Department of the Navy SBIR/STTR Transition Program

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited. ONR Approval # Topic # NRL-1 High Performance Single-Component (1K) Polysiloxane Topside Coatings U.S. Naval Research Laboratory

WHO

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



SAN DIEGO – Sailors roll-applying the NRL-developed 1K polysiloxane topcoat on the starboard side of USS Essex (LHD 2) in 2017.

WHAT

Operational Need and Improvement:

Specifications Required:

Technology Developed: A new class of high performance, single-component (1K) polysiloxane topside coatings. These coatings are solvent-free and intended to be used on exterior applications where superior weathering resistance and durability are required. If applied in thin coats, the surface will be dry and ready for additional coats within 30-45 minutes. Surfaces can be handled, including sanding, within 6-8 hours and will reach full hardness after 7 days. This new topside coating is chemical resistant to fuels, most solvents, and > 250 methyl ethyl ketone (MEK) double rub resistance and durability are required; including both military and commercial industries: automobile, maritime, sports equipment, outdoor furniture, oil & gas rigging/platforms, wind and renewable energy equipment, and bridge/structural beam coatings.

Warfighter Value:

WHEN		Contract Number: T2-ORTA-NRL-1		
Milestone	Risk Level	Measure of Success	Ending TRL	Date

HOW

Projected Business Model: Company Objectives: Potential Commercial Applications: