Miramar, located in northern San Diego. That location makes Miramar critical to support military training and project joint forces across the Indo-Pacific region. "We help 3rd MAW [Marine Aircraft Wing] project their aircraft … so they can maintain their ready and lethal force to deploy," he said.

Just last year, utility costs forced Miramar, headquarters of the 3rd MAW, to shift $1.5 million to cover its utility budget, Dockery said. "I don't see that changing through FY19."

To add to that worry, expected cuts coming in the next Department of Defense's budget, as well as shrinking Navy capital funding, could lead to more belt-tightening moves in the fiscal 2020 budget. That outlook may worsen in the face of likely higher energy costs, a trend of climbing rates that affect all military installations. This is compounded by aging installation infrastructure.

"We haven't seen a lot of spending increases on the installation side," said Dockery. "We are constantly almost doing triage to make sure we are fixing the right things on time."

But Miramar officials hope that the Navy and Marine Corps' investments in renewable, "green" energy innovations, along with more efficient fossil-fuel systems, will offset rising costs, including tapping into landfill gases for electricity and beefing up its micro-grid.

"We have some opportunities out there … that's not only going to keep my costs down but is also going to make me energy resilient," Dockery said.

A $20 million investment by the Defense Department is helping help shore up that resiliency, officials say.

In recent years, Miramar demonstrated a micro-grid to help find ways for installations to become more energy efficient and build energy resiliency to reduce costs and enable continued operations when the power grid goes down.

"If everything goes dark, I need something I can turn on right now," Dockery said.

Miramar already buys 3.2 megawatts of electricity – one megawatt is enough to power 750 to 1,000 homes – from San Diego Gas & Electric, the local utility provider. A backup power plant will provide to up 7 megawatts of power from four diesel and natural-gas generators to power the air station's flightline and more than 100 buildings nearby.

"So when SDG&E goes dark, I'm still launching and recovering airplanes," said Dockery.

This year, Miramar received a $5 million California Energy Commission grant to store up to 3 megawatts of energy in the installation micro-grid with backup batteries.

By next year, Miramar will draw from a mix of energy sources, including electricity and natural gas from the regional power grid; electricity generated by solar and methane gas from the adjacent San Diego landfill and integrated into the air

station’s micro-grid; and a building-level, $3 million micro-grid project with a large solar array and batteries to power the station’s Energy & Water Operations Center building off-grid, or in “island mode.” The Marine Corps also is boosting its collection and use of reclaimed water, which reduces the amount of pricier potable water that Miramar purchases, and a water project agreement with the city of San Diego is expected to improve water quality and water resiliency at Miramar, officials said.

“Resilience is a solution that involves all of it,” Mick Wasco, Miramar’s energy program manager, said in a briefing to the group.

“We had the renewables, but we had to bring in conventional power to make it all work,” he added. The addition of battery storage also will help provide “power quality” and consistent demand, filling in as needed with fluctuations in available renewable-power generation, he noted.

Lt. Col. Brandon Newell, who heads innovation projects for Marine Corps Installations-West, said the goal is to shore up critical infrastructure when most needed.

“Our vision – our aspiration – for resiliency for installations is that we can go 14 days, no matter what happens external to the base, (and) that energy, water, communications, food and logistics can support the mission that’s required of that base,” Newell said.

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“This is really a cool thing; the whole Navy is excited,” Kliem told the group, noting Miramar is the first DoD installation to sign an IGSA, or intergovernmental support

agreement, with localities — it's a congressional authority — to help build energy resiliency. "There's a lot of things that can be done with this once we break the code on how to do this."

Search Continues for Marines Missing After Air Collision

ARLINGTON, Va. — The search continues for five Marines whose KC-130 Hercules transport/refueling aircraft collided Dec. 6 with a Marine Corps F/A-18D Hornet strike fighter over the Pacific Ocean.

The two Marines in the F/A-18D apparently ejected; one was rescued in fair condition, the other was recovered and declared dead, III Marine Expeditionary Force said in a Dec. 6 release.

