

# Marine Corps F-35B, KC-130J Collide in Mid-Air



No one was hurt in the collision between a Marine Corps F-35B Lightning II strike fighter and the KC-130J Super Hercules. KESQ RADIO

ARLINGTON, Va. – A Marine Corps F-35B Lightning II strike fighter collided with a Marine Corps KC-130J Super Hercules tanker/transport aircraft over Southern California on Sept. 29, resulting in the loss of the F-35B and a crash landing of the KC-130J.

“At approximately 1600 [local time] it was reported that an F-35B made contact with a KC-130J during an air-to-air refueling evolution, resulting in the crash of the F-35B,” the Marine Corps said in a release. “The pilot of the F-35B ejected successfully and is currently being treated. The KC-130J is on deck in the vicinity of Thermal Airport. All crew members of the KC-130J have been reported safe.”

A photo of the KC-130J published in the Palm Springs Desert News showed the KC-130J largely intact, having made a gear-up landing in a field in a carrot field in Thermal, California. The photo showed that the two starboard engines and external fuel tank had been heavily damaged. The F-35B crashed near Salton City, California.

The KC-130J was assigned to Marine Aerial Refueler/Transport Squadron 352, based at Marine Corps Air Station Miramar, California. The squadron of the F-35B was not announced.

The F-35B crash is the second for the Marine Corps. An F-35B assigned to Marine Fighter Attack Training Squadron 501 based at Marine Corps Air Station Beaufort crashed in 2018. The Corps lost its first KC-130J in December 2018 in a mid-air collision during an aerial refueling with a Marine Corps

F/A-18D Hornet strike fighter off Japan.

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# U.S. Space Force May Become a Possibility for a Few Naval Academy Graduates



Capt. Ryan Vickers stands for a photo to display his new service tapes after taking his oath of office to transfer from the U.S. Air Force to the U.S. Space Force on Sept. 1, 2020, at Al Udeid Air Base, Qatar. U.S. AIR FORCE / Staff Sgt. Kayla White

ARLINGTON, Va. – In the future, a commission in the U.S. Space Force may be a possibility for a few new graduates of the U.S. Naval Academy (USNA).

“USNA graduates select commissions into the Navy or Marine Corps,” said Cmdr. Alana Garas, a Naval Academy spokeswoman, in a statement to *Seapower*. “All midshipmen are eligible to request interservice commissions into other services. This is separate from the service assignment process. We expect future graduates of USNA to be able to request commissions in the U.S. Space Force, although it remains unclear if the Department of the Air Force will accept any Space Force interservice commission requests from the class of 2021.”

Garas said there are no quotas for any service regarding interservice commissions, “although there is a ceiling of 3% of the graduating class which can be accepted.”

She said the “U.S. Air Force Academy will serve as the primary commissioning service academy for the U.S. Space Force (both

Department of the Air Force) in the same manner as the U.S. Naval Academy is the primary commissioning service academy for the U.S. Marine Corps (both Department of the Navy).”

USNA graduates have long been eligible to request commissions in the U.S. Air Force.

“USNA graduates will continue to be able to request interservice commissions into the U.S. Air Force,” Garas said. “The last U.S. Air Force commission from USNA was one graduate in the class of 2020.”

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## **Berger: Marine Corps Needs More Diversity – In Amphibious Ships**



The Tarawa-class amphibious assault ship USS Saipan (LHA 2) steams alongside the Nimitz-class aircraft carrier USS Dwight D. Eisenhower (CVN 69). U.S. Navy photo / Mass Communication Specialist Seaman David Danals

ARLINGTON, Va. – The commandant of the Marine Corps said the Corps needs the Navy to broaden its family of amphibious warfare ships to create a more distributed, survivable force to operate in a future high-intensity conflict with a peer competitor.

Gen. David H. Berger, Sept. 24 speaking during an online interview by Defense One, said the three types of large amphibious warfare ships currently in the Navy’s fleet – the amphibious assault ship (LHA/LHD), amphibious transport dock ship (LPD), and dock landing ship (LSD) – “have done great for

us in the way that we needed to operate so far. But that's not the only way we're going to need to operate going forward."

Berger said that "those three families of pretty expensive, high-end ships are not enough. We need a more diverse family of ships in order to compete every day, in order to be ready for a crisis or conflict, hence the light amphibious warship [LAW]."

Berger is in the midst of redesigning the force structure of the Marine Corps with his Force Design 2030 plan to meet the challenges of future potential conflict with powers such as China.

"We know we need something that's smaller, that doesn't have as much draft, that can move us around from ship to shore or shore to shore over great distances, but is affordable," the commandant said. "Whatever that turns out to be, it will broaden the portfolio and give us more tools. I need to give commanders the means, the mobility to move in a distributed operating environment. The [LAW], what ever that turns out to be, is part of that.

Berger noted that, "so far, within the Navy, within the Department of Defense, every single wargame for the past five months has borne that out. If you don't have that, they're going to know how you are moving around and you're easier to target. We've got to make it hard [for the enemy to target]."

The general said commanders "have to distribute the force first of all to give the adversary a lot of looks from a lot of different directions in every single domain. You make it very difficult for them to focus their strengths."

Berger also pointed out that medical facilities will need to be brought more forward in a high-intensity conflict to care for casualties. He also said protection of logistics and of command and control, which long have been taken for granted in the wars that the United States has fought over several

decades, can no longer be taken for granted.

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# Marine Corps Restores Priority to Ground-Based Air Defense



Capt. Christopher Lowe, (left), assigned to the 26th Marine Expeditionary Unit (MEU), and Cmdr. Don Wilson, the chief staff officer of Amphibious Squadron (PHIBRON) 8, pose for a photo next to an L-MADIS aboard the amphibious assault ship USS Bataan. U.S. Navy / Mass Communication Specialist 2nd Class Anna E. Van Nuys

ARLINGTON, Va. – After two decades of land combat in wars with no air threat beyond small drones, the Marine Corps is putting a high priority to ground-based air defense (GBAD) as it redesigns its force for expeditionary advance base operations in an era of great power competition.

The Marine Corps used to have batteries of Hawk surface-to-air missiles and later the Avenger system, augmented by short-range Stinger man-portable air-defense missiles (MANPADs) in their low-altitude air-defense battalions. Only the Stingers survived by the mid-2000s. In Afghanistan and Iraq, with no credible air threat, GBAD fell in priority in budgets and development as the Corps focused on ground combat systems such as armored vehicles, artillery and tactical aircraft.

With the Force Design 2030 plan of the commandant, Gen. David H. Berger, to re-shape the Corps into a force that can operate and survive inside the area of operations of a peer competitor equipped with advanced manned and unmanned aerial systems and

cruise missiles, GBAD has been restored to a higher priority in the defense budget and in the Corps' acquisition programs.

John Garner, program executive officer for Land Systems, has reorganized the PEO's program offices directorates to include one for GBAD. The four major GBAD programs being developed or deployed were outlined Sept. 22 by Garner in the Virtual Modern-Day Marine exposition:

- MRIC – Medium-Range Interceptor Capability
- MADIS – Marine Air Defense Integrated System
- L-MADIS – Light Marine Air Defense Integrated System
- Advanced MANPADS/Stinger

The MRIC is likely to be a vehicle-mounted missile system with a 360-degree fire-control radar to handle aircraft and cruise missiles at medium ranges.

Garner said the Corps expects to field a prototype of the MRIC "over the next two years."

