

**Visit Report
USS SWIFT (HSV 2)
18 August 2005**

On the 18th of August I paid a routine visit to the USS SWIFT (HSV 2) in her homeport of Ingleside, Texas. The ship had just returned the evening before from a 19 day exercise in the waters around Panama in support of a joint forces training mission. My point of contact for this visit was the ship's Bos'n, CWO4 Steve Pelon, USN (Blue Crew).

Background:

The USS SWIFT (Fig 1.) is a 321 foot high speed wave-piercing catamaran constructed of aluminum and is capable of speeds in excess of 45 knots (53 MPH). She is manned by a crew of 42 persons operating in a Blue & Gold rotation. At this time she is assigned as a Mine Warfare Support Ship, however she also participates in various other assignments in support of various military missions. Recent operations have included Tsunami relief in Southeast Asia, counter drug operations in the Caribbean, and the recent joint forces training in Panama. The weapons systems on the vessel are maintained by a single First Class Gunners Mate (E-6) supervised by the ship's Bos'n.



Figure 1. USS SWIFT (HSV 2)

The USS SWIFT purchased one MK19 40MM cover (P/N: 113064) directly from Shield Technologies Corp. in May 2005 and placed it on their MK45/EX-45 40MM gun mount on the after port side of the flight deck. In June 2005 the ship was provided with two Twin .50 Cal covers (P/N: 113050) as part of the Navy wide delivery contract. The ship is on the list to receive four single .50 Cal. Covers (P/N: 113046) in the next several weeks and has also expressed a strong desire to purchase a MK96 25MM cover when they go into production.

The SWIFT has various gun mounts around the exterior of the ship as indicated in the below photographs. (Figs 2 & 3)



Figure 2 USS SWIFT Forward Mounts



Figure 3 USS SWIFT Flight Deck and Aft Mounts

Visit Details:

During the 18 August visit I was met by CWO4 Pelon and introduced to the ship's Commanding Officer. During the brief introduction the CO indicated that he was very happy with the performance of our three gun mount covers currently on the ship. I then accompanied CWO4 Pelon to the forward area of the ship to look at the covers on the .50 Cal mounts. I had noted that when approaching the ship the twin .50 Cal guns were mounted on their mid-ship flight deck mounts but that they were not covered. When we arrived at the forward .50 single mounts I found that they had placed the two twin .50 Cal covers on their single .50 Cal mounts. (Fig 4.) CWO4 Pelon explained that even though the covers were designed for the twin mounts they chose to use them on the single mounts because of their location in the bow and because these guns had been mounted the entire time the ship was deployed. Because of helicopter evolutions the twin mounts were not always up on deck.



Figure 4 USS SWIFT Forward Port Mount

The ships' GM1 explained that the guns had been placed in their mounts prior to departing for the exercise, had all of the required Preventative Maintenance (PM) completed, and were in good working and material condition. The ship then transited from the continental United States over 1500 nautical miles to the Panamanian Operations Area (OPAREA) at speeds averaging 40 knots. During the transit the covers were subjected to high winds, salt spray and occasional rain. Once in the OPAREA the guns remained mounted the entire time during which they were subjected to daily rain winds exceeding 40 knots, continuous high humidity and temperatures frequently in excess of 100 degrees. The guns were fired several times during the exercise and received normal post-fire PM after each shoot. Following the exercises the ship transited 1300 miles back to Ingleside with the guns and covers in place, arriving the night prior to my visit.

The cover on the forward port gun mount was removed (Fig 5) and the condition of the gun was observed to be in a very good state of preservation. There was evidence of prior corrosion on top of the gun's receiver which had left a brown tint to the metal; however there was no new rust, corrosion, or salt deposits evident on the gun. All of the applied lubrication was still in place on the gun. The GM1 explained that the guns had last been fired about nine days prior to my visit and had been covered since the post-fire PM. The accompanying photo shows the material condition of the gun. The brown coloring on top of the receiver is from the effects of previous corrosion removing the Parkerizing material from the surface of the gun. Having conducted over 200 material condition reviews of this type of gun in my 29 year military career, in my opinion these guns were in outstanding condition considering the extreme operating conditions they had been subjected to over the previous 19 days.



**Figure 5 USS SWIFT Forward Port
.50 Cal**

When asked how the twin covers had performed on a single mount, the GM1 indicated that they worked very well and the extra material in the twin covers did not adversely affect the performance of the cover. Additionally by observation the cover appeared to be in outstanding material condition considering that it is in fact too large for the mount it was being used on and the severe environmental conditions it had been exposed to in the recent past. The two draw backs the GM1 pointed out with the cover was that because of the mounts location in the bow (Figs 2 & 4) and that it protrudes through a relatively small opening in the skin of the ship it was at times difficult to get the cover over the end of the gun barrel. The other draw back was that the front sight on the gun has a sharp point on top which stuck into the cover material. This problem was temporarily solved by removing the sight when the cover was in place.

