

Since 7 July 1941, 1st Marine Aircraft Wing (1st MAW) has distinguished itself throughout the Pacific Area of Operations—from the South Pacific to the snowtopped mountains of the Korean Peninsula and from Southeast Asia's tropical rainforests to Afghanistan's parched deserts. The 1st MAW boasts a broad spectrum of aircraft and equipment that can be configured for any mission requirement or task. We build airfields where none exist; we fly assault and support missions regardless of time or weather; and we control the skies in every clime and place to which we deploy. All of our personnel are highly trained, motivated, and committed to maintaining the "Tip of the Spear" in Marine aviation. We are the powerful aviation arm of the III Marine **Expeditionary Force** (III MEF).

Tip of the Spear in the Pacific

Overview/Introduction

1st MAW is a major contributor to United States Pacific Command's (USPACOM) mission to reassure allies, deter our enemies, and protect our nation's interests in a region that is a vital driver of the global economy and includes the world's busiest international sea lanes and nine of the ten largest ports. The 36 nations comprising the Asia-Pacific region are home to more than 50% of the world's population, 3.000 different languages, several of the world's largest militaries, and five nations allied with the United States through mutual defense treaties. The Asia-Pacific is also a heavily militarized region, with seven of the world's ten largest standing militaries and five of the world's declared nuclear nations. Given these conditions. the strategic complexity facing the region is unique.

Currently, 1st MAW consists of approximately 7,500 Marines and Sailors, and is organized into three Marine Air Groups (MAG-12, -24, -36) and one Marine Air Control Group (MACG-18) geographically dispersed between Marine Corps Air Station (MCAS) Futenma in Okinawa, MCAS Iwakuni on Mainland Japan and MCAS Kaneohe Bay in Hawaii. The capabilities of 1st MAW consist of fixed-wing, fighter attack support, aerial refueling and assault support, tiltrotor and heavy helicopter assault support, light/ attack support, and unmanned aerial intelligence, surveillance, and reconnaissance as well as a positive and procedural capability to command and control aircraft and missiles.

The mission of 1st MAW is to conduct air operations in support of the Fleet Marine Forces to include offensive air support, antiair support, aerial reconnaissance including active and passive electronic countermeasures, and control of aircraft and missiles. As a collateral function, Marines and Sailors may participate as an integral component of Naval Aviation in the execution of such other Navy functions as the Fleet Commander may direct.

Throughout 2016, 1st MAW remained at the forefront of III MEF operations in support of Commander, U.S. Pacific Command (COMUSPACOM) campaign plan, **Theater Security Cooperation** (TSC) agreements, and strategic programs. Personnel conducted robust aviation operations in a challenging but vitally important area of responsibility (AOR). The weight of an ever present "Fight Tonight" readiness requirement coupled with 1st MAW's aggressive Training and Exercise Employment Plan (TEEP) and joint and partnered military training requirements created a daunting operational tempo for 1st MAW assigned units. Marines and Sailors of 1st MAW continued to demonstrate operational excellence and unparalleled crisis response readiness as observed by the accumulated total of 31,239 flight hours flown and 14,039,609 pounds of cargo transported in support of more than 75 combined, joint, and bilateral exercises, unit level training events, or missions tasked across the Asia-Pacific Region. Additionally, the wing continued to battle the reality of conducting military operations in host-nation and politically charged environments, well demonstrating that there is "No Better Friend, No Worse Enemy" than United States Marines.

Operational Commands

As the aviation combat element (ACE) for III MEF, 1st MAW forward-deployed, forward-engaged, and postured to respond

to crisis in close proximity to an unstable threats within the AOR. Marines trained alongside interservice and bilateral partners on crisis response in preparation for a major contingency, and 1st MAW major subordinate elements (MSE) excelled at full spectrum operations, many of which supported the 31st Marine Expeditionary Unit (MEU), the Unit Deployment Program (UDP), and numerous joint. combined, and bilateral exercises.