The MADIS is mounted on a pair of Joint Light Tactical Vehicles, one with a turret launcher for four Stinger missiles and a 30mm cannon, as well as an optical sensor and shoulder-fired Stingers. The second vehicle is equipped with an RPS-42 360-degree radar, a 7.62mm M134 minigun, and electro-optic/infrared sensors, as well as shoulder-fired Stingers. On both vehicles is the Modi II dismantled electronic countermeasures system, which can be used to disrupt enemy drones, communications, and radio-controlled improvised explosive devices.

The L-MADIS is a counter-UAS electronic attack system mounted on a Polaris MRZR all-terrain vehicle. It features a 360-degree radar, a direct-fire capability, radio frequency jammers and electro-optic/infrared sensors. The L-MADIS is credited with downing an Iranian drone that flew in the close vicinity of the amphibious assault ship USS Boxer in July 2019.

Garner said the GBAD systems will fill “a major void” in Marine Corps capabilities.

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# Marine Corps' Amphibious Combat Vehicle Completes Initial Operational Tests



BAE Systems' ACV solution has completed thousands of miles of mobility testing and a full range of amphibious operations, including demonstrations of launch and recovery. BAE Systems ARLINGTON, Va. – The Marine Corp's new amphibious vehicle has completed a major step in its acquisition program and is on track for a full-rate production decision in November, a service acquisition official said.

The Amphibious Combat Vehicle (ACV), already in low-rate production by BAE Systems, completed its Initial Operational Test and Evaluation on Sept. 4, said John Garner, program executive officer for Land Systems, speaking Sept. 21 at the Virtual Modern Day-Marine Exposition.

Garner said early fielding of the personnel carrier version of the ACV to a Marine Corps amphibious assault battalion will begin in the first week of October and be completed by the end of that month. Other variants of the ACV under development include a command-and-control ACV; an ACV armed with a 30mm cannon; and a recovery version designed to tow damaged vehicles to repair facilities.

The ACV is replacing the AAV7 family of assault amphibious vehicles. Garner said he expects there will be a robust

Foreign Military Sales potential for the retired AAV7 vehicles.

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## **Moton: Unmanned Vessels May Require Different Approaches to Maintenance**



A Sailor and civilian technicians monitor an unmanned surface vehicle (USV), after it was launched from Military Sealift Command's expeditionary sea base, USNS Hershel "Woody" Williams (T-ESB 4), into the Chesapeake Bay, Sept. 14. U.S. Navy / Bill Mesta

ARLINGTON, Va. – The admiral in charge of developing the U.S. Navy's unmanned surface vessels (USVs) and unmanned underwater vessels (UUVs) said the maintenance strategy for the vessels may require different approaches to maintenance, particularly at the operational level (O-level).

Speaking Sept. 17 at a webinar panel of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers. Rear Adm. Casey Moton, program executive officer for Unmanned and Small Combatants, said that "for USVs, [that] probably puts a whole different take on O-level maintenance."

Moton said that "We are just in our initial prototype stage, so we haven't actually picked what the maintenance strategy is going to be but looking at the maintenance strategy is part of our prototyping effort. So [Surface Development Squadron One] in San Diego is including looking at maintenance and helping us look at all that. The same is happening on the UUV side

with [UUV Squadron One] up in Keyport [Washington].”

For small USVs and UUVs, Moton said that a likely outcome for 0-level maintenance would be like that performed by an aircraft squadron.”

As for the Intermediate- and Depot-levels, “We still have to sort that out,” he said. “My personal thoughts are that it goes from a range of making sure that a LUSV, MUSV in particular, are maybe not much different from other surface ship classes in terms of the [Regional Maintenance Centers] doing their role.”

Moton pointed out that the Navy also has “craft-level [UUVs and USVs] that are treated like a craft and [the question] is, “how are we going to maintain and modernize those?”

The admiral noted that “the prototypes are going to make that really interesting and we will figure that out in the next couple of years. ... We’ll try to make sure unmanned is not singled out as an aberration. I also don’t want to close the door to innovation. It’s more of a range of solutions.”

