NLECTC National Law Enforcement and Corrections Technology Center

NIJ Public Safety Bomb Suit Standard

NIJ

A program of the National Institute of Justice

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FACT SHEET

NIJ is proud to announce the publication of a new public safety bomb suit standard and a certification program for ensuring that bomb suits are tested and meet the requirements of the standard.

Why Did NIJ Undertake This Effort?

There is no standard for bomb suits worn by U.S. public safety bomb technicians. The NIJ standard was developed at the request of the National Bomb Squad Commanders Advisory Board (NBSCAB).

Research Focus Areas

The six key research areas listed below were investigated as part of the standard development:

- Blast overpressure.
- Fragmentation.
- Impact.
- Flame.
- Optics.
- Ergonomics.

Pipe bomb

Blast overpressure, fragmentation, impact and flame are hazards from which a bomb technician needs to be protected when performing render-safe procedures. Optics and ergonomics relate to a bomb technician's ability to perform render-safe procedures while wearing the bomb suit. This standard balances the protection requirements against the bomb technician's need for mobility, clear vision and dexterity.

Threat analysis revealed the most prevalent threat to U.S. law enforcement as a metal pipe bomb filled with black or smokeless powder.

The New Standard Includes:

- Minimum requirements for form and fit, performance, testing, documentation and labeling of personal protective equipment designed to protect bomb technicians from fragmentation, some blast overpressure, and impact and flame requirements associated with the explosion of an improvised explosive device (IED).

Pipe bomb

- Protection for the head, face, neck, thorax/abdomen, pelvis, arms and legs of technicians performing render-safe procedures and disposal activities.
- Minimum requirements for blast overpressure protection are addressed by performing a bomb suit integrity test.

Future research will address blast overpressure requirements and other issues such as electronics and communications.

These documents are available on **http://www.nij.gov/topics/technology/standards-testing/pages/active.aspx**.