



**CENTRAL MASSACHUSETTS  
LAW ENFORCEMENT COUNCIL**

---

**CEMLEC SWAT TEAM**

**SNIPER/OBSERVER UNIT - TRAINING REPORT**

**Date:** June 29, 2011      **Time:** 0900-1400      **Training Hrs:** 5

**Location(s):** Milford P.D. Range

**Members Present:**

S2- Lupachini

S3- Fahey

Scott Nelson- MetroLEC SWAT

**Training Topic:** Live Fire- Ammunition Testing- Glass Barriers

---

**Training Summary:**      Weather: 80f clear/dry sunny

Today we tested how the ammunition we carry for sniper rifles would perform through different types of glass barriers. See attached report for details.

---

Report Submitted By: Lupachini

Date: 6-30-11

**CEMLEC SWAT  
Sniper Element  
Ammunition Testing on Glass Barriers**

**Date:** June 29, 2011

**Time:** 0900-1400

**Location:** Milford Police Dept Range

**Initial Set Up:**

As depicted in Photo 1 the test medium consisted of 4 panes of 8"x10" wire reinforced 1/4" commercial glass. A cardboard backer with face targets was placed at various distances from the glass in order to observe the results after the projectile passed through the glass medium.

The shooters were positioned 50 yards from the glass, with no angle to the medium. All shots were straight on from either a bench rested or prone shooting position. One shot would be taken at each pane of glass from a different rifle using different ammunition. After each shot the result would be recorded and photographed.



*Photo 1*

Time: 1116 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
1	50 y/0	Win Match 168gr JHPBT	Armalite AR-10 .308 18"bbl	8"x10" wire reinforced 1/4"	None noted
Notes/Comments	Bottom left target 18" from glass. Glass and bullet fragmentation contained to target sheet.				



Photo 2



Photo 3



Time: 1135 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
2	50 y/0	Black Hills Match 168 gr JHPBT	GA Precision Rem 700 20" bbl	8"x10" wire reinforced 1/4"	None noted
Notes/Comments	Top left target 24" from glass. Glass and bullet fragmentation struck target to the right				



Photo 4



Photo 5

Time: 1148 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
3	50 y/0	Federal Gold Match 168 gr JHPBT	Surgeon Rem 700 22" bbl	8"x10" wire reinforced 1/4"	None noted
Notes/Comments	Bottom right target 36" from glass. Glass and bullet fragmentation off the target to the right				



Photo 6



Photo 7



Time: 1200 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
4	50 y/0	Hornady TAP 110gr 6.8mm SPC	LWRC M6A2 16" bbl	8"x10" wire reinforced 1/4"	Unknown
Notes/Comments	Top right target 18" from glass. Glass and bullet fragmentation very pronounced from top to bottom of target. 2 distinct holes within the target box.				



Photo 8



Photo 9

Time: 1219 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
5	50 y/0	Win Match 168gr JHPBT	Armalite AR-10 .308 18"bbl	19" x 35" dbl pane thermal	none
Notes/Comments	Hostage type target 18" from glass. Small glass fragment indentations on face target, hostage target OK. Bullet impact hole elongated on target possibly from bullet yaw and/or fragmentation .				



Photo 10



Photo 11



Time: 1230 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
6	50 y/0	Black Hills Match 168 gr JHPBT	GA Precision Rem 700 20" bbl	19" x 35" dbl pane thermal	none
Notes/Comments	Hostage type target 18" from glass. Small amount of fragmentation noticed within the target box. Bullet impact hole more circular suggesting less yaw and/or fragmentation.				



Photo 12



Photo 13



Time: 1239 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
7	50 y/0	Hornady TAP 110gr 6.8mm SPC	LWRC M6A2 16" bbl	19" x 35" dbl pane thermal	none
Notes/Comments	Hostage type target 18" from glass. Bullet and some glass fragmentation more significant, with an elongated bullet impact hole, but contained on target				



Photo 14



Photo 15

Time: 1300 Temp: 80 f Weather: Clear/Dry Sunny Daylight No wind value

Shot#	Distance/ Angle	Ammo/Caliber	Rifle Used	Barrier Type	POA/POI Difference
8	50 y/0	Federal Gold Match 168 gr JHPBT	Surgeon Rem 700 22" bbl	23" x 24" & 19" x 35" dbl pane thermal	none
Notes/Comments	2 double pane windows. #1 set 10' from muzzle, #2 at 50 yards. Hostage type target 18" from glass. 1 <sup>st</sup> pane had a circular hole, 2 <sup>nd</sup> pane had a triangular shaped hole. Large bullet impact hole. Glass and bullet fragments contained on the target.				



Photo 16

**Shot 8 Continued:**



*Photo 17*



*Photo 18*