He also said that lots of companies that are working the USV efforts, and that many “smaller and mid-sized yards able to participate. I’m really excited about that.”

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## **Commander Praises Agility that Deployed Low-Yield Warhead for SLBMs**



The Ohio-class guided-missile submarine USS Florida (SSGN 728)

prepares to transit the Mediterranean, Oct. 15, 2019. Some Ohio-class submarines can carry the W76-2 low-yield nuclear warhead. U.S. Navy / Mass Communication Specialist 3rd Class Drew Verbis

WASHINGTON –The admiral in command of the nation’s strategic deterrent forces defended the new W76-2 low-yield nuclear warhead before the Senate Armed Services Committee (SASC) in a hearing on Capitol Hill and praised the agile process that rapidly deployed the weapon.

The requirement for a submarine-launched low-yield warhead became a requirement noted in the 2018 Nuclear Posture Review. The result was the W76-2 warhead, which was deployed in 2019 on the tips of some Trident submarine-launched ballistic missiles carried by Ohio-class ballistic-missile submarines.

“I think it’s an example that shows that we can move fast,” said Adm. Charles A. Richard, commander, U.S. Strategic Command, testifying Sept. 17 before the SASC. “We still know how to do this. That is an example of where the threat changed, new capability was needed, we provided on an operationally responsive timeline [and] closed a potential hole in our deterrence strategy. We should be able to do that more.”

Richard said the rapid development and deployment of the W76-2 was “a type of hedging strategy that enables you to react inside what somebody is attempting to do. That enhances a nation’s deterrence by a nation’s ability to do that.”

Richard stressed that the strategic climate was changing as China and Russia began surging on their way to becoming peer competitors “that have to be deterred differently.”

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# NAVSEA Commander: Planning Critical to On-Time Maintenance of Ships



Gas Turbine System Technician (Mechanical) 3rd Class Jonathan Gancayco, from Oakland, California, right, and Seaman Brice Rodgers, from Philadelphia, operate a lift on the pier beside the Nimitz-class aircraft carrier USS Dwight D. Eisenhower (CVN 69). Ike is currently pier side in Naval Station Norfolk conducting routine maintenance. U.S. Navy / Mass Communication Specialist 3rd Class Asheka Lawrence-Reid

ARLINGTON, Va. – The on-time delivery of ships, submarines and systems from the Navy's repair yards and the private shipyards as well as on-time delivery of new construction ships remains the Naval Sea Systems Command's (NAVSEA's) top priority, the NAVSEA commander said.

"It all starts with advance planning," said Vice Adm. William Galinis, the NAVSEA commander, speaking Sept. 16 in a webinar of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers. "We're going to be relentless to get the planning right."

Advance planning is critical in determining what work a ship will need so that materials can be ordered and delivered in time and the necessary work force assigned and mustered to perform the maintenance before the work starts. Each day matters, he said.

Galinis noted that the duration and complexity of ship maintenance and modernization availabilities is increasing.

"We need to be absolutely relentless in execution," he said.

One of the planning actions that has proved beneficial is sending assessment teams to do ship checks, inspecting a ship

in advance of the availability to determine the condition and needs of the ship to develop the work package as completely as possible.

Galini said that one of the biggest challenges is unplanned work that emerges. Managing that change is critical to minimizing its impact on the schedule.

He also said, "We are challenged in some areas by capacity. We need to build additional capacity."

The admiral said that currently 47 CNO [chief of naval operations] availabilities are being executed in private shipyards (including three nuclear-powered attack submarines at Newport News Shipbuilding). Of those, he said, approximately half are "tracking to the schedule," he said, with the other half being challenges. In addition, 13 nuclear-powered ships – 11 submarines and two aircraft carriers – are in availabilities in the Navy's shipyards.

Galini stressed the importance of teamwork between the Navy, the ship repair industry and the supply chain in meeting the challenges of on-time delivery.

