Bulletproof Backpack Insert: Armadillo Skin

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This project's purpose is to provide safety and security to those in danger or at a higher risk of gun violence by adding a layer of bulletproof material into the laptop compartment/back sleeve of their backpack. The goal of this project is to completely stop a variety of bullets from varying distances in hopes of providing casual and subtle armor to the general public. The design will include a tile of steel, a tile of ceramic, and a wrap of kevlar to provide backing to the plate and absorb the kinetic energy of the bullet. The plate will be 9”x12” designed to fit into any backpack. The procedures for construction will involve the shaping and cutting down of a steel tile as well as 36 ply kevlar. The kevlar will prove to be front and back for the plate and will be able to be removed in order to take data on the hit to the plate. Testing for this project will be shooting prototypes from 25 feet, 50 feet, and 100 feet away with a handgun (9mm) and an AR-15 (.223) . and recording the trauma to each component of the plate and the surrounding kevlar. The risk involved with this project exists inherently and is the fuel for this design. Risk can be near eliminated and testing can ensue safely as long as proper safety protocols are followed on site by all involved.

Awards Won: