



MARINE CORPS BASE HAWAII

Ground-Based Forces Modernization Proposed Modernized Equipment FACT SHEET

NMESIS (Navy/Marine Corps Expeditionary Ship Interdiction System)

Capability

- The NMESIS provides the Marine Corps with an anti-ship missile capability fired from land. It combines the Naval Strike Missile (NSM) Launcher Unit (NLU) with the Remote Operated Ground Unmanned Expeditionary (ROGUE) Fires Carrier.
- The ROUGE Fires Carrier uses the chassis of a joint light tactical vehicle (JLTV).
- The JLTV family of vehicles uses a modular concept to provide mobility to personnel and payloads across the full spectrum of military operations. *The JLTV is currently in use on all Hawai'i military training ranges.*



Equipment

- Composed of 18 launchers separated into two platoons of nine launchers each. Platoons are further subdivided into three sections of three launchers each.
- Each NMESIS section would consist of five Marines and five vehicles: one leader JLTV vehicle, one command and control JLTV vehicle, and three JLTV launcher vehicles.
- *JLTV vehicles are smaller than current 7-ton truck systems.*



Previous Equipment: Cannon Section (with 7-ton trucks)



Modernized Equipment: NMESIS Section (with smaller vehicles)



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G/ATOR (*Ground/Air Task Oriented Radar*)

Capability

- The G/ATOR is a three dimensional, short/medium range, multi-role radar system that transmits in the S Band (2-4 GHz) frequency range.
- The system meets expeditionary needs across the fleet and replaces five legacy radar systems with a single system.
- It provides surveillance of airspace to provide accurate location, altitude, direction, and identification of aircraft which can be used to ensure safety of flight.
- In tactical situations the radar provides early warning of enemy air attack and can cue other air defense units.



G/ATOR System

Equipment

- The G/ATOR consists of three subsystems:
 - Radar Equipment Group (REG), which consists of the radar array towed on a trailer by a Medium Tactical Vehicle Replacement (MTVR), a vehicle commonly used by the Marine Corps in Hawaii.
 - Power Equipment Group (PEG), which provides power to the entire system via a generator mounted on the MTVR.
 - Communications Equipment Group (CEG), which provides the ability to communicate and control the radar. The CEG is mounted on a High Mobility Multi-Wheeled Vehicle (HMMWV), another vehicle commonly used by the Marine Corps in Hawaii.



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MADIS (*Marine Air Defense Integrated System*)

Capability

- **MADIS is a maneuverable, ground-based air defense system that provides the Marine Corps with an improved mobile, short-range air defense capability in support of expeditionary bases and maneuvering units.**
- **The MADIS represents the Marine Corps modernization of its Ground Based Air Defense (GBAD) capabilities.**

Equipment

- **The MADIS is similar to current anti-armor weapons systems. It is mounted on a JLTV vehicle and can detect, track, identify, and defeat aerial threats at short range.**
- **It has two vehicles per section, the MADIS Mk1 and Mk2, working in a complementary pair. The MADIS Mk1 vehicle is responsible for neutralizing fixed- and rotary-wing aircraft and the MADIS Mk2 vehicle is responsible for the Counter-Unmanned Aircraft System (C-UAS) mission and providing radar and command and control for both vehicles.**
- ***The two-vehicle system uses technology and weaponry similar to that currently used on Hawai'i ranges.*** This includes Stinger missiles, the RPS-62-S band radar, and 30-millimeter (mm) direct fire weapons.



Modernized Equipment: MADIS



Previous Equipment: High Mobility Multipurpose Wheeled Vehicle (HMMWV)



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L-MADIS (*Light Marine Air Defense Integrated System*)

Capability

- The L-MADIS is a maneuverable, ground- based Counter Unmanned Aircraft System (UAS) system.
- It provides the Marine Corps with the capability to detect, identify, and defeat UAS by disrupting adversary command and control, communications, and intelligence, surveillance, and reconnaissance.



L-MADIS

Equipment

- The L-MADIS is mounted to an ultralight tactical vehicle (ULTV), which is similar to a commercial 4x4 off-road vehicle.
- It uses two ULTVs working in tandem. One vehicle utilizes the RPS-62 radar (the same radar MADIS utilizes) for detection and surveillance and integrated electronic capabilities to defeat UAS. The second vehicle acts as a support vehicle assisting with transmitting data received from various air and ground platforms.
- The L-MADIS' small size allows it to be transported by CH-53 and MV-22 aircraft and makes it more maneuverable than the MADIS.