A Product of Shield Technologies Corporation

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The High Mobility Artillery Rocket System (HIMARS), fielded in 2005 by the U.S. Army, has proven to be a highly effective offensive platform and defensive shield for ground combat units. Yet, like every other state-of-the-art fire support system, it can be damaged by excessive exposure to heat, dust, sand, UV, and moisture. To help protect the investment they have made in this state-of-the-art technology, the Army has ordered ENVELOP Protective Covers for all HIMARS launcher systems.



High Mobility Artillery Rocket System (HIMARS)

U.S. Army Chooses ENVELOP To Protect All HIMARS Launchers

HIMARS, fielded with Army and National Guard units, is affected by the full spectrum of potential environmental degradation, from the relentless moisture experienced at Fort Lewis, Washington, to the extreme heat and sand in the deserts of Iraq and Afghanistan. Soldiers who employ HIMARS appreciate the dual benefits provided by the protective covers: drastically less preventive maintenance from a custom cover design that provides the full protection of ENVELOP's patented system, and easy and full access to critical maintenance checkpoints. All designs by Shield Technologies take into consideration ease of installation and removal, potential for operational use or access while installed, and other unique needs of the user.

USN/USCG...96 NSNs and Counting: The Fleet is "Covered"

An executive level decision by the U.S. Navy maintenance leadership means that all U.S. Navy surface ships can now be outfitted with **ENVELOP Protective Covers** - 96 National Stock Numbers (NSNs) encompass a full range of corrosion-reducing covers for the fleet. The decision, made jointly by the Pacific Fleet (PACFLT), Commander, Naval Surface Force (COMNAVSURFOR), and Fleet Forces Command (FFC), is the latest endorsement of Shield Technologies' patented technology for protecting critical topside equipment from

damage due to corrosion and environmental wear.

Initially, cruiser (CG) and destroyer (DDG) class ships were singled out to be equipped. Representatives from Shield Technologies have worked with sailors and port engineers to survey the needs of other ship classes, such as frigates (FFGs), aircraft carriers (CVNs), mine countermeasure ships (MCMs), and various amphibious classes of vessels. All topside equipment not previously protected by ENVELOP covers was examined, including sensors, capstans, winches, and other vital gear.

ENVELOP Protective Covers are now the only recommended soft, flexible cover for use on Navy surface combatants because of their unique waterproof, breathable, corrosion-inhibiting characteristics. The existing NSNs can be procured through the federal supply system, or the General Services Administration (GSA). Two Allowance Equipage Lists (AELs) have been updated and released by Naval Inventory Control Point (NAVICP) as directed by Naval Sea Systems Command (NAVSEA) — AEL#2-180020000 and #2-180020001. Already in widespread use throughout the U.S. Surface Fleet, **ENVELOP** custom covers have also been delivered for

ships of the Australian, New Zealand, Canadian, British, and Norwegian navies.

Jeff Vold, director of military markets for Shield Technologies, said the Navy's desire to cover all ship classes is part of a larger trend: "The Department of Defense is increasingly concerned with preserving the longevity and effectiveness of expensive combat equipment. And this also means freeing up our sailors to do the jobs they volunteered to do," said Vold.

ENVELOP Protective Covers has become the market leader in responding to this accelerating requirement, particularly in the naval environment, and is rapidly developing solutions for ground and aviation assets as well.



USS COLE SVTT

ENVELOP Covers Provide Additional Benefits to Torpedo Tubes

The MK-32 Surface Vessel Torpedo Tube (SVTT) is part of the standard offensive punch of the U.S. Navy's guided missile destroyers (DDGs) and frigates (FFGs), and has been for decades. Throughout the years, the launchers have been covered — if at all with canvas or other materials that did little to protect them from the harsh environment of the main deck, salt spray, and proximity to the waterline. That changed recently with the Navy's decision to outfit the MK-32 weapons system with **ENVELOP Protective Covers.**

The Navy's choice was driven by a desire for the best possible solution for ensuring combat readiness of the MK-32. The system has been especially susceptible to salt spray that leads to severe corrosion in the electrical components of the triple-launcher, mainly the firing solenoids, for the otherwise lethal MK-46 and MK-50 torpedoes they launch. Each failed torpedo-firing solenoid costs the Navy \$5,000, and there are three solenoids per launcher on the nearly 200 launchers in the fleet. By contrast, each **ENVELOP Protective Cover**

costs substantially less than a single damaged solenoid. Moreover, with the ENVELOP covers, it is much less likely that the costly firing solenoids will fail due to prolonged exposure to the elements.

