

Terms of Reference
Marine Corps Capabilities for Countering Precision Weapon Threats
NRAC Summer Study 2011

Objective

US Marine Corps Expeditionary Forces face constant threats that continue to evolve. This study will examine the Marine Corps capabilities for responding to the emerging potential for US adversaries to adopt and employ precision weapons and munitions to improve their lethality. The objective of this study is to identify the challenges for countering precision munitions and recommend opportunities to address this potential challenge.

Background

We saw the emergence of Forward Operating Bases (FOBs) during operations in Afghanistan, from which the Marine Corps sustains, deploys from, and accomplishes missions against the enemy with small units (squads to companies). Should these FOBs become subject to precision enemy fire, the Afghanistan mission risk will increase. The intel community is seeing greater proliferation of relatively inexpensive Guided Rockets, Artillery, Mortars, and Missiles (G-RAMM), which can pose a great threat to future Marine operations. This threat is yet another example of cheap technologies with the potential to have a huge impact on future missions, much like the IEDs have had on recent ones.

Specific Taskings

This study will specifically:

- Characterize known and potential precision weapons and munitions types that could be potentially exploited by hostile governments and non-state actors, to include relatively inexpensive, home-made-type weapons;
- Review and assess the current and planned Marine Corps policies, strategies, approaches (including training), and capabilities for responding to these potential precision weapons and munitions;
- Identify promising science and technology areas for Marine Corps capabilities to respond to these potential precision weapons and munitions threats, which can include detection, tracking, identification, engagement, and ways to counter damage caused by precision weapons, as well as others;
- Recommend any other initiatives that should be undertaken by the Marine Corps in an effort towards improving their overall capabilities for responding to the potential exploitation of precision weapons and munitions by adversaries.