

# **Abstract**

## **EM Gun**

The Naval Research Advisory Committee was asked in May 2003 to conduct an assessment of the current maturity of electromagnetic gun technology for the Assistant Secretary of the Navy (Research, Development & Acquisition). Specifically, the Committee was tasked to: review and assess the technical and operational performance capabilities necessary to achieve a militarily effective EM gun system for naval application; review the current and anticipated state of the technology and provide an assessment of the performance, manufacturability and maintainability of an EM gun system; and evaluate the technical and developmental risks in producing a projectile that will perform throughout the mission profile, i.e., launch to precision impact on target.

The study panel concluded that while there were significant engineering challenges that must be overcome to produce an operational naval electromagnetic gun, there were not major basic scientific breakthroughs required. Additionally, the study panel provided a strawman roadmap that would enable the Department of the Navy to within four years have sufficient technical basis to decide whether or not to proceed with a development program that could be completed in an additional four years.