



PROGRAM
EXECUTIVE
OFFICE
SOLDIER

INTERCEPTOR BODY ARMOR (IBA)

Project Manager Soldier Protection and Individual Equipment

Product Manager Soldier Protective Equipment

<http://www.peosoldier.army.mil>

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Specifications

- **Component materials:**
 - IOTV/OTV/DAP/ESBI carrier: Cordura™, Kevlar™, and/or Twaron™
 - ESAPI/ESBI: Composite ballistic ceramic plate with coated ballistic fiber backing
- **System weight (size medium):**
 - IOTV base vest: 10.56 pounds without plates
 - IOTV, yoke/collar, groin, lower back, deltoid protectors: 15.87 pounds without plates
 - IOTV, front and back plates only: 26.77 pounds
 - IOTV with all plates: 31.87 pounds
 - ESAPI: 10.9 pounds per pair
 - Deltoid protectors (pair): 2.4 pounds
 - ESBI: 5.1 pounds per pair
- **Size:**
 - IOTV: 11 sizes from X-small through XXXX-large, with tall sizes available in medium, large, and X-large
 - OTV: 8 sizes from X-small through XXXX-large
 - ESAPI: 5 sizes from X-small through X-large
 - ESBI: 1 size
- **Coverage area (size medium):**
 - IBA complete (IOTV, ESAPI, ESBI, yoke and collar, deltoid protectors, lower back, and groin protector): 1,085 square inches
 - IBA minimum configuration (IOTV and ESAPI/ESBI): 885 square inches
- **Color:** Universal Camouflage Pattern; Operation Enduring Freedom (OEF) Camouflage Pattern for Soldiers deploying to OEF, starting in August 2010



Interceptor Body Armor (IBA) provides the Soldier with enhanced protection from ballistic and blast effects while maintaining comfort and maneuverability.

IBA is a modular protective system consisting of an outer vest, ballistic plates, and attachable components that increase the area of coverage. IBA can stop small arms ballistic threats and fragments, thus reducing the number and severity of wounds.

The Improved Outer Tactical Vest (IOTV) provides protection from fragments and 9mm rounds. Enhanced Small Arms Protective Insert (ESAPI) plates and Enhanced Side Ballistic Insert (ESBI) plates provide additional coverage. The ESAPI plates protect the wearer in front and back, and the ESBI plates provide protection for the sides. The plates are inserted into plate carriers that are secured with an adjustable shoulder strap and an adjustable waist strap for stability. The plates can withstand multiple small-arms hits, including armor-piercing rounds.



The X Small Arms Protective Insert (XSAPI) is a product improvement to the existing hard body armor requirement. XSAPI hard armor plates are intended to protect Soldiers from potential emerging small arms ballistic threats.

Deltoid and axillary protectors, an integral component of the IOTV, extend protection from fragments and 9mm rounds to the upper arm area. The IOTV has throat and underarm protection built in. Groin protection can be added as needed.

The side-opening IOTV has an increased area of coverage over the Outer Tactical Vest (OTV), the first-generation body armor vest. The IOTV, which replaced the OTV, includes multiple adjustment points to improve fit, weight distribution, and load-carriage capabilities. It has a mesh lining for better ventilation. A single quick-release at the front of the vest allows a Soldier to remove the IOTV and its attachments with one pull. The IOTV comes in 11 sizes, including three tall sizes.

Further improvements in form, fit, and function were introduced to the IOTV in FY 2010, including: an adjustable side plate carrier; a modified internal liner that reduces rubbing and chafing; a more durable and stable internal waistband; a simplified quick-release; and a stronger drag strap. Any unnecessary feature has been removed to reduce weight.

Program Status

Every Soldier currently deployed has IBA.

NON-DESTRUCTIVE TEST EQUIPMENT



Non-Destructive Test Equipment (NDTE) uses digital X-rays to detect any physical or structural defects in body armor plates, and thus to ensure that Soldiers are equipped with mission-capable body armor while in theater. NDTE is a portable, deployable, self-contained system that can scan a plate in 15 seconds or less, or as many as 240 in an hour.

"I've actually taken shrapnel to my vest, and it's protected me perfectly."

– SSG Jeremy Gilmore

"Soldier feedback is held in the highest regard. Survivability has been the paramount concept that we've been aiming for, and I think that it's working."

– 1SG Patrick Schrader on the evolution and continued reliability of the IBA

"We were getting shot at from three angles. It hit my buddy square in his plates, on his IOTV. Hit the plates, bounced off and hit the guy next to him, and embedded itself inside the plates. Both of them lived ... No broken bones, no internal bleeding. They were able to stand up and get back in the fight right afterwards."

– SPC Joseph McGuffie

"Rounds impacted my vest. ... Had I not been wearing that type of system, I might not be here today. It was a great system. Pretty much felt like a sledgehammer. But it did save my life—knocked the wind out of me for about three or four minutes, but I was able to continue the mission."

– SPC Tom Grady