MK-32 SVTT covers can be procured directly from Shield Technologies Corporation via credit card, GSA contract, or through the federal supply system. The assigned NSN is 2090-01-519-5600.

ENVELOP Covers for Apache M-TADS

Shield Technologies Corporation has been awarded its first major contract for U.S. Army aviation units to protect the Apache helicopter's vital Modernized Target Acquisition Designation Sight (M-TADS) system. The "eyes and ears" of the powerful Apache helicopter reside in its M-TADS. The nosemounted package incorporates sophisticated electronic and optical components that are especially prone to system degradation from the fine dust and sand found in desert environments where the Apache operates most frequently. ENVELOP covers will not only protect the M-TADS from the harsh environment found in places like Iraq, but they will also provide unique protection in climates affected by higher humidity and rainfall, creating a moisture-reducing microenvironment around the system.

Compared with its predecessor TADS, the M-TADS is 150% more reliable and

capable, and costs almost 60% less to operate and maintain. The Army feels that none of these savings are fully achievable without the protection of ENVELOP Protective Covers

when the aircraft is on the ground. Shield Technologies designers developed the uniquely-shaped M-TADS cover in conjunction with the Prototype Integration Facility (PIF) and the Apache program manager's office at the Army's Redstone Arsenal in Huntsville, Alabama.



Modernized Target Acquisition Designation Sight (M-TADS)



New ENVELOP Thermal Cover Introduced

The oil and gas industry has a need for thermal insulated ENVELOP covers to protect critical valves, pipelines, and equipment in extremely cold environments. A newly developed ENVELOP thermal cover, using 3M Thinsulate, has an R-value of about 10. The cover was developed to protect hydraulic gearboxes in Alaska. When used with a circulating heat source, this cover will provide protection from freezing while also providing protection from corrosion and other environmental damage.

The new cover has applications in oil and gas production and drilling areas and could have applications for the military and other industries. Ask your ENVELOP representative for more details.



USS MILIUS

Massive Offshore Covers Delivered to Norwegian Company

When the behemoth production platforms and oil rigs of the offshore oil-drilling industry are moved, the very largest rely on internal cranes to do the heavy lifting and positioning of the rigs, using cables that attach to the seafloor. For one Norwegian company, StatoilHydro, protection of those cranes against the harsh North Sea is a major priority, and understandably so; the multimillion dollar pieces of capital equipment remain within the at-sea platforms for upward of 20 years, during which time they are expected to operate as if they were new.

As a result, this year Statoil put its trust in Shield Technologies and Presserv, the Norwegian ENVELOP distributor, based in Stavanger, to design and install ENVELOP Protective Covers in its huge four-legged production platform facility in the North Sea. Four covers were put in place on each of the 350-ton cranes organic to the platform. Each cover includes 2,500 square feet of the patented ENVELOP material to provide the best possible anticorrosive protection from the North Sea's relentless salt air, moisture, and temperature extremes.

The StatoilHydro crane covers represent the largest ENVELOP cover produced to date, and further demonstrate the impressive versatility of the designs and manufacturing processes of Shield Technologies. Tom Nelson, general manager of Shield Technologies, spoke of the common needs of Shields customers: "Whether we are protecting the equipment of naval ships, army vehicles and weapons systems, sea-based commercial interests, or private firearms, our customers have a common desire to provide the best possible protection of expensive assets against the damaging effects of the environment."

"Ship Sets" Delivered to USN

The U.S. Navy has invested heavily in recent years in the best technology available for environmental protection of topside deck equipment and weapons systems for its ships — principally ENVELOP Protective Covers. Partial or complete "ship sets" of the covers have been ordered for delivery under contract from the Pacific Fleet (PACFLT) and Fleet Forces Command (FFC) for various classes of surface ships.

The custom-tailored ship sets include upward of 60 covers per vessel for items ranging from weapons systems and their ancillary components, to capstans, winches, and sensor equipment. Some of the cover designs allow for operational use of the protected system while the cover is installed — such as with the powerful Phalanx Close-In Weapons Systems (CIWS) found on nearly every U.S. Navy ship.

