Bell Offers Manned, Unmanned Tiltrotors for Navy's Next Rotorcraft

The Bell 280 Valor is currently offered as a replacement for the U.S. Army's H-60 helicopters, and Bell proposes they would be an ideal component of the Navy's DMO concept. *Bell*

NATIONAL HARBOR, Md. – Bell, a Textron company, is marketing its manned and unmanned tiltrotor aircraft to be the eventual replacements for the Navy's MH-60R/S helicopters.

Carl Forsling, Bell's senior manager for military sales and strategy, told *Seapower* April 4 at the Navy League's Sea-Air Space expo that the Bell tiltrotors would be ideal for implementation of the Navy's Distributed Maritime Operations concept because of their speed, range and payload.

The two tiltrotors are the versions of the unmanned Bell 247 Vigilant and the manned Bell 280 Valor.

The Valor, currently offered as a replacement for the U.S.

Army’s H-60 helicopters, is larger than the 247 and is designed to carry 8-12 passengers. It has two engines, one each at the wingtips driving a tiltrotor. Unlike those on the Bell-Boeing V-22 Osprey, the engines do not pivot, simplifying the mechanics of the movement and reducing cost. The marinized Valor would have a pivoting wing like the V-22 for storage in a ship’s hangar. The aircraft would be hardened for electromagnetic protection and be marinized for corrosion control in the salt-water environment. It would assume the roles of the MH-60S, including plane guard, rescue, medical evacuation and logistics.

The marinized unmanned Vigilant would replace the MH-60Rs on surface warships such as guided-missile destroyers. The folding rotors and pivoting wing would allow storage in a warships’ small helicopter hangars. The Vigilant could be used for roles including surveillance, antisubmarine warfare, precision strike and aerial refueling.

With both aircraft replacing helicopters, the speed and range advantage would allow the tiltrotors to cover more area at a faster rate, Forsling said, while carrying heavier payloads.

Navy’s CVM-22B Aircraft Adds Medevac Speed to Carrier Strike Group

A CVM-22B Osprey, from the “Sunhawks” of fleet logistics multi-mission squadron (VRM) 50, lands on the flight deck of the aircraft carrier USS Nimitz (CVN 68). At a Sea-Air-Space briefing, the V-22 program manager discussed the aircraft’s usefulness as a medevac solution. *U.S. Navy / Mass Communications Specialist 3rd Class Joseph Calabrese*

NATIONAL HARBOR, Md. — The U.S. Navy’s new CMV-22B Osprey tiltrotor carrier-onboard delivery aircraft’s capabilities have been a game-changer for medical evacuation from a carrier strike group, the Navy’s V-22 program official said.

The CMV-22B, which is replacing the catapult-launched C-2A Greyhound COD aircraft in the fleet, takes off and lands vertically. It is less dependent on carrier launch-and-recover cycles and, therefore, more flexible in its ability to quickly launch from the aircraft carrier and carry a medical patient to facilities ashore.

In addition to quicker launch capability, the range of the CMV-22B — which can be refueled in flight—give it an added ability to reach land-based medical facilities from farther

out.

Marine Col. Brian Taylor, the Navy's V-22 program manager, speaking April 4 to reporters at a Naval Air Systems Command (Booth 947) briefing the Navy League's Sea-Air Space expo at National Harbor, Maryland, spoke of a medevac from the one of the two CMV-22B detachments from that have deployed on aircraft carriers to the Indo-Pacific region so far from Fleet Logistics Multimission Squadron 30 (VRM-30). A CVM-22B launched from the carrier with a medevac patient and was able to land in a helicopter landing pad at the naval hospital in Camp Foster, Okinawa, a feat that the C-2A would not have been able to accomplish.

Taylor MV-22B integrated well with carrier operations. He also said the Marine Corps' MV-22B Osprey has qualified to operate from the hospital ship USNS Mercy.

The Osprey is operated by the U.S. Marine Corps, Air Force, and Navy and by the Japanese Self-Defense Force.

