Department of the Navy SBIR/STTR Transition Program

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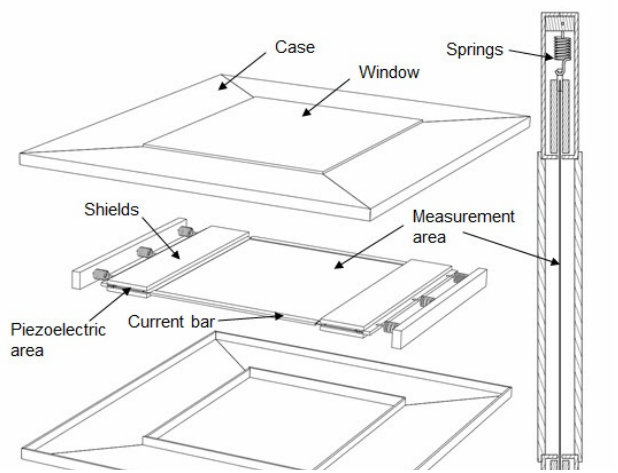
NAVSEA #

Topic # NSWC-2
Magnetic Field Sensor for Large Areas
Naval Surface Warfare Center Carderock Division

WHO

SYSCOM: NAVSEA
Sponsoring Program:
Transition Target:
TPOC:
Other transition opportunities:



WHAT

Operational Need and Improvement:

Specifications Required:

Technology Developed: Disclosed is a product and method to quickly and accurately measure the total static and fluctuating magnetic flux Φ passing through a large area. A uniform oscillating current flows down the measurement area interacting with magnetic flux to produce Lorentz forces at each point proportional to the magnitude of the current and the magnetic flux to be sensed. Lorentz forces are transferred to piezoelectric areas (PVDF) that produce voltage on top and bottom electrodes in response to the changes in tension. Existing sensors are essentially point flux density (B) sensors and many measurements must be taken to integrate B over the area.

Warfighter Value:

WHEN

Contract Number: T2-ORTA-NSWC-2

Milestone	Risk Level	Measure of Success	Ending TRL	Date

HOW

Projected Business Model:

Company Objectives:

Potential Commercial Applications:

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