The ENVELOP Protective Covers ship sets are being delivered throughout fiscal 2008 to the surface combatants of the Atlantic and Pacific Fleets. Ships that are being outfitted under the PACFLT/FFC contract include:

USS STETHEM (DDG 63) USS BENFOLD (DDG 65) USS RODNEY M. DAVIS (FFG 60) **USS PINCKNEY (DDG 91)** USS CURTIS WILBUR (DDG 54) USS DENVER (LPD 9) USS KIDD (DDG 100) USS CHUNG-HOON (DDG 93) USS RUSHMORE (LSD 47) USS HALSEY (DDG 97) USS ARDENT (MCM 12) USS FORREST SHERMAN (DDG 98) USS ROBERT G. BRADLEY (FFG 49) USS JAMES E. WILLIAMS (DDG 95) USS WINSTON S. CHURCHILL (DDG 81) USS STOUT (DDG 55) USS MAHAN (DDG 72) USS HAWES (FFG 53) USS SAMUEL B. ROBERTS (FFG 58) USS GUNSTON HALL (LSD 44) USS AVENGER (MCM 1) USS DEFENDER (MCM 2) USS BAINBRIDGE (DDG 96)

All ship maintenance teams and port engineers should consider the availability of a full set of topside covers as part of a vessel's maintenance.

Expert Hired to Enhance Shield's Aviation Team

Shield Technologies Corporation is pleased to announce that it has hired Mr. Mark Bechtel as team leader for Army and National Guard Aviation. The addition of Bechtel reflects Shield's continuing policy of attracting the most experienced professionals while, at the same time, leading the market in the custom design and manufacture of sophisticated protective covers.

Mr. Bechtel is a former Chief Warrant Officer 5 (CW5) who retired from the U.S. Army in June after 27 years. His active duty service included a 15-month combat tour during Operation Iraqi Freedom. Throughout his career,
Bechtel served first as a pilot and
later as a highly distinguished
aircraft maintenance officer.
As the Army's senior aviation
maintenance technician, his final
tour of duty was as the leader
of Warrant Officer training for
the U.S. Army Aviation Logistics
School at Fort Eustis, Virginia.
In that capacity, for over three
years Bechtel personally trained
and influenced all U.S. Army
and National Guard aviation
maintenance officers.

"Hiring a team leader in this area comes at a critical time for us," said Tom Nelson, Shield Technologies general manager. "We recently received our first large order from the Army aviation community to provide over 100 covers for the Apache Helicopter Modernized Target Acquisition Designation Sight (M-TADS)."

Shield Technologies worked closely this year with the Army's Prototype Integration Facility (PIF) at Redstone Arsenal and the Apache program manager's office in order to meet the specifications identified for the Apache's M-TADS system. The resultant ENVELOP cover will significantly increase the life span of the Apache sensor package while reducing costly man-hours spent on traditional corrosion protection methods.

"Mark will help us to strengthen our relationships with the Army and National Guard aviation communities as we move forward in addressing their needs for force sustainment," said Nelson.



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Forest Loden Deluxe 48" Shotgun Case

Retail Market Acclaims Gun Protection

ENVELOP Protective Covers have brought world-class protection to the valuable assets of navies and militaries worldwide for years. Now, that same reputation is being widely established among sportsmen in the shooting sports market. The cases have received exceptional reviews for their quality, customized design, and ease of use as the ultimate in protection for the demanding owners of rifles, shotguns and handguns. All cases are handcrafted in the USA.

Several outdoor and sporting periodicals have featured Shield Technologies'

retail gun cases, and championed their features. According to Mitch Kezar of Windago Images, "These cases are revolutionary. Keeping guns from rusting after an arduous photo shoot is always a problem for me, but no longer. We can bag them wet without worry about big rust problems, and clean them when we get time." Each ENVELOP cover is a patented, five-layer system originally developed for the unrelenting demands of the military market. The cases repel and even expel moisture, providing unmatched corrosion protection in the harshest of environments.

Shield Technologies offers a wide variety of custom-fitted protective cases that are the most effective and functional gun cases available. The premium products range from top-ofthe-line, leather-trimmed cases to more simple storage sleeves, all of which offer the protective features only available from Shield. They are widely purchased by sportsmen and hunters who represent the top 20 percent of the retail gun market in terms of the value of their firearms. Similarly, the law enforcement community is a growing customer base, as those demanding customers look to provide the best possible protection for the expensive tools of their trade.

Building on its success in the consumer gun market, Shield Technologies will continue to expand its commercial offerings in the near future to include motorcycles and other small vehicles. More details on ENVELOP's 30-plus models of retail gun cases are available at *envelopcases.com*.