Taylor said the Osprey is expected to be in service through 2055. It reached initial operational capability in 2007. Under current contracts, production is expected to end in late 2024. The program office is focusing on sustainment and keeping the flow of parts and other resources necessary to keep the Osprey fleet operational through its service life.

Last year the Marine Corps deactivated one MV-22B squadron – VMM-166 – as part of Commandant Gen. David Berger's Force Design 2030 initiatives. Faced with the possibility of excess MV-22Bs in inventory, Taylor said his office is looking at inventory management of the fleet to develop a long-term plan, with an option that some Ospreys may be placed in storage, available as attrition aircraft.

Navy’s Flight I/II DDGs Get UAS Capability with Textron’s Aerosonde

The Aerosonde UAS has been deployed on a Navy Arleigh Burke-class guided missile destroyer in the 7th Fleet. *TEXTRON SYSTEMS*

ARLINGTON, Va. – The Aerosonde unmanned aerial system has been deployed on a U.S. Navy Arleigh Burke-class guided-missile destroyer serving in the U.S. 7th Fleet, giving the Flight I/II DDG – which does not have the organic helicopter facilities of the Flight IIA and subsequent versions of the DDG – an organic aerial surveillance capability.

Wayne Prender, Textron Systems’ vice president for Air

Systems, told *Seapower* March 31 the DDG – which he was not at liberty to name – deployed with an Aerosonde system on board in March. The system is being operated under a contractor-owned/contractor-operated arrangement.

Prender said a second DDG would deploy with an Aerosonde system later this year. He also said that for three years an Aerosonde system has been operational on board the Lewis B. Puller-class expeditionary sea base ship USS Hershel "Woody" Williams in support of the U.S. 2nd Fleet.

Prender said the deployments are "helping to set the calculus for real-world operations."

The Aerosonde can carry a variety of sensors including an electro-optical camera, an Automatic Information System receiver, and other special payloads. The UAS can perform wide-area search, expanding the search horizon of the host ship. The system is fully integrated into the ship's combat information center.

The UAS uses less fuel – about one pound per hour – than an MH-60 helicopter, which burns about 1,000 pounds per hour. The Aerosonde uses heavy fuel, the same fuel used by the ship's turbines, so no provision for a different fuel is needed.

An Aerosonde can be operated by a team of three contractor personnel. The fixed-wing version can be launched and recovered in Sea State 4 and is recovered by a net rigged on the host ship. A vertical takeoff and landing version, which carries a lighter payload but can be launched more quickly, will be deployed on a ship later this year.

Lockheed Martin Marks Delivery of 500th C-130J Super Hercules

An HC-130J Super Hercules long range surveillance aircraft sits on a runway in Waco, Texas, following its arrival May 11, 2017, to begin installation of the Minotaur Mission System Suite. *U.S. Coast Guard*

ARLINGTON, Va. — The 500th C-130J Super Hercules aircraft built by Lockheed Martin (Booth 1001) has been delivered to its customer, the company announced March 15.

The aircraft, Lockheed Martin C-130 construction number 5934, is a C-130J-30 version that was delivered to the 130th Airlift Wing, a unit of the West Virginia Air National Guard based at McLaughlin Air National Guard Base in Charleston, West

Virginia. The wing is replacing its older C-130 Hercules aircraft with new C-130J-30s.

The C-130J Super Hercules represents a significant advancement in performance, technology and airlift capability over the older C-130 Hercules family of aircraft. The C-130J is equipped with the more powerful Rolls-Royce AE 2100D3 turboprop engines, six-bladed GE-Dowty R391 composite propellers, modern avionics and mission systems. The Super Hercules features dual head-up displays, an integrated defensive suite, automated maintenance fault reporting, and a rear ramp door capable of opening at airspeeds of up to 250 knots. It has greater speed, range lift capacity, climb rate, cruise altitude and short-field performance than the legacy C-130.

The C-130J Super Hercules is the current production model of the legendary C-130 Hercules aircraft. The C-130J first flew in 1996 and entered service in 1999. It is now the airlift aircraft of choice of 26 operators in 22 nations.