"The search-and-rescue operations continue for the remaining five U.S. Marines who were aboard the KC-130 Hercules and F/A-18 Hornet involved in a mishap about 200 miles off the coast of Japan around 2:00 a.m. Dec. 6," the release said. "The aircraft were conducting routine training and aerial refueling was a part of the training; as to what was taking place when the mishap occurred, that is under investigation."

Forces from the U.S. Navy and Japan are assisting in the search.

"U.S. 7th Fleet is supporting ongoing search-and-rescue efforts with a Navy P-8A maritime patrol and reconnaissance aircraft flying out of Kadena Air Force Base, along with assistance from the Japan Maritime Self-Defense Force and the

Japanese Coast Guard," the release said.

The Marine Corps has not yet released the names and units of the seven personnel involved. Marine Aircraft Group 11, headquartered at Marine Corps Air Station Iwakuni, Japan, includes one F/A-18D squadron, Marine All-Weather Fighter Attack Squadron 242, and one KC-130J Super Hercules squadron, Marine Aerial Refueler Transport Squadron 152.

The loss of the KC-130J would be the first J-model lost by the Marine Corps. The KC-130J entered service in 2004. More than 50 have been delivered to the Marine Corps.

Marine Corps Releases Solicitation for New Lightweight Hard Armor Plate

MARINE CORPS BASE QUANTICO, Va. – The Marine Corps has released a request for proposal for a lightweight hard armor plate to lighten the load for Marines and allow commanders to adapt to the environment, mission and level of threat on the battlefield.

In August, Marine Corps Systems Command (MSCS) assessed industry's capability to make a plate that would supplement the Enhanced Small Arms Protective Insert, or ESAPI plates, and provide sufficient protection for the majority of combat environments. MCSC's Program Manager Infantry Combat Equipment (PM ICE) held Industry Days on Oct. 17-18 and met with 12 companies to receive feedback on the draft solicitation documents.

Now MCSC is seeking proposals from industry for procurement of a maximum of 680,706 and a minimum of 60,000 lightweight plates. The lighter plates will give commanders more options to tailor Marines' ballistic protection to the environment, mission and threat.

"These new plates will be fielded in addition to the existing ESAPI plates," said Nick Pierce, Individual Armor Team lead in MCSC's PM ICE. "We expect the plates to be at least 38 percent lighter than the ESAPI which will significantly increase the mobility of Marines on the battlefield."

All proposals are due in March, and a contract is expected to be awarded in July. Priorities have not yet been set, but initial fielding would likely go to combat units and could take place as early as fiscal 2020.

"This along with other recent initiatives such as the Plate Carrier Gen III are part of a holistic effort to modernize the personal protective equipment set to give Marines better, lighter, more effective gear," said Pierce.

Marine Corps' Sea Dragon Effort Turning Focus to Information Operations

STAFFORD, Va. – After two years focusing on increasing the lethality of the small ground units and providing logistical support in the contested littorals, the Marine Corps Warfighting Laboratory (MCWL) is moving into intensive trials on information operations and ways to more fully integrate the naval forces to fight the maritime campaign, which will

include a search for Marine-operated anti-ship weapons.

The focus of the Sea Dragon force development effort in the current fiscal year will be on “a handful of select, high-value capabilities” that will enable Marine expeditionary forces to maintain their “battle networks in the most highly contested environments,” providing a “high degree of domain awareness” through experimental technologies for sensing the environment and feeding that “into networks we can fire and fight from,” Brig. Gen. Christian F. Wortman, the MCWL commander, said Nov. 27.

They also will be testing capabilities to disrupt an enemy’s ability to sense the environment and target Marine units, Wortman told reporters at an office near Marine Corps Base Quantico.

Then, the gains from the first three years of the re-energized Sea Dragon will culminate in fiscal 2020 experiments to address Marine “contributions to a maritime expeditionary campaign,” with close cooperation with the Navy, Wortman said.

Those efforts will be in direct support of Marine Corps Commandant Gen. Robert B. Neller’s commitment to an integrated naval force, he added.

“We know that fleet and Marine forces are far more lethal, survivable and effective when they fight as an integrated team. So we’re approaching naval and Marine Corps development as an integrated team, to the maximum extent possible.”

