

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 dismounted 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.