The U.S. military services operate the largest C-130J Super Hercules fleet in the world. The U.S. Air Force and Air National Guard collectively operate C-130J, C-130J-30, AC-130J Ghostrider, EC-130J Commando Solo, HC-130J Combat King II, MC-130J Commando II and WC-130J Weatherbird variants. The Marine Corps operates the KC-130J tanker version and a C-130J as part of the Blue Angels Flight Demonstration Team. The Coast Guard operates a version of the HC-130J which is different than the version used by the Air Force for search, rescue and logistics. The U.S. Navy is planning to test a version of the C-130J-30 for the Take Charge and Move Out (TACAMO) strategic communications mission.

These are some of the 17 different mission configurations of the C-130J used worldwide for transport (military and commercial), humanitarian aid delivery, aerial firefighting, natural disaster relief support, medevac, search and rescue,

special operations, fire support, weather reconnaissance, atmospheric research and aerial refueling.

The C-130J-30 is a version of the Super Hercules, which has an extended fuselage (15 feet, or 4.6 meters) when compared to the basic C-130J. As such, it can carry 30% more passengers and cargo than the basic C-130J and 50% more container delivery system bundles.

The rugged C-130 family of aircraft has been in serial production longer than any other military aircraft in the U.S. inventory. The first C-130A made its first flight in 1954 and entered service in 1956. Since the first C-130 rolled of the Lockheed Martin production line, more than 2,100 were built before production switched to the C-130J. It is flown out of more than 70 nations and has been certified to support upwards of 100 different mission capabilities in its lifetime.

“No aircraft in history, production or operation matches the C-130 Hercules in terms of its versatility. The C-130J both extends and expands this reputation thanks to increased speed, integration and strength,” said Rob Toth, director of Business Development for Lockheed Martin’s Air Mobility and Maritime Missions line of business.

As a retired U.S. Air Force Special Operations MC-130H navigator, Toth has experience flying and commanding operations with both legacy and C-130J aircraft.

“The legacy Hercs were great aircraft. The C-130J offers a more enhanced flying experience, especially with the advanced situational awareness and added power,” he said. “You the value of those attributes across all mission scenarios, especially with the maritime patrol, search and rescue, special operations and aerial refueling requirements supported by the U.S. Marine Corps and Coast Guard.”

To date, the Navy is the only U.S. government operator to not have a J in its fleet. Currently the Navy flies C-130s for

transport and for 20 years (1963-1993) on the TACAMO missions.

Lockheed Martin is honored to have the Super Hercules selected for TACAMO testing – possibly bringing it back to where it all began, Toth said.

“We are working closely with NAVAIR to support an aggressive acquisition strategy that prioritizes both speed of acquisition and affordability to accelerate recapitalization of one of our nation’s most important capabilities – survivable, reliable, and endurable communications between the president and the nation’s nuclear forces,” Toth adds. “We are proud to be at the heart of this effort and confident that the Super Hercules will deliver the critical capability our nation needs.”

With SPY-6, Navy Has Radar to Match the Range of its Missiles

The SPY-6(V)1 is being installed on Flight III Arleigh Burke-class DDGs. This air-and-missile-defense radar has been installed on the future USS Jack H. Lucas (DDG 125), shown here, scheduled to join the fleet in 2024. *HII*

ARLINGTON, Va. – The SPY-6 air and missile defense radar, the first of which has been installed on a guided-missile destroyer, will give the Navy a sensor worthy of its long-range Standard SM-3 Block IIA surface missiles, Raytheon officials said.

Briefing reporters April 1, Ken Spurlock, Raytheon's Strategic Missile Defense Requirements & Capabilities director, said the SM-3 missile "out-shot" the capabilities of earlier radars – presumably the SPY-1 on earlier DDGs. With the SPY-6, the SM-3 "can engage at the maximum range possible" for the missile.

Spurlock said the SPY-6 allows a ship to provide air and missile defense simultaneously, provide regional defense organically, offer greater clarity of the battlespace, give more defense in depth, reduce the risk of fratricide and reduce the number of missiles needed to defeat a target.

Also briefing was Michael Nulk, Raytheon's associate director, Requirements and Capabilities – Naval Power, said the SPY-6 will give commanders the discrimination capability to make better decisions and to "change their shot doctrine."

“There is no other radar with the surface maritime capabilities of SPY-6,” Wes Kremer, president of Raytheon Missiles & Defense, said in a March 31 release. “SPY-6 is the most advanced naval radar in existence, and it will provide our military a giant leap forward in capability for decades to come.”

Raytheon Missiles & Defense was awarded a $651 million Naval Sea Systems Command contract, with options totaling $2.5 billion, for “hardware, production and sustainment for full-rate production” of the SPY-6 family of radars. The contract provides for five years of production for radars for up to 31 U.S. Navy ships of seven types.

Scott Spence, naval radars executive director at Raytheon Missiles & Defense, also briefing reporters, said the company had 46 SPY-6 shipsets under contract, with six of those in work at the Raytheon plant. He said the enlarged footprint of the SPY-6 production will help reduce sustainment costs.

Spence noted the last transmitter that Raytheon builds for the SPY-1 radar will be delivered in April, concluding 41 years of production for the SPY-1.

The SPY-6 family includes the SPY-6(V)1, being installed on Flight III Arleigh Burke-class DDGs. The (V)1 has four flat antenna faces each with 37 radar module assemblies. This air-and-missile-defense radar has been installed on the future USS Jack H. Lucas (DDG 125), scheduled to join the fleet in 2024. The second shipset has been delivered for installation on the future USS Ted Stevens (DDG 128).

The SPY-6(V)2 Enterprise Air Surveillance Radar (EASR) has a rotating face with nine RMAs. The (V)2 will equip the America-class and Wasp-class amphibious assault ships, San Antonio-class amphibious transport dock ships, and Nimitz-class aircraft carriers.

The SPY-6(V)3 EASR has three fixed faces each with nine RMAs.

The (V)3 will be installed on Ford-class aircraft carriers and Constellation-class guided-missile frigates.

The SPY-6(V)4 EASR will have four fixed faces each with 24 RMAs. The (V)4 will be back-fitted on some Flight IIA Arleigh Burke-class DDGs.

Builders, Suppliers of Navy Ships Facing Inflation Costs for Materials

USS Gerald R. Ford (CVN 78) transits the Atlantic Ocean, March 30, 2022. *U.S. NAVY / Mass Communication Specialist 3rd Class Jackson Adkins*

ARLINGTON, Va. — The price inflation hitting American

consumers also is hitting the shipyards that builds ships for the U.S. Navy, which are facing increased costs for the materials used to build the ships and their components, said two executives who chair shipbuilder and supplier industrial base coalitions.

Suppliers who were not given advance funding especially are vulnerable to price inflation, which could have long-term effects in driving up the cost of the ships the Navy plans to procure. In addition, the shipbuilders are facing daunting labor shortages in the current tight labor market.

David Forster, a retired Navy captain, Global Strategy Executive of Naval Services, Rolls-Royce North America Inc., and chairman of the Amphibious Warfare Industrial Base Coalition, and Rick Giannini, chairman of the Aircraft Carrier Industrial Base Coalition and CEO of Milwaukee Valve, described the industrial base challenges of the fiscal 23 budget and Future Years Defense Plan in an April 1 interview with *Seapower*.

Giannini said inflation is the top concern of the aircraft carrier industrial base, especially to those suppliers who did not receive advance funding during the COVID-19 pandemic. He said the block buy of CVNs 80 and 81 saved the taxpayers money because it allowed suppliers to order advance materials, which are now in hand and unaffected by the inflation now hitting the industry.

Giannini's company, Milwaukee Valve, uses a large amount of nickel and copper in its aircraft carrier components, which it ordered as soon as possible for two CVNs and was able to lock in the low costs before the current inflation. He said the prices of nickel have jumped and that suppliers that did not or could not order earlier were now facing the effects of inflation.

The ACIBC chairman said the CVN block buy is going well from

his perspective and the ACIBC is working to show Congress the benefits of a two-CVN buy, including the advance procurement of materials that helps the suppliers to have the materials on hand when the builder needs them, making for a smooth build rate.

Forster said the Navy's efforts to award contracts early during the first two years of the COVID pandemic "saved a lot of jobs" and gave credit to James "Hondo" Geurts, then assistant secretary of the Navy for research, development and acquisition, for his successful efforts to advance funding to shipbuilders and in turn to their suppliers.

Forster said the three to 3.5 year build cycle for amphibious assault ships was in place and good for the stability of the industrial base, but the Navy's 2023 budget plan to end procurement of the Flight II San Antonio-class amphibious transport dock ships after a "handshake deal" for a block buy was disappointing and illustrated the ambiguity of the plans, especially since Marine Corps Commandant Gen. David Berger supported a requirement of 31 large- and medium-size amphibious warfare ships. In concert with the 2023 budget calling for the decommissioning of four dock landing ships, the Navy's budget is at odds with its plans to a build a force structure of 31 amphibious warfare ships.

Forster also noted the procurement of the light amphibious warship had slid until 2025, a further challenge to stability for the workforce.

He also advocates the Navy procure a replacement for the amphibious assault ship USS Bonhomme Richard, which was scrapped after a devastating fire in July 2020, having been modified for operation of the F-35B strike fighter.

Giannini said the second major concern of the shipbuilders and its supplier industrial base was the workforce, which is stressed by the difficulty of hiring skilled labor. He cited

the increasing age of the workforce and the retirements earlier than planned as a consequence of the COVID-19 pandemic.

The Navy's shipbuilding and ship retirement plans for 2023 and the Future Years Defense Plan and are likely to face intense scrutiny from the armed services committees in Congress, who have pushed back against retirement plans for several ships in the recent past and have been critical of the Navy's "divest to invest" strategy.

HELIOS Laser Weapon System Delivered for Installation on USS Preble

An artist’s rendering of Lockheed Martin’s HELIOS system. *LOCKHEED MARTIN*

ARLINGTON, Va. — The Navy’s newest laser weapon system has completed range testing at Wallops Island, Virginia, and is being installed on the U.S. Navy’s Flight IIA Arleigh Burke-class guided-missile destroyer USS Preble in San Diego.

The first High-Energy Laser with Integrated Optical Dazzler and Surveillance, or HELIOS, built By Lockheed Mission Systems and Sensors, has started phased delivery to the Preble at the BAE Systems yard in San Diego. It will be the first laser weapon system to be integrated with a ship’s Aegis Combat System and power and cooling systems, said Jon Rambeau, Lockheed Martin’s vice president and general manager for Integration for Systems and Sensors, during a March 30 interview with *Seapower*.

The 60-kilowatt HELIOS is scalable, Rambeau said, up to 120 kilowatts with minor modifications such as the addition of more fiber-optic laser modules. It has replaced the Preble’s forward Mk15 Close-In Weapon System.

“We believe the 60- to 120-kilowatt-range systems can be effective against an ASCM [anti-ship cruise missile],” Rambeau said. “We’ve done some modeling that demonstrates that, we believe, and also looking soon to be able to back that up with some real-world test data. Watch for some news that should be coming soon as we continue the test program.”

The 60-kilowatt HELIOS also can be used for surveillance and as a counter-unmanned aerial system dazzler. The HELIOS also is adaptable to the Ship Self-Defense System on aircraft carriers and newer amphibious warships.

“After better than a decade of that question being out there, ‘When are these systems going to demonstrate that they’re tactically relevant,’ we’re really right at the threshold of that to the point where the conversation is not going to be

anymore, ‘Are those going to work?’ and ‘Are they going to be useful on the battlefield?’” Rambeau said. “Rather, the question is going to turn more to funding priorities, price points, the capacity of our industry primes, and the supply chain that could build these things in full quantities and at scale and then, ultimately, conversations around doctrine and how they would actually be employed in combat.

“It’s really exciting time in lasers and it has been a long time in coming,” he said.

