

Dahlgren activities

SLBM Weapons Control Facility - is used for the development and testing of SLBM weapons control software, fleet problems investigation, fleet procedures development, technology and obsolescence studies and production and quality control of fleet media (i.e. magnetic media containing weapons control software and data and strategic targeting data).

- http://www.scitechweb.com/inhousereport/00navy/00nswc.html#programs_nar

Impact of Nuclear Weapons Effects on Mission Planning

Jose F. Garcia

Naval Surface Warfare Center
SLBM Research and Analysis Division
Dahlgren, VA 22448-5150
(540) 653-8250 (FAX: (540) 653-8382)
GarciaJF@nswc.navy.mil

Detonating a nuclear device creates effects that can be detrimental to tactical and strategic delivery systems and their payloads. In a scenario where U.S. forces are required to use nuclear weapons, mission objectives could be severely reduced by these effects. The first reentry vehicle (RV) to detonate can reduce the effectiveness of subsequent RVs by producing (a) physical damage to the RV, (b) radiation that can disable electronics, and (c) reflective clouds off which false radar responses occur.

The main purpose of this presentation is educational. By studying a fictitious nuclear conflict, concept-based definitions of the various nuclear environments, and how they might affect a generic RV will be provided. A variety of avoidance techniques to eliminate their impact on mission planning, such as nuclear effects modeling and various targeting configurations, will also be explored.

-http://www.mors.org/publications/abstracts/71morss/wg1_abs.htm