Certifiable Ground Control Station Controls First End-to-End Flight

SAN DIEGO – The Certifiable Ground Control Station (CGCS) from General Atomics Aeronautical Systems Inc. (GA-ASI) was used to control the complete flight of an MQ-9B SkyGuardian – including takeoff and landing – on March 12, the company said in a release. This is the first time the CGCS has been used to control an entire end-to-end flight of a remotely piloted aircraft (RPA).

“Controlling takeoff and landing was the last step in a progression of flight milestones for the CGCS,” said David R. Alexander, president of GA-ASI. “Our vision is that MQ-9B will be the first RPA certified to fly in national and international airspace. To achieve that goal, our GCS needs to be type-certified as well. Completing an end-to end flight was an important step in achieving that ultimate goal.”

The flight originated from the Yuma Proving Grounds in Yuma, Arizona. The CGCS features a Pro Line Fusion integrated avionics system from Collins Aerospace, the Abaco FORCE2 flight computer, as well as all the weapons and payload controls for MQ-9B.

The CGCS architecture provides separation between flight and mission critical functions. Flight critical functions are performed using off-the-shelf avionics and flight computers running GA-ASI’s certifiable DAL B software. The mission critical functions are separated and run alongside GA-ASI’s proven Advanced Cockpit payload and weapons equipment.

Coast Guard Interdicts 8 Cuban Migrants on Cay Sal

CAY SAL, Bahamas – The Coast Guard interdicted eight migrants on April 7 on Cay Sal attempting to illegally enter the United States, the Coast Guard 7th District said in a release.

Coast Guard 7th District watchstanders received a notification from a Coast Guard Air Station Miami HC-144 Ocean Sentry aircraft crew reporting two people hiding in nearby bushes. The Coast Guard Cutter Charles Sexton (WPC-1108) crew arrived on scene and deployed a boarding team ashore to investigate the situation. The Charles Sexton boarding team was able to locate the eight Cuban nationals and embarked them with no medical concerns.

The eight Cubans were transferred to Bahamian immigration officials in Freeport, Bahamas, by the Coast Guard Cutter Robert Yered (WPC-1104) crew and will be transferred back to their home.

“Illegal migration voyages are extremely dangerous when transporting human lives on these unseaworthy vessels and put the safety of those aboard in jeopardy,” said Petty Officer 2nd Class Jeffrey Swope, Command Center Watchstander, Sector Key West. “The Coast Guard remains consistent with the mission of protecting the safety of life at sea and interdicting these vessels in an effort to prevent the loss of life.”

Coast Guard Cutters Robert Yered and Charles Sexton are 154-foot fast-response cutters homeported in Florida.

Coast Guard Interdicts 11 Cuban Migrants 24 miles East of Cay Sal

CAY SAL, Bahamas – The Coast Guard interdicted 11 migrants on April 5 who were 24 miles east of Cay Sal and attempting to illegally enter the United States, the Coast Guard 7th District said in a release.

Coast Guard Sector Key West watchstanders received a notification from the Cuban border security reporting an illegal vessel departure with an unknown number of passengers aboard.

The Coast Guard Cutter Isaac Mayo (WPC-1112) crew arrived on scene after a Coast Guard Air Station Miami HC-144 Ocean Sentry aircraft crew sighted the vessel. The 11 adult Cuban males aboard were embarked with no medical concerns.

They were transferred to Bahamian authorities by the Coast Guard Cutter Robert Yered (WPC-1104) crew and will be transferred back to their home.

“Illegal migration voyages are extremely dangerous when transporting human lives on these unseaworthy vessels and put the safety of those aboard in jeopardy,” said Petty Officer 2nd Class Sharon Vela, Command Center Watchstander, Sector Miami. “The Coast Guard remains consistent with the mission of protecting the safety of life at sea and interdicting these vessels in an effort to prevent the loss of life.”

Coast Guard Cutters Robert Yered and Isaac Mayo are 154-foot

fast-response cutters homeported in Florida.

Coast Guard Offloads More than 7.1 Tons of Cocaine in San Diego

SAN DIEGO – The crew of the Coast Guard Cutter Waesche offloaded in San Diego on April 5 more than 14,300 pounds of cocaine seized in international waters of the eastern Pacific Ocean from February to late March, the Coast Guard 11th District said in a release.

“The offload that you see behind me, the bales of cocaine, represents a successful example of the cycle of justice,” said Rear Adm. Nathan Moore, deputy commander of Coast Guard Pacific Area. “This cycle of justice disrupts a cycle of crime which, left unchecked, fuels violence and instability that erodes our hemisphere’s social and economic fabric and directly contributes to historically high numbers of drug-related deaths in North America.”