The HELIOS contract was awarded to Lockheed Martin in January 2018. The company is also developing a layered laser weapon system for the U.S. Army.

NAVCENT Commander: Goal of 100 USVs in Area by Summer of 2023

A Saildrone Explorer unmanned surface vessel is being towed out to sea in the Arabian Gulf off Bahrain's coast, Jan. 27. U.S. Naval Forces Central Command began operationally testing the USV as part of an initiative to integrate new unmanned systems and artificial intelligence into U.S. 5th Fleet operations. *U.S. ARMY / Specialist Natianna Strachen*

ARLINGTON, Va. — The commander of the U.S. 5th Fleet/Naval Forces Central Command said he is pleased with the results of the experimentation with unmanned vessels and artificial intelligence in his area of operations and predicts a significant expansion of their use in his area of responsibility in the near future.

Vice Adm. Brad Cooper, speaking March 28 in an online discussion sponsored by the Washington think tank the Middle East Institute, said his task force for unmanned vehicle experimentation, Task Force 59, "has exceeded our every expectation."

Unmanned systems are not new to the 5th Fleet; it has operated RQ-4A Global Hawk surveillance unmanned aerial vehicles and

Mk18 mine countermeasures unmanned underwater vehicles for years. But Cooper said the maturation of unmanned surface vessels is relatively new and has enabled a great expansion in their use in the role of maritime domain awareness, allowing his command to "put more eyes out on the water."

The admiral said by linking two USVs together, they could use "artificial intelligence to map the waters around them … detecting when something is unusual – smuggling, illegal fishing, you name it, and then sending the information back to the command center.

"That process has allowed us to expand our maritime domain awareness two or three times," he said, noting that with more nations using USVs, the maritime domain awareness in the region could expand to 30 times the coverage.

"Our goal is to have 100 of these USVs patrolling around the waters of the Middle East by the summer of 2023," Cooper said. "It a heavily partnered effort; it would mostly be an investment by partners. … We're going to find ourselves in a pretty good spot because the capabilities speak for themselves."

In January and February, about 80 unmanned systems were deployed in International Maritime Exercise 2022 in scenarios ranging over the Persian Gulf, North Arabian Sea, Gulf of Oman and the Red Sea.

Task Force 59 has accrued more than 7,000 hours of operating USVs. One type of USV stayed at sea for 45 days without need of additional fuel or maintenance.

For example, TF-59 has deployed high-endurance Saildrone USVs, which were controlled from Alameda, California, to patrol the Gulf of Aqaba. In another example, MARTAC provided five of its high-speed USVs for the experiments.

Cooper said for the price of one Arleigh Burke-class guided-

missile destroyer, he could buy or lease around 2,000 Saildrone USVs.

Marine Corps Hornet Squadron Repositioned to Eastern Europe

U.S. Marines with Marine Fighter Attack Squadron (VMFA) 312 assigned to 2nd Marine Aircraft Wing, II Marine Expeditionary Force, depart in F/A-18C Hornets from Marine Corps Air Station Beaufort, South Carolina, Feb. 26, to participate in Exercise Cold Response (Ex CR22) in Norway. *U.S. MARINE CORPS / Cpl. Aidan Parker*

ARLINGTON, Va. — The Defense Department has added another tactical jet squadron to eastern Europe to shore up U.S.

European Command and possible NATO forces in the region, the Defense Department said.

Defense Department spokesman John F. Kirby told reporters March 29 that a 10-plane Marine Corps F/A-18 squadron based at Marine Corps Air Station Beaufort, South Carolina, would be dispatched to an airfield – which he did not name – in eastern Europe.

Kirby did not name the squadron but referred to the recent Exercise Cold Response in Norway, where Marine Fighter Attack Squadron 312 (VMFA-312) was deployed. It is likely that VMFA-312 was the squadron chosen. VMFA-312 operates F/A-18C/D Hornets. Other Hornet squadrons based at Beaufort include VMFA-115, VMFA(AW)-224 and VMFA(AW)-533.