Marine Aircraft Group 12

In 2016, MAG-12 superbly executed the six functions of Marine aviation while sharpening the tip of the spear for "Fight Tonight" realities within the Pacific. Amidst theater operations, MAG-12 units trained alongside inter-service and bilateral partners as well as conducted crisis response simulations for a variety of contingency operations that might be encountered within the AOR. MAG-12 units paired with more than a dozen countries including Japan, Korea, the Philippines, Thailand, and Australia to build international and military relationships

and refine operational tactics techniques and procedures across the globe. Through the Aviation Training Relocation Program, MAG-12 conducted training with our Japanese allies in Guam and Japan, where aircrews flew training missions with their Japanese Air Self Defense Force counterparts, strengthening the Marine's relationship with the host nation. Much of MAG-12's training within the theater involved fixed-wing integrated strikes, live fire suppression of enemy air defense missile shoots, forward air controller airborne (FAC(A)) operations, and defensive air combat tactics. Throughout the year, MAG-12 squadrons flew more than 9.000 sorties, accumulated over 17,399 flight hours, and delivered over one million pounds of ordnance through more than two thousand ordnance release events, despite the limited range options available for MAG-12 to conduct ordnance delivery training requirements. Overall, MAG-12 operations demonstrated the depth of the U.S. commitment to maintain stability and partnerships across vast distances that separate Pacific nations, all while maintaining a

ready posture to fight and win in any clime and place.

Marine Aircraft Control Group 18

In 2016, Marine Aircraft Control Group 18 (MACG-18) supported more than 41 different exercises, training, or operational engagements within the Pacific theater. Though MACG-18 receives 40% less personnel than Continental United States-based control groups, MACG-18 consistently overcame a variety of operational challenges specific to the 1st MAW AOR, such as acquiring frequency approval for radar operations in foreign nations, obtaining cost effective transportation for movement of robust aviation command and control (C2) systems across the vast 1st MAW AOR, and maintaining a high level of readiness with strategic "Fight Tonight" assets.

MACG-18 conducted multiple sustained bilateral training events with seven different countries including Korea, Australia, Malaysia, Indonesia, Thailand, Japan, and the Philippines. MACG-18 tailored aviation C2 components

MV-22B Osprey tiltrotor aircraft returning after a long-range raid at Combined Arms Training Center, Camp Fuji, Japan to MCAS Futenma, Okinawa as part of Blue Chromite 2017. Marines honed their ability to project forces from afar by executing a longrange raid over 1,000 miles via MV-22B Osprey to include an aerial refueling by KC-130J Super Hercules. The Ospreys are from VMM-265.

PHOTO COURTESY: U.S. MARINE CORPS





to support the ACE during multiple 1st MAW theater training exercises. MACG-18 C2 services included provision of Tactical Air Command Centers (TACC), Tactical Air Operations Centers, Air Traffic Control, Marine Mobile Teams, Tactical Air Navigation, and Air Traffic Navigation Integration and Coordination Systems among other scalable elements. MACG-18 also stood poised to deploy aviation C2 capabilities on short notice to various locations on the Korean peninsula in support of real world operations.

Marine Aircraft Group 24

MAG-24 entered 2016 aggressively executing 1st MAW's TEEP and conducting aviation operations in the local Hawaiian Islands. Unfortunately, 2016 begin with tragedy when two CH-53s collided in a mishap off the coast of the North Shore. MAG-24 conducted memorial services for the 12 aircrew who were lost and re-centered command focus on conducting high-tempo operations in support of both operational and exercise deployments. Personnel supported numerous distinguished visitor lifts and events, change of command ceremonies, and bilateral, joint, and unit level operations throughout the Pacific. MAG-24 exercise support included Key Resolve, Rim of the Pacific, Ulchi Freedom Guardian, and Marine Rotational Force Darwin, as well as multiple unit level training events, which provided opportunities to execute air tasking order (ATO) development, joint terminal attack controller and forward air controller training, and expeditionary airfield (EAF) and forward arming and refueling point (FARP) operations within the Hawaiian Islands. As the only MAG within 1st MAW possessing an unmanned aerial vehicle squadron (VMU-3), MAG-24 provided multisensor reconnaissance, surveillance, and supporting arms coordination, and control during both exercises

and operational tasking within the PACOM AOR. In total, MAG-24 squadrons accumulated over 6,192 flight hours, transported over 841,266 pounds of cargo, and conducted more than 76,000 ordnance expenditures involving bullets, rockets, precision guided munitions, chaff, and flares in theater exercises.

Marine Aircraft Group 36

MAG-36 conducted numerous bilateral and host nation engagements within the 1st MAW AOR. A cornerstone of the 1st MAW exercise calendar involved the participation of MAG-36 in exercises such as Fuji Freeze, Forest Light, Cobra Gold, Blue Chromite, Balikatan, Korean Marine Exchange Program, Aviation Assault Support Exercise, Fuji Fire, Ulchi Freedom Guardian, and Forager Fury. These exercises involved aviation operations in a variety of locations to include: mainland Japan, Guam, Thailand, Okinawa, the Philippines, and Korea. The exercises ranged from bilateral training to large force exercise events, such as Blue Chromite; which templated large scale Marine Corps operations and demonstrated the United States' ability to strategically project forces in a rapid and large-scale capacity. Given the significant number of short notice operational tasks issued to the Marine Air Group via high-level Pacific commands, MAG-36 continually balanced operational support throughout the AOR while maintaining proficiency during training events. MAG-36 also hosted the introduction of the first AH-1Z aircraft in the III MEF AO, as the latest Marine attack helicopter variant made its debut with UDP units. In addition, MAG-36 remained the primary aviation force provider to the Marine Corps' Western Pacific expeditionary force: the 31st MEU. In closing out 2016, MAG-36 squadrons accumulated over 7,648 flight hours, transported more than 868,980 pounds of cargo, and conducted more than

185,679 ordnance expenditures across five different type/model/series aircraft.

Pacific Reorientation

VMM Squadrons Relocating to Pacific to join 1st MAW

As Marine Corps aviation transitioned to support the "Pivot to the Pacific", 1st MAW increased MV-22 presence in theater by relocating Marine Medium Tiltrotor Squadron 268 (VMM-268) to Hawaii. The repositioned Osprev unit expands the Marine Corps tilt-rotor assault support capability within the Pacific Theater and will continue to grow with the addition of another VMM squadron over the next two years. The increase in 1st MAW tilt-rotor capacity immediately impacted 1st MAW's ability to provide assault support to ground forces stationed in Hawaii. Ospreys became an integral part of USPACOM's Pacific expansion by helping the Hawaiian Marine Air-Ground Task Force (MAGTF) component of the Marine Corps increase operational reach to distant locations, such as Australia and Guam. Meanwhile, 1st MAW Okinawa-based units supported the 31st MEU, bilateral and multilateral TSC programs, and provided humanitarian aid and disaster relief (HA/DR) support to partner nations while maintaining robust "Fight Tonight" projection capability.

Joint Strike Fighter Introduction to the Pacific Forces

Throughout the year, 1st MAW prepared for the F-35B Joint Strike Fighter (JSF) to arrive in the Pacific as Marine Fighter Attack Squadron 121 (VMFA-121) relocated from MCAS Yuma, Arizona, to MCAS Iwakuni, Japan at the beginning of 2017, in accordance with the

Marine Aviation Plan. The relocation provided a 5th Generation fighter to the Marine Corps warfighting capability in the Pacific. The 1st MAW anticipates VMFA-121 will be capable of supporting both the 31st MEU and forwardbased operational requirements in USPACOM with at least 16 operational F-35B aircraft by the end of 2017, as F/A-18 Hornet and AV-8B Harrier units begin to transition to the new platform.

Strengthening **Alliances** and **Combat Readiness**

Australia

Marine Rotational Force-Darwin (MRF-D) is an annual deployment of task-organized forces in support of the Marine Forces Pacific's force posture strategy and USPACOM's reorientation to the Asia-Pacific Theater. In April of 2016, 1st MAW deployed an ACE led by MAG-24 with combined elements from Hawaii and Okinawa, which deployed to Darwin, Australia in support of MARFORPAC's rotational force concept. The ACE consisted of detachment forces from Marine Light Attack Helicopter Squadron 367 (HMLA-367), MALS-24, MWSS-172, and MACG-18 and provided four UH-1Y Huey helicopters that operated out of Royal Australian Air Force Base (RAAF), Darwin for six months. The aviation detachment conducted operations across the vast Australian ranges, supported multiple ground combat element field and training events, and provided assault support and casualty evacuation capabilities in in the training areas. The 2016 MRF-D rotation further developed the Marine Corps' bilateral relationship with Australia, provided realistic MAGTF training opportunities, validated rotational basing and facility requirements, and advanced barracks and flight



line expansion programs at RAAF Darwin for future MRF-D ACE operations.

Alaska

Marines and Sailors of 1st MAW participated in Exercise Red Flag Alaska 16-2 as part of a combined and joint large force exercise hosted by Pacific Air Forces (PACAF), which focused on integration and interoperability of U.S. components with international forces in the conduct of anti-air warfare, offensive air support, control of aircraft and missiles, and aerial reconnaissance. From 1st MAW. Marine All Weather Fighter Attack Squadron 242 (VMFA(AW)-242),

Marine Fighter Attack Squadron 314 (VMFA-314), Marine Aviation Logistics Squadron 12 (MALS-12), and Marine Wing Support Squadron 171 (MWSS-171) supported the exercise from Eielson Air Force Base (AFB), while Marine Aerial Refueling Squadron 152 (VMGR-152) supported operations from Elmendorf AFB. Eielson-based units remained in place at the completion of Red Flag in order to execute unit training in Exercise Distant Frontier. Red Flag and Distant Frontier provided a unique opportunity for 1st MAW units to plan and execute high-end tactics, techniques, and procedures with a large pool of Naval, aviation, and C2 participants available for execution. The exercise also reinforced U.S. commitments to regional security, peace, and stability while emphasizing communication of our commitment to freedom of movement and access to U.S. global maritime commons.

Republic of the Philippines

During the year, 1st MAW conducted Exercise Balikatan, Aviation Assault Support Exercise (AASE), and Bilateral Tactical Exercise (BITACEX), which greatly improved interoperability, increased readiness, and developed professional relations between the United States and the Republic of Philippines during a challenging and politically charged period. From 4 to 16 April 2016, 1st MAW conducted Exercise Balikatan with detachments from MAG-36 and MACG-18 in support of the 3D Marine Division in the Republic of the Philippines. The exercise provided opportunities for 1st MAW units to train in assault support, offensive air support, and C2 in support of MAGTF operations. The training areas in the Philippines allowed personnel to focus on tactics, techniques, and procedures required in amphibious and air assault operations and to further enhance cooperation, interoperability, and

adjacent relationships within III MEF and with Philippine military counterparts. Additionally, BITACEX allowed 1st MAW to conduct large-force integration operations and overcome multiple unit training deficiencies due to restrictions encountered from 1st MAW units operating primarily in Japan. Participating units included VMM-262, HMH-466, HMLA-167, VMGT-152, MWSS-172, and MACG-18 elements.

From 20 July to August 10, 1st MAW successfully supported AASE 16.2, led by MAG-36 and conducted with 3d Battalion, 3d Marine Regiment, and promoted cooperative training opportunities in the Philippines commensurate with previously established Mutual Defense and Security Exchange Boards. The 1st MAW supported AASE 16.2 with eight MV-22 aircraft and three KC-130s operating out of Clark and Basa AB.

Thailand

In February, 1st MAW participated in annual military-to-military training with Thailand in exercise Cobra Gold 16 (CG16); a Multinational Joint Exercise conducted in the Kingdom of

Thailand and comprised of forces from over 30 different participating or contributing nations. The 1st MAW led the planning and execution of CG-16 and acted as the Commander of Marine Forces responsible for all participating Marines. Marines and Sailors and leaders from the Royal Thai Armed Forces (RTARF) lead a battle staff simulation designed to improve interoperability among the seven partner nations represented at the Command Post Exercise (CPX). The scenario was based on a United Nation Resolution and sanctioned multinational action in real world anti-piracy, counter-terrorism, and HA/DR missions. The goal of the exercise was to foster multinational military decision making among the staff and senior leadership at an operational level in a complex environment with military and civil actors. Combined forces operated at Royal Thai Naval Base Utapao and Camp Red Horse, Thailand. While cooperating with the Royal Thai Marine Corps, Marine Forces supported the combined execution of the field training exercise (FTX), humanitarian crisis action events, and staff exercise in order to advance USPACOM Theater engagement objectives. CG-16 greatly improved U.S. joint