The drugs were seized during six separate interdictions off the coasts of Mexico and Central and South America by the Coast Guard Cutters Active (WMEC-618), Steadfast (WMEC-623) and Waesche (WMSL-751):

• Active was responsible for two cases, seizing about 1,297 kilograms of cocaine.

• Steadfast was responsible for two cases, seizing an estimated 2,350 kilograms.

• Waesche was responsible for two cases, seizing about 2,874 kilograms.

“The national security cutter is the Coast Guard’s most sophisticated and technologically advanced asset,” said Capt. Patrick Dougan, Waesche’s commanding officer. “However, it would be ineffective without the men and women who serve aboard. Everyone on board plays an important role and manning these ships requires everyone to contribute. This crew and those of our other assets are relentless in their pursuit of professional excellence. This offload is just a small sample of our success.”

Numerous U.S. agencies from the departments of Defense, Justice and Homeland Security cooperated in the effort to combat transnational organized crime. The Coast Guard, Navy, Customs and Border Protection, FBI, Drug Enforcement Administration and Immigration and Customs Enforcement along with allied and international partner agencies play a role in counter-drug operations.

The Coast Guard increased U.S. and allied presence in the eastern Pacific Ocean and Caribbean Basin, which are known drug transit zones off Central and South America, as part of its Western Hemisphere Strategy. During at-sea interdictions in international waters, a suspect vessel is initially detected and monitored by allied, military or law enforcement personnel coordinated by Joint Interagency Task Force-South based in Key West, Florida. The law-enforcement phase of counter-smuggling operations in the eastern Pacific is conducted under the authority of the 11th Coast Guard District, headquartered in Alameda, California. The interdictions, including the actual boarding, are led and conducted by members of the U.S. Coast Guard.

The Waesche is a 418-foot national security cutter homeported in Alameda, California. The Active is a 210-foot medium-endurance cutter and is homeported in Port Angeles,

Washington. The Steadfast is also a 210-foot medium-endurance cutter and is homeported in Astoria, Oregon.

Coast Guard Interdicts 10 Cuban Migrants 20 Miles South of Matecumbe Key

MATECUMBE KEY, Florida – The Coast Guard interdicted 10 migrants Monday 20 miles south of Matecumbe Key attempting to illegally enter the United States, the Coast Guard 7th District said in an April 5 release.

Coast Guard Sector Key West watch-standers received a notification from a good Samaritan boat reporting a suspicious vessel with 10 passengers aboard.

A Coast Guard Station Islamorada 45-foot response boat-medium crew arrived on scene after a Coast Guard Air Station Miami MH-65 Dolphin helicopter crew sighted the vessel with 10 adult Cuban males aboard and embarked them with no medical concerns.

The 10 Cuban nationals were transferred to Cuban authorities by the Coast Guard Cutter Isaac Mayo (WPC-1112) crew and will be transferred back to their home of origin.

“Illegal maritime migration voyages are extremely dangerous, often on homemade, unseaworthy vessels, and put the safety of those aboard in great jeopardy,” said Lt. j.g. Karrie Jeffries, command duty officer of Sector Key West. “The Coast Guard remains poised to protect the safety of life at sea and interdict these vessels in an effort to prevent the loss of

life while also enforcing the law.”

Isaac Mayo is a 154-foot fast-response cutter homeported in Key West, Florida.

C2, Air Defenses Against UAS Attack Among Corps’ Top Acquisition Priorities, Berger Says

Some of the top acquisition priorities for the Marine Corps to prevail against the emerging security threats are maintaining the ability to command and control a naval expeditionary force in a degraded electronic environment and acquiring air defense capabilities against unmanned aerial systems, senior officials said April 4.

Meeting the requirement for assured command and control (C2) is complicated by the continuing dependence on legacy systems that are so far out of date they can’t be upgraded, Lt. Gen. David H. Berger, the commanding general of the Marine Corps Combat Development Command, told the House Armed Service Tactical Air and Land Forces Subcommittee.

Although a lot of C2 systems will be fielded in the next few years, “the challenge for us, as a naval force, is how to do that in a degraded electro-magnetic spectrum environment. That’s not easy work,” Berger said.

There is the challenge of integrating the sensor and communications systems of fourth- and fifth-generation

aircraft, he said, referring to the Marines' mix of legacy F/A-18 Hornets and new F-35B joint strike fighters.

Then there is the basic requirement of processing and distributing that information so the Marines can get it. That's hard enough to do if it wasn't in a contested environment," Berger said. "But we absolutely expect the threat to go after our C2 systems first … because they believe that's our Achilles' heel."