We next took a look at the cover placed on the MK45/EX45 40MM mount (Figs 6 & 7) on the after port side of the flight deck. This gun mount is a remotely operated mount which is placed outside the safety railing on the edge of the flight deck. This places the mount directly aft of the ships main engine exhaust port which in turn subjects the mount and cover to excessive stack gasses and smoke. I was told that previous covers placed on this mount had lasted less than 30 days once the ship got underway because of the corrosive effects of the exhaust gasses and the winds the cover is subjected to. Our cover had been in place over 90 days so far and was holding up well. Because of this location the cover was almost entirely black as it had not yet been cleaned. CWO4 Pelon reported that even with the cover becoming as dirty as it was (Fig 6.), it cleaned up very easily with soap and water as the instructional DVD indicated it would. Additionally during July 2005 this cover was left in place over the mount during a 30 day dry dock availability in Louisiana where daily sandblasting, painting, and extreme weather conditions were present.. The cover suffered no damage or deterioration in the shipyard environment.



**Figure 6 USS SWIFT, MK45/EX45
Mount looking aft**

The GM1 indicated that the cover on the MK45/EX 45 was mounted during the entire Panamanian operation and was even left in place during helicopter evolutions where it was subjected to the rotor down wash from a HH60 helicopter on a daily basis. It was only on the last day of the exercises that there was some concern that the cover would blow off and be lost so it

was removed for the duration of the flight evolution. Following the flight quarters the cover was immediately replaced on the mount.

Of note, the cover used on the EX45 mount is not designed for this particular system. The 40 MM MK19 cover we designed was intended to be used on a universal MK93 mount which is not remotely operated. Because of the cabling attached to the EX45 the over does not fit properly and leaves some of the cabling and the ammunition box constantly exposed to the weather. (Fig 7)



Figure 7 USS SWIFT MK45/EX45 Mount looking forward

Near the end of the visit I spoke with both CWO4 Pelon and the ship's Supply Officer (SUPO) about the value the Envelop® covers added to the USS SWIFT. CWO4 Pelon indicated that the covers they currently have helped to both protect the equipment and reduce the amount of time the GM1 spent conducting maintenance on the mounts. He was also very eager for the delivery of the single mount covers and the deployment of the MK96 to the ship so that all of the mounts would be protected as well as the ones currently covered. The ship's SUPO indicated that even with the cost of Envelop® covers being more than standard vinyl type covers they were a better investment because of the return on investment over the expected life of the covers and the reduction in man power costs. He indicated that he fully supported the purchase of future covers with the ship's funds because it made good economic sense.

At the conclusion of the visit CWO4 Pelon indicated that he would be getting off the ship in the next couple of weeks as part of the normal crew rotation but would still be involved in the program. He provided me with the contact information for his relief (Gold Crew) and said that he would pass along his desire to utilize our covers on more of the ship's equipment. He also said that he would follow up my visit with an e-mail regarding the performance of our covers on board the USS SWIFT. (Encl. 1)

Conclusion:

I feel that the information provided by the crew of the USS SWIFT will go a long way in helping us promote the use of our covers throughout the fleet. Because of the exposure to high winds during transits, the location relative to the bow that the covers were in, and the often hostile environmental conditions to which they were exposed this information, although antidotal in nature, is very compelling.

The crew of the USS SWIFT should be commended for their openness and willingness to put our covers to a very challenging test. They purchased our 40MM MK19 cover and placed it on a mount that had destroyed all other covers in short order. They also took a chance that twin covers may have been too baggy for a single mount and proved that the material is durable in extreme conditions even when not tightly fitted to the equipment under it, and still provided excellent protection for the mount. Bravo Zulu SWIFT!

Respectfully,
Jim Oaks
Fleet Support & Sales – Atlantic
Shield Technologies Corp.

Encl: (1) CWO4 Pelon e-mail dated 18 August 2005.

Enclosure 1.

From: Pelon, Steve A CWO4 BOSN (Blue Crew) [pelonsa@swift.navy.mil]
Sent: Thursday, August 18, 2005 12:49 PK
To: 'james.oaks@envelopcovers.com'
Subject: HSV 2 SWIFT 50 Cal Gun Cover/MK45 (EX45)Gun Cover

Jim,

I am writing in regards to our 50 Cal Gun Covers and their shown durability aboard HSV 2. We average 40 knots of relative wind on a daily basis when we are transiting from oparea to oparea and your covers have held up to the challenge. During our latest deployment to the Panama Ops area we encountered winds in excess of 60 knots on two occasions with rain, and seas hitting the covers very hard. Still no damage. They recently were up and in position for 19 consecutive underway days. During this time it rained on a daily basis (heavily), reached winds exceeding 40 knots once again, sea spray, humidity, and heat index temps of over 105 degrees. The covers have held with "Zero" damage since we received them in May of this year as well as lowering/making pms requirements on an easier level.

On our MK 45/EX-45 we asked for a cover that could withstand high winds, salt water, rain, heat from our stacks, and continual soot spray. Once again your cover met the challenge. This cover takes more abuse than any cover we have on board and has not given in the slightest. It is up during flight operations, underway, and in port but has yet to show a stitch of give. This cover also went through a 30 day dry docking availability where sand blasting, painting, and weather (i.e. humidity, heat index over 100, etc.) were huge factors daily. Cleaning the cover is as easy as described using soap and water.

We on board SWIFT want to thank you for providing us with a product which is living up to what it has advertised. We look forward to working with you in the future. Thank you.

v/r

CWO4 Steve Pelon
Ship's Bosn
HSV-2 SWIFT INGLECREW
361-385-0019

"The Naval Officer is truly unique for he must have the capacity to simultaneously love his country, his service...his family...his shipmates...and the sea. He needs each of them unquestionably as each of them needs him...and the demands which are placed on him never diminish, they only grow. - VADM Bulkeley