Kirby also announced that "a couple of Marine C-130s" were also going to be repositioned to eastern Europe. These likely are KC-130J Super Hercules tanker/transports from Marine Aerial Refueler/Transport Squadron 252, base at MCAS Cherry Point, North Carolina.

Also deploying from Exercise Cold Response to Lithuania are Marines assigned to Marine Air Control Group 28, Kirby said.

On March 29, Kirby announced that a Navy EA-18G Growler electronic attack squadron, VAQ-134, arrived at Spangdahlem Air Base, Germany, to strengthen U.S. forces on NATO's Eastern Flank.

Marine Corps' Black Sheep to

Ride the Lightning

An AV-8B Harrier and an F-35B Lightning II are staged during the change of command and re-designation ceremony for Marine Fighter Attack Squadron 214 aboard Marine Corps Air Station Yuma, Arizona, March, 25. *U.S. MARINE CORPS / Sgt. Samuel Ruiz*
ARLINGTON, Va. – The Marine Corps' famous Black Sheep squadron has a new designation as it upgrades to from its AV-8B Harrier II attack jet to its new aircraft, the Lockheed Martin F-35B Lightning II strike fighter.

Marine Attack Squadron 214 (VMA-214) – the Black Sheep – was re-designated Marine Fighter Attack Squadron 214 (VMFA-214) at Marine Corps Air Station (MCAS) Yuma, Arizona, on March 25, marking the beginning of its transition from the AV-8B to the F-35B.

VMA-214 was the last AV-8B squadron based at Yuma and based near the West Coast. Three other AV-8B squadrons – VMAs 223, 231, and 542 – remain in service at MCAS Cherry Point, North

Carolina. The Harrier is scheduled to serve with the Marine Corps until fiscal 2028.

Having flown the Harrier since 1989, the Black Sheep routinely deployed six-plane detachments on board amphibious assault ships as part of the Air Combat element of a Marine Expeditionary Unit and flew combat missions in numerous operations.

The Black Sheep began as Marine Fighter Squadron 214, activated with F4F Wildcat fighters on July 1, 1942, in Hawaii. In August 1943, Maj. Gregory "Pappy" Boyington and Maj. Stan Bailey formed a group of unassigned pilots into a combat squadron with the callsign "Black Sheep" and flew their F4U-1 Corsair fighters to an outstanding record in the Solomon Islands.

The squadron has built a solid legacy with numerous aircraft types in combat in World War II, the Korean War, the Vietnam War, Somalia, Iraq and Afghanistan and many other crises. For the official history of the Black Sheep, see this link: https://www.3rdmaw.marines.mil/Units/MAG-13/VMA-214/History/

"Having previously served in VMA-214 and flown the AV-8B for many years, the Black Sheep and the Harrier hold a special place in my heart," said Maj. Gen. Bradford J. Gering, the commanding general of 3rd Marine Aircraft Wing, in a Marine Corps release. "As 3rd MAW says a bittersweet farewell to the Harrier, we are excited to increase our number of F-35B squadrons with the re-designation of VMFA-214."

"The re-designation of VMA-214 to VMFA-214 is the end of a legacy for the Black Sheep and Marine Aircraft Group-13," said Lt. Col. Keith Bucklew, the outgoing commander of VMA-214. "This symbolic event finalizes the sundown for Harriers on the West Coast and closes the chapter on 58 years of attack aircraft operations for the Black Sheep.

"Finishing this mission with a successful 11th Marine

Expeditionary Unit deployment is a testament to the viability and performance of the Harrier over the last 33 years and, more importantly, the talent of the Marines who managed them," Bucklew said. "The AV-8B will be missed in the skies of Yuma, but it is time to transition to the next generation of fighter attack aircraft."

"The F-35's fifth-generation strike fighter capability brings more lethality and flexibility to combatant commanders than any other fighter platform," said Lt. Col. Christopher Kelly, the commanding officer of VMFA- 214. "The STO/VL capability inherent in the F-35 B variant allows the Marine Corps to operate expeditiously and from remote locations, making the model uniquely qualified at supporting expeditionary advanced base operations."

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