

—THE GREEN KNIGHTS—

ENTER THE NEXT GENERATION



Text and photos by Rick Llinares

The VMFA-121 Green Knights are the Marine Corps' first operational squadron to fly the F-35B Lightning II. The new aircraft replaces the venerable F/A-18D. Photographer Rick Llinares shares some of his past photos of the squadron and his conversations with some of its personnel. (Photo by Cpl. Ken Kalemkarian)

“Today is a historic day for our Corps as we mark yet another milestone in the development of the F-35,” said Marine Corps Commandant Gen. James F. Amos at the VMFA-121 Green Knights re-designation ceremony on 20 November 2012, when the squadron officially became the first operator of the F-35B Lightning II. “The Marines before you are on the cutting edge of aviation history. This squadron will be the first, not only in the Marine Corps or the United States, but the first in the world to bring a fifth-generation multirole STOVL [short take-off and vertical landing] stealth fighter, and its unique and highly advanced capabilities, into an operational status.”



Also known as the Joint Strike Fighter, the F-35B is replacing three separate platforms currently in use in the Marine Corps: the AV-8B Harrier II, EA-6B Prowler, and F/A-18D Hornet (the Green Knights' previous ride). The Lightning II reifies the Corps' long-term strategy of reducing the service's airframes without sacrificing capabilities, and replacing all its aircraft by 2025. Variants are also replacing a variety of current platforms within the Air Force and Navy as well.

This first of a two-part feature on the squadron focuses on the unit's rich history and its activities leading up to and including the recent transition from the Hornet to

the Lightning II. *Naval Aviation News* was given the opportunity to speak with some of the squadron's former and current officers.

The Green Knights' lineage traces back to World War II when Marine Fighting Squadron (VMF) 121 was activated in June 1941. Flying F4F Wildcat and F4U Corsair fighters, the Green Knights took part in the Solomons Island campaign and the battle of Peleliu. The unit produced more aces (14) than any other U.S. squadron. Deactivated after the war, the unit was re-activated as VMA-121 and participated in the Korean War while flying the AD-2 Skyraider. The unit entered the jet age with the Grumman F9F-8 Cougar. As

the 1950s came to a close, the unit upgraded once again to the new A-4 Skyhawk, which the squadron took into the hostile skies over Vietnam from 1966 to 1969. The unit was re-designated VMA(AW)-121 to reflect their all-weather attack mission after switching to the new Grumman A-6E Intruder. In 1989, the unit became the first Marine Corps unit to receive the fourth-generation F/A-18D Hornet. The unit was re-designated VMFA(AW)-121 and participated in Operations Desert Storm/Shield just one year later.

“We have used the F/A-18D first in combat during Desert Storm, and were the first F/A-18D squadron to deploy to

an expeditionary airfield in support of Operation Enduring Freedom,” said Maj. Gregory Summa, the squadron's executive officer. “Fifteen months later the squadron deployed for Operation Iraqi Freedom. In all of these conflicts the ability of the F/A-18D pilots and WSOs [weapon system officers] to brief and communicate with each other at a centralized expeditionary airfield enabled them to have the most up to date intelligence on the enemy's activities and support the ground commander as the battle space changed.”

The actual process of retiring the Hornet and transitioning to the Lightning II took place much more quickly than anticipated. “We were notified in January 2012—three weeks into our deployment—that we'd be transitioning the squadron from Hornets to the F-35B sometime in September of the same year,” said Lt. Col. Michael Waterman, former commanding officer of VMFA(AW)-121. “On paper it's a 24-month process. From the time we were notified to the prospective transition date we had eight months. Five of those eight months remaining until the slated transition date ticked down while we were still fully engaged in operations while attached to MAG-12 on our deployment to the Western Pacific.”

The speed of the transition posed a very real threat to the squadron's morale and its ability to accomplish its mission. “So, how did we do it? We kept the ‘main thing’ the ‘main thing,’” said Waterman. “That main thing was maintaining and demonstrating readiness while accomplishing our current mission as part of MAG-12. That was priority number one”

Since the move also involved changing the squadron's base from MCAS Miramar, Calif., to MCAS Yuma, Ariz., the second priority was ensuring the successful transition of the squadron's personnel by finding homes for everyone. The third priority was transferring aircraft and equipment.

“Last, but certainly not least, our fourth priority was an appropriate ceremony to mark the close of an era,” said Waterman. “We did the first part of that in Miramar with the help of The Flying Leatherneck Museum. They provided a number of vintage aircraft, some of which my Marines helped to restore, for the change of command ceremony/reception that showcased some of the airframes 121 had flown since its inception.” Despite many challenges, the transition was a success.

The last two years have been a busy time for the Green Knights. In early November 2011, the unit flew Amos aboard USS *Ronald Reagan* (CVN 76) in aircraft VK01 for VMFA-323's Marine Corps birthday celebration. Four months later the Green Knights became the first Marine F/A-18D squadron to complete the Navy's Strike Fighter





Advanced Readiness Program while deploying to NAS Fallon, Nev., NAS Lemoore, Calif., and NAS Key West, Fla.

In January 2012, the Green Knights accepted their final three F/A-18Ds (taken from VMFA(AW)-225) for their full complement of 12 aircraft and deployed 10 days early to MCAS Kaneohe Bay, Hawaii, to begin what was to be their final Western Pacific deployment in the Hornet. On 16 January, the squadron was informed it would transition to the F-35B by the end of September. The last week of January saw the squadron move from Kaneohe to MCAS Iwakuni, Japan. January's close saw the squadron fly a monthly total of 245 sorties for 568.5 hours, the highest monthly flight hour total the squadron had seen since 2007 Operation Iraqi Freedom combat operations.

In April, exercise Foal Eagle provided invaluable experience for air crews and maintainers as the squadron supported a demanding operations tempo over the Korean peninsula in adverse weather. In Kunsan, the squadron generated a low-cost, four-plane unit level training det. to further flight leadership training. Deemed exercise "Wolf Raider," flight leads and combat wingmen under instruction gained



valuable air combat maneuvering experience against U.S. Air Force F-16s. "All the while, squadron maintenance reset a flat aircraft phase trajectory in preparation for MAG-12's upcoming exercise in Guam," said Waterman. "We executed 108 sorties during a 72-hour surge event without dropping a single scheduled sortie."

In mid-July the squadron redeployed from Iwakuni to Miramar to continue the business of transition. In August and September, VMFA(AW)-121 transferred its remaining aircraft, equipment, and personnel; executed a change of command; and relocated squadron colors and heritage items from Miramar to its new home at Yuma.

Current VMFA-121 commanding officer Lt. Col. Jeffrey

Scott, who took command of the unit shortly before its transition, essentially took over a squadron with no aircraft. Waterman oversaw the transfer of all the squadron's F/A-18Ds before Scott assumed command.

"We started as a detachment of Marine Aircraft Group 13 with a core cadre of Marines who would become the core of our maintenance department on the aircraft and eventually the trainers," Scott said. "We didn't have a building or any aircraft at first and everyone had come from legacy platforms from various squadrons."

The squadron received its first new jet and was re-designated VMFA-121 in November 2012. The squadron did not have an existing structure of personnel, who were patched together with Marines from all over even as there were other Marines and pilots coming and going to get trained on the aircraft.

"Most commanders are very experienced in the platform their squadron flies; in this case I had a lot of experience, but none with the F-35," admitted Scott. "I had to attend training to fly the F-35B in Eglin AFB, and continue to




command procedures were developed to bridge those gaps," said Scott. "Many of the processes normally in place for an aircraft were not in place, since we were the first F-35 squadron ever not to rely on the manufacturer to manage and conduct the maintenance on the aircraft."



build my knowledge of the aircraft, just as our Marines have been doing on the maintenance side. Aside from being away as a commander for a few months, I ended up spending more time in the simulator and book learning this jet than many commanders simply to build experience. We are still growing at the rate the schoolhouse can produce trained maintainers and pilots. We stood up the squadron and completed a thorough maintenance inspection, as well as our administrative programs with limited personnel on hand."

The F-35B was purchased as part of a joint and international program, but how it was purchased did not exactly match existing Naval Aviation maintenance programs. "It was through the hard work of the Marines that the local

Scott has been pleased with the progress the squadron has made and the challenges it has overcome before, during, and after the transition. "Everyone from my parent MAG-13, 3rd Marine Aircraft Wing, Headquarters Marine Corps, and Marine Corps Air Station Yuma have done an outstanding job to support the squadron's stand up of this aircraft and the maintenance for this fifth-generation stealth fighter." 

Rick Llinares's photography has appeared in multiple publications, including Naval Aviation News. The author would like to express his sincere appreciation to the following people for their tremendous support with this feature: Lt. Col. Jeffrey Scott, Lt. Col. Michael Waterman, Maj. Gregory Summa, Capt. Staci Reidinger, 1st Lt. Kathryn Whichard, and 1st Lt. Chad Hill.