

Large Caliber Projectile Recovery System

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Recently, a .50 caliber bullet fragment, two .50 caliber M2 Browning Machinegun Heavy Barrels and several .50 caliber cartridges (standards) were submitted to the USACIL for examination purposes. The contributor requested that we utilize our M2 Browning Machinegun with M3 tripod located in our Firearms Reference Library (Photo 1) to test fire submitted cartridges and microscopically compare them to the questioned bullet fragment in order to determine if the questioned bullet was fired through one of the two evidence barrels.



Photo 1



Photo 2

The projectile recovery system that we utilized is comprised of five sections in four-foot lengths, totaling 20 feet (Photo 2). The recovery system afforded us the opportunity to expeditiously and safely test fire .50 caliber Armor Piercing (AP) and lesser caliber bullets in order to successfully complete our examination process. The projectile recovery system uses a proprietary blend of natural and synthetic fibers rather than the standard medical grade of cotton. Additionally, there are multiple specially blended foam partitions that separate the bundles of fibers, which retard the speed of the bullets without obliterating any of the striations. Additionally, each of the five sections utilize mild steel around all sides and the back of the last section uses regular steel with armor plating. (Photo 3)

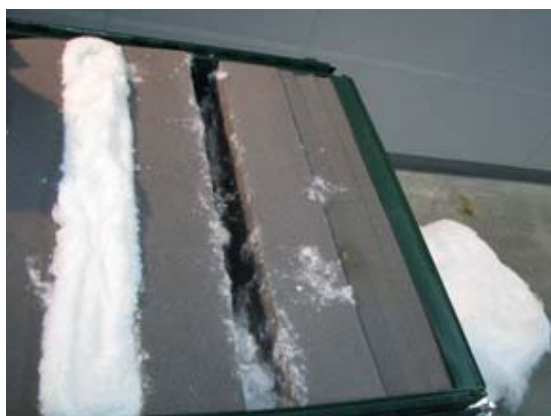


Photo 3



Photo 4

Using our Reach Back Operations Center (RBOC) personnel; Mr. A.D. Bell, Mr. Ryan Coffey, Mr. William Cox, Mr. William Gardner and Mr. Brandon Huskins, additional testing was recently conducted using a .50 caliber, 675 grain Jacketed Hollow Point bullet and two .50 caliber, 700 grain bullets (Photo 4).

For the purposes of this testing, the .50 caliber M2 Browning Machinegun was test fired along with a Heavy Barrel from the USACIL Firearms Reference Library. The .50 caliber Jacketed Hollow Point bullet travelled to the second box and the two .50 caliber Full Metal Jacketed bullets travelled to the beginning of the fifth box (Photos 5 and 6).



Photo 5



Photo 6

Microscopic comparison of the test fired bullets disclosed them to be in perfect condition and highly suitable for comparison purposes (Photos 7 and 8). Additionally, it should be noted that immediately after test firing the M2 Machine gun and subsequently locating the fired bullet, some of the synthetic fibers were affixed to the bullets; however, by simply rotating the bullets with our fingers in a pinching type manner, the synthetic fibers were easily removed from the bullets.

The actual costs for the projectile recovery system may vary according to its size and configuration. For further information, please contact:

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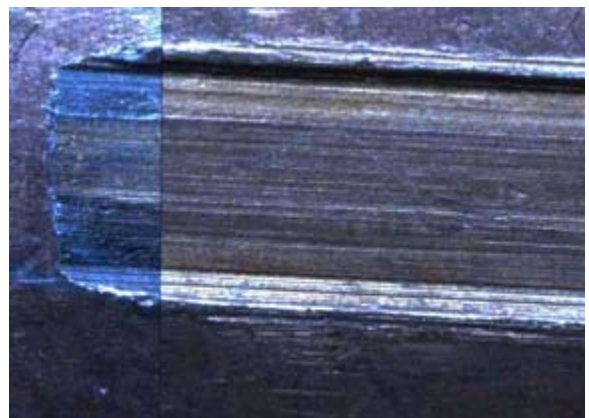


Photo 7

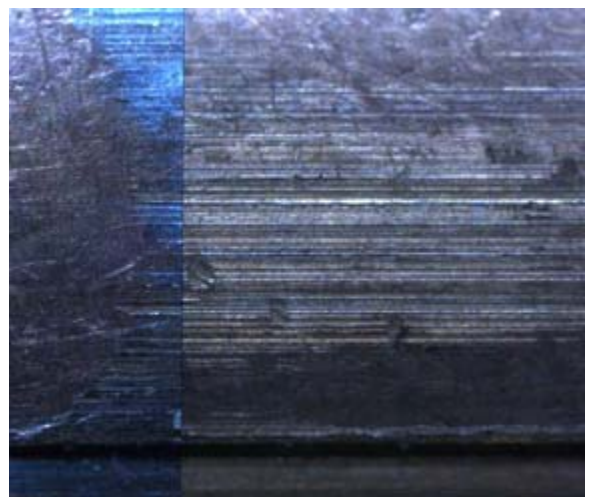


Photo 8

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