"For us, the Navy and Marine Corps, it's No. 1," because they cannot operate successfully "if we can't have the network that we need," he said. "A fair portion of [budget] requests this year addresses that."

Jimmy Smith, deputy assistant secretary of the Navy for research, development, and acquisition, echoed that point, telling the panel that "competing with a peer threat is the theme of our 2020 request." The budget prioritizes modernization, in C2, long-range precision fires, enhanced maneuver and logistics.

Asked how they would deal with legacy equipment, Berger said they have started writing the need for retrofitting into requirements. "It wasn't so necessary before, but now it absolutely is," he said, citing a commonly used radio system, the Humvee vehicles and the M1A1 main battle tank, which he noted has analog, not digital electronics.

"Some of the legacy systems, there's a point that we reach, like the M1A1, that we can't go any farther, and the LAV [light armored vehicle]," he added.

For the new Amphibious Combat Vehicle that will begin fielding this summer, modern technology is built into it, he said.

Berger noted that the 2020 budget includes "cancellation of some legacy systems in order to upgrade others."

To deal with the rapidly growing threat of armed unmanned aerial systems (UAS), Berger emphasized the new Ground/Air Tactical Oriented Radar, as "a huge advance for us in identifying and tracking targets. … Plus, it's expeditionary."

He also cited the Light Marine Air Defense Integrated System, being fielded in "very limited quantities." It is "an integrated, modular package" that can be mounted on two small vehicles and includes sensors, controls and an electronic attack system to disable small UASs.

"For longer range, we'll need a medium range interceptor" missile, he added.

Lt. Gen. Steven Rudder, Marine Corps deputy commandant for aviation, also mentioned offensive UASs to counter enemy drones and some small guided munitions that can loiter and be guided into enemy UASs. Defensive drones could be particularly useful against swarms of aerial drones, Rudder said.

Asked about the need for long-range fires, Smith said the Marines "are closely tied in with the Army," which has a much larger force, and a larger budget and already is working on those things. "The Marine Corps benefits greatly from leveraging their work, working together."

In response to a question from subcommittee chairman David Norcross, Berger joined other witnesses in warning that a return to sequestration, which would cut defense spending far below the budget request, would force the Marines to sacrifice modernization to ensure that "the next units deploying, or one already deployed, have what they need."

Marine Corps May Extend AV-8B Harrier Service to 2028

WASHINGTON – The Marine Corps' fleet of AV-8B Harrier II attack aircraft may serve until 2028, the Corps' aviation chief told Congress, a two-year extension of the previous plan.

"We will continue to be a fourth-gen/fifth-gen [tactical aircraft] fleet out until about 2030, with Harriers probably going to 2028 and F/A-18s going to 2030-2031," said Lt. Gen. Steven R. Rudder, the Marine Corps' deputy commandant for aviation. He testified April 4 during a hearing of the Tactical Air and Ground Forces subcommittee of the House Armed Services Committee.

The Corps earlier had extended the Harrier's planned service out to 2026 in view of the delays in the F-35B Lightning II joint strike fighter. Rudder's comment indicates that the Harrier may serve until 2028, three years longer than planned.

The F-35B has deployed on two amphibious assault ships, USS Wasp and USS Essex, flying the aircraft's first combat missions in September from the deck of the Essex.

According to one source, a planned F-35B deployment on a third ship this year was assumed instead by a detachment of AV-8Bs.

Rudder said the Corps plans to achieve a 100% fifth-generation tactical fighter force by 2030. He said the mixture percentage of fourth-gen to fifth-gen fighters in the Marine Corps today is 80-20.

The Marine Corps operates three operational F-35B squadrons and its first F-35C squadron, VMFA-314, is in transition.

Navy’s Triton UAV Expected to Deploy in Summer 2019

WASHINGTON – The Navy’s director of air warfare said the service expects to deploy the MQ-4C Triton high-altitude, high-endurance unmanned aerial vehicle later this year.

“The Triton is going forward this year, probably later this summer,” Rear Adm. Scott D. Conn, director of air warfare in the Office of the Chief of Naval Operations, said during an April 4 hearing of the Tactical Air and Ground Forces subcommittee of the House Armed Services Committee.

The deployment will mark the achievement of Early Operational Capability, which originally was planned for last year at Andersen Air Force on Guam for two MQ-4Cs assigned to Unmanned Patrol Squadron 19. The deployment was postponed when one of the two Tritons experienced a landing mishap on Sept. 13 at Naval Air Station Point Mugu, California.

The MQ-4C eventually will be deployed to several bases and will be used to establish five orbits – patrols – with a 24/7 presence over the oceans. Its sensors will be used to search for, detect and identify shipping and other targets of interest. The Triton will work closely with the Navy’s fleet of P-8A Poseidon maritime patrol aircraft.

