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Dear John,

The following is an account of a demonstration I attended at the Three Points Range in December, 2009.

My father and I were given an opportunity to observe and test your new armor. It was a new aluminum armor that is lighter than the current E-SAPI armor plates issued to our soldiers. The test consisted of a 4x4 inch plate at around 3/8" thick with a spectra backing. We started by firing 15 rounds of 30-06 M2 Armor Piercing (AP) at 218 feet from the target and then 5 rounds of 7.62x54R FMJ. I was shocked to see no penetration and no major cavity on the plastic bucket that was located right behind and supporting the plate plus backing.

After all of this, we were asked to move closer and try at 12 yards! I was shocked to hear this, especially with the same plate. We then fired 1 more M2 AP, with the same effect. We then decided to finish it off with 15 rounds of M193 55gr 5.56mm spread out over the whole plate at the 12 yard line. Much to my amazement, even at this point there was no penetration. All this was shot into a plate that was only 4" X 4." Most plates cannot take multiple hits so close together or near an edge, and be expected to stop AP rounds.

At the same test we also had a 2"x2" plate, or round about, of the same material, but only 1/8" thick. It was just a spill off from the pouring that took place making the 4X4 plate. We fired 4 rounds of M2 AP and 2 rounds of 7.62x54R at the same 218 feet. I was amazed to find that it stopped all the rounds of ammo. We then moved up to 12 yards and shot 2 more rounds of M2 AP and 1 round of 7.62x54, with the same effect.

I am an armorer, gunsmith, and gun maker. I have shot a lot of objects and have been experimenting with ballistics for years and have never seen the M2 AP act the way it did. The M2 AP consists of a steel core and a double jacket with a total projectile weight of around 163gr. The jackets are made to peel off on contact with armor and the core made to push through the armor. While observing the armor after we shot it, we couldn't find any steel cores in the backing material but only found fragments and dust on and around the plates. Shockingly, we found only the jackets in spectra. This is an odd way for an AP round to act.

I am very satisfied with your armor. I saw several rounds of AP hit the same hole and even one that hit the edge with less than half the diameter of the bullet hitting the armor, and still was stopped!! Needless to say I don't feel confident in the armor I use now, knowing there's something that is this much better.

I can not even imagine all the uses for this material, from radios (due to being highly conductive) all the way to armor for people and vehicles.

Kindest regards,

Samuel Aaron Wood