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for assured command and control (C2) is complicated by the continuing dependence on legacy systems that are so far out of date they can't be upgraded, Lt.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.”