As a key part of Neller’s commitment to the integrated naval campaign and the Corps’ effort “to support the sea fight in contested maritime domains,” Marine elements will conduct, in partnership with the Navy staff, the research establishment and industry, a series of “fight the naval forces forward” advanced naval technology exercises (ANTX) in 2020, Wortman said.

The ANTX series will focus on “naval fires, technology to close the kill chain in highly contested environments and to deny the enemy the ability to target our forces.”

A key part of that will be a search for land-based, long-range, anti-ship missiles that Marines could employ from advanced expeditionary bases within an enemy’s defensive shield to support the Navy’s fight for sea control.

“The commandant is determined to provide a capability to strike a killing blow against advanced surface ships from our tac [tactical] air assets or land-based locations,” Wortman said.

Where the first year of the new Sea Dragon campaign resulted in major changes to enhance the lethality of the infantry squad and other small ground combat elements, 2018 focused on the logistical and sustainment challenges of distributed operations in contested areas. Those experiments identified unmanned and autonomous logistics distribution assets “as high value. We are working aggressively” on unmanned underwater, surface, air and ground vehicles “to support our logistics distribution requirements,” the general said.

The goal is to sustain the expeditionary forces in high-tempo operations “while dramatically reducing the risk to our Marines and frustrating the ability of potential adversaries to interrupt our sustainment operations.”

In response to a question on the possible role of underwater vehicles, Wortman said “anything that offers us the ability to move bulk liquids, ordnance or other consumables over extended range in a manner that is hard for an enemy to target is really attractive to us.”

They also see the potential of those systems in the sea-control fight by “employing unmanned underwater systems from expeditionary advanced bases with a wide range of payloads that will challenge or destroy adversary capabilities in some

of these contested environments."

Wortman said the 2018 experiments also introduced the new "experimental opposing force," a cadre of eight to 10 civilian experts who will challenge the MCWL experimenting units and the technologies and concepts they are testing.

Sikorsky Awarded Contract to Sustain Navy, Marine Super Stallion, Sea Dragon Helicopters

STRATFORD, Conn. – Sikorsky, a Lockheed Martin company, was awarded a performance-based logistics contract with a value of $717 million to provide supply and logistics support to the entire fleet of in-service CH-53E Super Stallions and MH-53E Sea Dragon helicopters, the company said in a Nov. 5 release.

The H-53E is a battle-proven heavy-lift helicopter continuing to support the U.S. Marine Corps and Navy in missions at home and around the world.

The scope of the contract includes repairs, overhauls, spares, obsolescence mitigation and asset management services over four years. Contract performance is based on material availability metrics with additional incentives added for demand reductions, maintainability enhancements and aircraft readiness contributions.

The expanded comprehensive arrangement will cover additional readiness-critical components, including main and tail rotor

blades, main gearbox, main rotor head and flight control components, as well as accessories such as refueling probe and cargo system components.

“We expect the expanded performance-based logistics to measurably improve material availability and reduce support cost while increasing overall aircraft readiness,” said Pierre Garant, Sikorsky senior program manager, Marine Corps In-Service Programs. “Our support infrastructure and past performance-based logistics successes will result in Sikorsky continuing to reliably provide mission support critical to the warfighter.”

As the Marine Corps’ heavy lift-helicopter designed for the transportation of heavy material and supplies, the CH-53E Super Stallion is compatible with most amphibious class ships. With four-and-one-half hours’ endurance, the helicopter can move heavy equipment over rugged terrain in bad weather and at night. The MH-53E Sea Dragon fills the Navy’s need for long-range minesweeping missions, in addition to heavy-lift duties. The H-53E has consistently proven its worth to the fleet commanders with its versatility and range.

The contract will provide the vital and affordable support to the entire fleet – expanding a reliable base of long-term sustainment as the aircraft continue to fully operate until the introduction of the replacement aircraft, the Sikorsky CH-53K King Stallion.

Marine Squadron to Return

from EA-6B’s Last Deployment

ARLINGTON, Va. — The Marine Corps’ last squadron flying the EA-6B Prowler electronic attack aircraft is scheduled to return home in early November, marking the last operational deployment for the aircraft.

