

Department of the Navy SBIR/STTR Transition Program

Statement A: Approved for Release. Distribution is unlimited.

Topic # N122-132

Advanced Ballistic Shielding for Crew Served Weapons Stations
Kinetic Protection

WHO

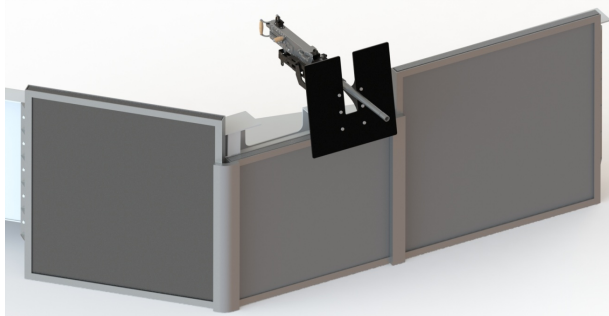
SYSCOM: NAVSEA

Sponsoring Program: PEO
Carriers

Transition Target: PEO Carriers

TPOC:
(215) 897-1083

Other transition opportunities:
PEO Ships PEO LCS, DDG 1000,
USCG



Advanced Ballistic Shield Concept for Station 54 aboard
CVN-68 Class Aircraft Carriers

WHAT

Operational Need and Improvement:

CVN-68 Class ships do not have ballistic shields installed for Crew-Served Weapons Stations (CSWS). Commercially available ballistic shields do not meet shipboard integration requirements.

Specifications Required:

As outlined in MIL-PRF-32379, Shield, Ballistic - Shipboard Crew-Served Weapons Station, these shields at a high-level must integrate aboard ships in permanent and semi-permanent (reconfigurable) installs, and exceed currently available commercial systems in regard to environmental longevity, and increased ballistic defeat levels.

Technology Developed:

Enhanced reconfigurable and non-reconfigurable CSWS Ballistic shield system that exceeds MIL-PRF-32379, while also performing to the requirements for ballistic defeat (see MIL-STD-3038, Test Method for Ballistic Defeat Materials).

Warfighter Value:

The US Navy defined an Urgent Requirement in 2008, for the development of a system that provides an increased level of warfighter protection, withstands the harsh sea environment with a longer life cycle, and provides a common solution across multiple ship classes with a variety of integration capabilities. Kinetic Protection's solution meets this Urgent Requirement for Anti-Terror/Force Protection (AT/FP) by providing critical protection to the sailors manning these stations.

WHEN

Contract Number: N00024-14-C-4078 **Ending on:** April 12, 2016

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Conceptual Mechanical Design	Low	Approved 3-D Models	3	November 2014
Ballistic Defeat Solution	Med	Successful Testing	4	January 2015
Refined Mechanical Design, Ballistic Optimization	Med	Detailed Drawing Package	6	January 2016
Production Ready Solution	Med	Successful Testing including environmental	8	August 2016

HOW

Projected Business Model:

Currently, Kinetic Protection has a fully capable R&D and production environment that can support ROM estimates provided by the U.S. Navy for production of CSWS kits. Kinetic Protection will produce the kits in-house and deliver directly to the USN. Production capability during the first year will be in excess of 2,000 square feet of ballistic panels - equating to roughly 80 CSWS for DDG, or 25 CSWS for CVN.

Company Objectives:

Kinetic Protection intends to further market this technology to PEO Ships, PEO LCS, and DDG 1000 within the USN, and will engage with the USCG through the Department of Homeland Security. Another potential market for the technology is aboard ground vehicles utilized across all DoD.

Potential Commercial Applications:

There are several commercial applications for unique armor technology - private security firms, law enforcement, and OEM providers.

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