## Follow-up

## **INSPECTION AND TESTING PROGRAM**

## HELPS STOP POTENTIAL ARMOR ISSUES

748 models of ballistic-resistant body armor pulled from production lines and tested in the past six years...

73 (9.76%) variations in construction identified and resolved...

13 models removed from the National Institute of Justice (NIJ) Compliant Products List (CPL) as the result of inspections...

All thanks to the Follow-up Inspection and Testing
(FIT) program administered by the Compliance Testing
Program (CTP) for the National Institute of Justice (NIJ).

he first follow-up inspection took place in September 2010, and through September 2016, inspectors contracted to the CTP

completed 251 inspections at various manufacturing locations and pulled 748 total armor models, the vast majority of which have passed through the FIT program with no issues. Take this high statistical success rate, add the development of a process wherein the manufacturing community works with CTP staff to resolve as many of the issues as possible, and the result is increased confidence in body armor's protective capability among members of the law enforcement community.

inspections have resulted in the recall of fielded armor, an added benefit has been helping manufacturers identify and resolve potential problems before armor reaches the field.

"When you talk about building body armor, you need to remember that it's a system...that is, you combine different materials to achieve a desired result, and that result is meeting a specific performance level as defined in the NIJ standard," says Lance Miller, director of the Justice Technology Information Center, which administers the CTP for NIJ. "When you do that, details matter. The FIT program helps manufacturers identify areas that can potentially impact the performance of their armor."



Prior to the inception of the FIT program, the CTP tested only pre-production design samples of armor models, more of a "once and done" approach. Miller says the introduction of FIT provides enhanced quality assurance showing that not only did the pre-production test items meet the requirements of NIJ Standard 01010.06 *Ballistic Resistance of Body Armor*, fielded armors are produced consistently and have the capability to meet the requirements of the standard and the NIJ CTP.

"FIT deals with the whole area of quality assurance in manufacturing, which is where ISO 9001 and our body-armor specific component, BA 9000, comes in. However, the limitation with ISO standards is they speak to the quality of the manufacturing process; that is, that a manufacturer can repeat the same process consistently. For instance, if you produce pens, they're always made the same way," Miller says. "But ISO standards don't speak to the performance of the product; your pen may not write. That's where something like the NIJ standard comes in, because it covers the minimum performance of what the product is expected to do. If a pen fails, it's annoying, but you just go get another pen. In the case of body armor, it's an officer safety product, and if it fails, somebody could get hurt, or even die."

## How the Follow-up Inspection and Testing Program Works

The Follow-up Inspection and Testing (FIT) program applies to armor models found by the National Institute of Justice Compliance Testing Program (NIJ CTP) to be compliant with NIJ Standard 0101.06 *Ballistic Resistance of Body Armor,* published in 2008. Under FIT, periodic unannounced inspections are conducted, during which independent inspectors pull production armor samples and send them for testing and inspection.



Follow-up inspection and testing has two aspects: performance testing and construction inspection. Each month, the CTP prepares a list of armor and locations for follow-up inspection, based on the number of models a manufacturer currently has on the CPL that have not been inspected within the past 10 months. Some models of ballistic-resistant body armor are initially manufactured for a single contract and are not produced again for a significant amount of time, which could result in the CTP's not analyzing production samples in a timely manner. To address this issue, the FIT Program also includes initial product inspection, which requires that follow-up inspection occur as soon as a model is listed on the CPL and production begins.

Ballistic-resistant body armor has been credited with saving the lives of more than 3,000 law enforcement officers since the mid- 1970s, when NIJ began testing body armor and developing performance standards. For more information on the FIT and compliance testing programs, visit https://justnet.org/law-enforcement/LE-body-armor.html or contact CTP staff at bactp@justnet.org.