Japan Air Self-Defense Force aviation officer cadets from the Japan Maritime Self-Defense Force Ozuki Aviation Training Squadron observe and converse about an F/A-18C static display during a Japanese Officer Exchange Program tour at MCAS Iwakuni, Japan. Hosted by MAG-12, the exchange program aims to better the understanding and working relationships between U.S. and Japanese pilots. The visit provides the cadets with greater knowledge and understanding of the present condition of the Marines in Japan. PHOTO COURTESY: U.S. MARINE CORPS

and combined interoperability and improved Thai capacity for planning and execution of military operations by using short-duration, joint, combined, and integrated field training exercise events. Additionally, CG16 allowed USPACOM to demonstrate strategic force projection through rapid deployment of joint and combined task forces. While 1st MAW staff conducted CG16 at the command level, MAG-12 provided VMFA(AW)-242, VMGR-152, MWSS-171, and MALS-12 components that operated out of Korat Royal Thai Air Force Base, Thailand during the exercise.

Republic of Korea

In 2016, 1st MAW took advantage of multiple opportunities to develop partner relationships with Republic of Korea (ROK) military forces. The vital partnership directly impacts United States ability to execute "Fight Tonight" responsibilities against threats to stability in the 1st MAW Theater of operations. In order to maintain combat readiness and interoperability, and to sharpen operational knowledge and environmental focus in the Korean Theater of Operations (KTO), 1st MAW deployed forces in support of multiple FTX and joint and combined CPXs in support of combined forces commander (CFC) and combined Marine component commander (CMCC) staffs. In March 2016, 1st MAW Marines

and sailors deployed to the Korean peninsula in support of combined and/or joint exercises Key Resolve, KMEP, and Max Thunder. KMEP and Max Thunder incorporated aviation sorties in support of joint and combined forces. Exercise Key Resolve supported the CFC through establishment of the 1st MAW operations from Camp Foster, Okinawa and 1st MAW staff deployed to Osan AB thereby strengthening 1st MAW's ties with USAF 7th Air Force and the ROK Air Force. The CMCC CPX provided 1st MAW with an opportunity to establish a full TACC at Osan AB in support of MEF-level C2 aviation operations while subordinate groups and squadrons executed both live and virtual training events.

In August of 2016, 1st MAW participated in the annual capstone, joint, and combined Exercise Ulchi Freedom Guardian. The 1st MAW Headquarters and battle staff combined efforts and provided opportunities for Marine Corps aviation to execute ATOs in a simulated joint and combined aviation battlefield where 850 sorties were flown on each ATO day.

1st MAW's Focus for 2017

At the beginning of 2017, 1st MAW remains the Marine Corps' tip of the spear in the Pacific, maintaining a forward posture and preparing to engage across a full spectrum of contingencies

and crises. The 1st MAW's focus remains maintaining the ability to succeed in "Fight Tonight" scenarios while keeping balance in the Pacific. In 2016, 1st MAW achieved several major milestones towards rebalancing the Pacific including standing up VMM-268 in Hawaii, finalizing preparation for VMFA-121 relocation to MCAS Iwakuni, and executing major aviation-related military construction projects on Marine Corps air stations throughout the AOR.

The Pacific Theater is unique and provides a challenging environment for Marine Corps and United States force projection capabilities. However, the diverse operating environment offers opportunities to rigorously test warfighting technological concepts, such as digital interoperability and common operational picture with real-time tracking, and allows for development of concepts like Expeditionary Force 21. Furthermore, vast distances associated with operations in the Pacific Theater demand a robust and resilient ability to conduct logistical support and C2 operations. As the United States approaches the 75th anniversary of several Marine Corps battles in the Pacific during World War II, 1st MAW is honored to carry on the proud legacy of providing integrated aviation support to our ground brethren across the Asia-Pacific Theater in any clime and place.



A U.S. Marine Corps AV-8B Harrier with VMA-542 taxis down the runway at Chitose Air Base, Japan on 12 December 2016. Four of VMA-542's Harriers are conducting daily flight training out of Chitose as part of the Aviation Training Relocation Program. PHOTO COURTESY: U.S. MARINE CORPS