Achieving a predictable and stable workload in ship repair yards benefits both the Navy and industry, enabling the yards to hire and retain a skilled, right-sized work force, a feature that also enables suppliers to get backlogs of orders. It benefits the populations and economies of the communities located by the yards and suppliers as well.

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# Navy Ship Days Delayed by Maintenance Reduced 80% in 2020



Damage Controlman 3rd Class Quiana Quezada, from St. Petersburg, Fla., assigned to Arleigh Burke-class guided-missile destroyer USS Halsey (DDG 97), disassembles the aqueous film forming foam (AFFF) concentrate pump during maintenance. U.S. Navy / Mass Communication Specialist 3rd Class Andrew Langholf

ARLINGTON, Va. – The number of ship days delayed by maintenance has been reduced by 80% in fiscal 2020, a senior Navy engineering duty officer said, even with the COVID-19 pandemic affecting operations.

“The needle is really moving, and moving in a good direction,” said Rear Adm. Eric Ver Hage, commander, Regional Maintenance Center, speaking Sept. 15 in a webinar of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers. “Even with the challenges of COVID, we’ve achieved an 80% reduction in the days of maintenance delay in [fiscal] ‘20 as compared to [fiscal] ‘19.”

Ver Hage said, “It’s not just about on time, it’s also getting the required work complete. In our 2020 DDG [guided-missile destroyer] availabilities, we are tracking to complete 99% of all of our mandatory technical requirements, the things required to keep a ship operating to its full expected life cycle. That also is an improvement over last year.”

The admiral said that fiscal 2020 has been a super-busy year, with 50 CNO [chief of naval operations] availabilities and another 100 in planning; almost 700 emergent availabilities; 20,000 intermediate-level tasks; and 25,000 technical assists.

He said that also conducted were 157 ship readiness assessments, which help “our ships prepare for deployment and really importantly, on preparing for the next CNO avail.”

Ver Hage said the accomplishments were the result of “a great team effort,” while noting that “there has been steadily improving collaboration between industry and the government.”

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## **Navy’s First New Berthing Barge Set for Delivery to Pacific Fleet**



Sailors assigned to the amphibious assault ship USS Bonhomme Richard (LHD 6) walk across the ramp from Berthing and Messing Barge APL-65 to the pier at Naval Base San Diego in this 2010 photo. U.S. Navy / Joe Kane

ARLINGTON, Va. – The first of a new class of berthing barges is soon to be delivered to the U.S. Pacific Fleet, followed early next year by a delivery to the East Coast, a Navy official said.

The first one, APL 67, is nearing completion [and] is going to Pac Fleet,” said Rear Adm. William Greene, fleet maintenance officer, U.S. Fleet Forces Command, speaking Sept. 15 in a webinar of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers.

Greene said the second barge of the class, APL 68, will be delivered to the East Coast in February 2021. The subsequent deliveries will alternate between the West and East Coasts.

He said the 27 legacy berthing barges on the East Coast “are

reaching the end of their service lives.”

Officially designated non-self-propelled auxiliary personnel lighters (small) (APL(S)), the barges provide living space and berthing for the crew – particularly the duty section – of a ship that is going through extensive maintenance. Often the maintenance on a ship requires that berthing, climate control, food service, and water supply, and other services be shut down during renovation.

The new APL(S)-67-class barges will have a length of 269 feet, a beam of 69 feet, and a draft of seven feet. They will have berthing for 74 officers and 537 enlisted personnel. The messing facilities will be able to accommodate 56 officers and 228 enlisted personnel at a time. The barges also feature washrooms, classrooms, lounges, laundry facilities, offices, a barber shop, a fitness center and a medical facility.

The barges are not self-propelled but can be towed to the port or harbor area where the maintenance is to be performed.

VT Halter Marine was awarded a \$78 million Navy contract in September 2018 for two berthing barges with options for four more which, if exercised, would raise the contract value to \$244 million.