“We’re going to continue to build capability and capacity with that system,” Conn said, noting that the capacity and capability need to be increased before the Navy can retire its EP-3E electronic reconnaissance aircraft in 2021. “We are on track to do that.”

Navy Air Warfare Director: Report on Next-Generation Fighter Due in Summer

WASHINGTON – The Navy's analysis of alternatives (AoA) for its next-generation air-dominance fighter aircraft is almost finished, a Navy admiral told Congress.

"That AoA will be complete this spring," Rear Adm. Scott D. Conn, director of air warfare in the Office of the Chief of Naval Operations, said during an April 4 hearing of the Tactical Air and Ground Forces subcommittee of the House Armed Services Committee.

"The final report will come out this summer, and that will inform future choices reflected in future budget cycles in terms of what we need to do to get after the lethality that we need at a cost that we can afford."

The F/A-XX air-dominance fighter will be a sixth-generation aircraft that eventually will succeed the F/A-18E/F Super Hornet strike fighter in the Navy's carrier air wings.

The F-35C Lightning II joint strike fighter achieved Initial Operational Capability in February and will join the Super Hornet in carrier air wings. Strike Fighter Squadron 147 is the Navy's first fleet F-35C squadron.

Conn said the Navy expects to attain a 50-50 percentage mix of F-35Cs and F/A-18E/Fs by about 2030. The Navy has ordered 78 Block III Super Hornets and plans to modify more than 100 older Super hornets to the Block III configuration.

“Any additional resources that would be available from an F-35 perspective would provide us some buffer to meet our transition schedule as we get transition squadrons from Super Hornets into the Joint Strike Fighter,” Conn said.

Marine Corps Sees Cargo UAVs as the Future of Logistics in Distributed Operations

140318-N-PO203-138 QUANTICO, Va. (Mar. 18, 2014) A Kamen K-Max helicopter equipped with the Autonomous Aerial Cargo Utility System (AACUS) lifts off during an Office of Naval Research (ONR) demonstration held at the Marine Corps Base Quantico, Va., as part of the Autonomous Aerial Cargo Utility System (AACUS) program. AACUS consists of a sensor and software package that when integrated into rotary wing aircraft enables autonomous, unmanned flight allowing the Marine Corps to rapidly resupply forces on the front lines as an alternative to dangerous convoys, manned aircraft or air drops in all weather conditions. (U.S. Navy photo by John F. Williams/Released)

WASHINGTON – The Marine Corps plans to continue experimentation with its two K-Max cargo unmanned aerial vehicles (CUAVs) and hopes to procure more to add to experimentation in logistics for distributed operations.

“We see this as the future of distributed operations in how we logistically supply ourselves,” said Lt. Gen. Steven R. Rudder, the Marine Corps’ deputy commandant for aviation, responding to a question about an unfunded requirement for $18 million for the K-Max unmanned cargo helicopter from Rep. Joe Courtney (D-Connecticut) during an April 4 hearing of the

Tactical Air and Ground Forces subcommittee of the House Armed Services Committee.

The Marine Corps owns two CQ-24A K-Max unmanned helicopters and deployed them to Afghanistan in 2011 through 2014 as an experiment in logistics to forward operating bases. Operated by contractors, they transported 4.5 million pounds of cargo, much of which would otherwise have been transported by 900 convoys of trucks through territory subject to ambush and improvised explosive devices.

“We endeavored to make them a program of record and are still working down that road,” Rudder said. “But we were not able to secure funding to get that flying in the fleet for test and operational usage for experimentation. We have since been able to secure funding for a cooperative research and development contract that we’re working with [the K-Max vendor].

“In the next few weeks [the two CUAVs] are going to be trucked back to Connecticut, and we’re going to give them to the vendor to let them work through a couple different things,” Rudder added. “One is autonomous logistics delivery. There are certain things you want on call but there are other things that you need going autonomously. The K-Max, with its lift capability and the way we conceive distributed operations in the future, if we get those airplanes, we’re going to configure them [the same] as we’re configuring a test vehicle in Connecticut with autonomy, which will allow them to have terrain-following radar and, [with] a push of a button, it will take the cargo to a particular point that was programmed in, drop that cargo and do it all day long. We’ve seen efficiencies with this over time.

“With the money we have funded right now – to do those two aircraft that we own – we will bring those back from Connecticut, hopefully by the end of next summer, to begin experimenting in [Marine Corps Air Station] Yuma [Arizona] and [Marine Corps Air-Ground Combat Center] Twentynine Palms

[California], but the emphasis right now is to create a few more air vehicles so we can expand this usage," he said.