Marine Tactical Electronic Warfare Squadron Two (VMAQ-2) is returning from its final deployment to its home base, Marine Corps Air Station Cherry Point, North Carolina, from a base in the Central Command area of responsibility, the Marine Corps said in an Oct. 31 release.

VMAQ-2 is scheduled to be deactivated in March, the last of four VMAQ squadrons to operate the Prowler. The other three squadrons — VMAQ-1, VMAQ-3 and VMAQ-4, two of which were formed from detachments of VMAQ-2 and one of which became a fleet replacement training squadron (VMAQT-1) until it was no longer needed — have been deactivated — one each year — over the past three years.

The VMAQ squadrons have deployed their EA-6Bs to numerous bases and aircraft carriers over their service, providing electronic jamming and attack in support of joint forces, including participation in combat operations in Libya, Kuwait, Iraq, Syria, Bosnia, Serbia, Kosovo and Afghanistan.

The Marine Corps is not fielding a direct replacement for the EA-6B, instead relying on other platforms like the F-35B and the Navy’s electronic attack squadrons.

The Navy retired its last EA-6B squadron in 2015. The service now flies the EA-18G Growler electronic attack aircraft from aircraft carriers and in expeditionary roles from land bases to support joint forces.

Armor Express Wins Marine Corps Soft Armor Contract Award

CENTRAL LAKE, Mich. – Central Lake Armor Express Inc., a leading manufacturer and distributor of high-performance armor solutions, announced Oct. 30 that it has been awarded a multiyear, firm-fixed-price, indefinite-delivery/indefinite-quantity contract from the Marine Corps Systems Command.

The contract was competitively procured as a total small business set-aside, with a potential value of $59.4 million. Under the terms of the award, the Company will provide up to 65,469 Plate Carrier Generation III-Soft Armor Inserts and data reports, with production expected to be completed by October 2023.

Jim Henderson, CEO of the holding company that owns both Armor Express and KDH Defense Systems said, “It is our extreme honor to be chosen by the U.S. Marine Corps for this prestigious award, and we thank them for the trust they have placed in us. We also commend ongoing efforts by the U.S. armed forces to develop lighter body armor systems, while improving the modularity and flexibility of plate carriers deployed in the field. It is the servicemen and women who ultimately benefit, and all of us at Armor Express and KDH Defense Systems, stand ready to deliver.”

Henderson added, “With the recent contract extensions KDH received for the Modular Scalable Vest and Blast Pelvic Protection, along with this most recent ballistic protection award for Armor Express, we have secured over $140.0 million

of potential business with the U.S. armed forces over the past two months. Working in tandem with our supply chain and technology partners, it remains our goal to provide all customers with the most advanced, lightweight and comfortable protection, supported by unparalleled delivery and service."

The company intends to leverage the manufacturing capabilities of KDH Defense Systems and will produce the ballistic armor at KDH's state-of-the-art manufacturing facility in Eden, North Carolina.

Marine Commandant: 2018 Recruiting Goal Met, but Dearth of Qualified Youth 'Should Scare You'

WASHINGTON – The Marine Corps met its recruiting goal in fiscal 2018, said the service's commandant, Gen. Robert B. Neller, despite a more challenging recruiting environment.

"We've made our recruiting goal every year," Neller told reporters Oc. 10 at a Defense Writers Group breakfast.

The Marine Corps met 100 percent of its goal in 2018, while the Army failed to meet its goal for the first time since 2005.

The improving U.S. economy, with the lowest unemployment rate since 1969, is adding to the stress of military recruiters.

Neller said the Corps achieved its goal without lowering standards.

“If anything, we’ve raised our standards,” he said.

Neller pointed out that today less than 30 percent of the nation’s youth are qualified – physically and otherwise – for military service.

“That should scare you,” he said.

He said that in the Marine Corps, 62 percent of the force – about 120,000 of 186,000 Marines – is 25 years old or less. The average age of Marines is the youngest of the U.S. armed forces.

“We’re getting good folks,” he said.

As a manpower-intensive service, the Marine Corps spends 65 percent of its budget on personnel costs.