

ITEM: BOMB DISPOSAL SUIT

MATERIAL: The basic suit is to consist of the following components: threequarter length jacket, trousers, back apron, helmet with face shield, soft ballistic filling and hard armor plates. Detailed specifications are as follows:

> Jacket: Three-quarter length; outer shell constructed of woven cotton, minimum of 60 threads per inch warp and 55 threads per inch fill, minimum weight 4.5 ounces per square yard. Nomex treated. Olive drab in color. Stand-up type collar.

CONSTRUCTION: One piece front and two piece back with rear zipper closure and ventilation panels. Full sleeves, detachable. Button of front and left end of collar to open to allow for insertion of ballistic filler.

Separate pockets to accommodate hard breast and groin plates fitted to front of jacket.

Single patch pocket on each side of lower back. One large patch pocket on upper back suitable for communications equipment.

Weight of jacket, including soft ballistic filler, and without hard plates, to be no more than 16 nor less than 15 pounds.

Back Apron: Three-quarter length; outer shell constructed of woven cotton, minimum of 60 threads per inch warp and 55 threads per inch fill, minimum weight 4.5 ounces per square yard. Nomex treated. Olive drab in color.

To fasten to jacket by means of Velcro-type material at each shoulder and each side seam of jacket. Opening at left side seam to allow for insertion of soft ballistic filler.

One back pocket on each side of lower back. One large patch pocket on upper back suitable for communication equipment. Weight of apron, including ballistic filler, not more than 8 nor less than 7 pounds.

<u>Trousers</u>: Full length, outer shell constructed of woven cotton, minimum of 60 threads per inch warp and 55 threads per inch fill, minimum weight 4.5 ounces per square yard. Nomex treated. Crotchless design, universal fit, with adjustable waistband and braces. Trousers to include foot shield extension.

Ballistic filling to be confined to front and sides of legs and extensions. Filling to be permanently sewn-in. Zipper closure behind each leg.

Weight of trousers, including soft ballistic filler, to be no more than 9, nor less than 8 pounds.



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CHICAGO POLICE DEPARTMENT UNIFORM & EQUIPMENT SPECIFICATIONS RESEARCH & DEVELOPMENT DIVISION

March 1985

ITEM:

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CONSTRUCTION: (continued) Helmet: Fiberglass shell, olive drab in color. Clear visor, approximately 1/2" thick, non-spalling and anti-mist treated, constructed of acrylic and polycarbonate, to extend to breastplate and cover all frontal aspects of the head. Visor to pivot and be readily replaceable, and to lock in three separate positions.

Helmet to be equipped with built-in communication headset and accoustic tube microphone.

Helmet to incorporate automatic diaphram as well as manual accoustic valves for protection against blast pressure.

Sizing to be accomplished by means of removable inserts. An impact load of 90 foot/pounds may not produce a transmitted force of more than 4,4000 pounds. Weight of full helmet and visor to be no more than 10.5, nor less than 9 pounds.

Ballistic Filler: The ballistic filler in the front, sleeves and collar of jacket; in the legs, groin, and foot extensions of the trousers; and in the back apron will be a minimum of 20 plies of Kevlar 49, minimum 17 threads per inch warp and fill, weight of single ply to be 6.5 to 7.5 ounces per squar yard. Ballistic fill of jacket front, collar, and apron to be sealed in vinyl casing. Sleeve liners to have outer protective layer of polyurethane coated nylon.

<u>Chest and Groinplates</u>: Press molded, multi-layer glass fabric to absorb multiple fragment strikes without fracturing. Plates not be crack on impact. Weight of plates to be no more than 11, nor less than 10 pounds.

Instructions for Care and Maintenance: All garments and equipment (including plates) will either be tagged with appropriate care and maintenance instructions for same or a booklet will be provided entitled "Care and Maintenance of Bomb Suit." Instructions should include laundering capabilities, storage of garment, necessary maintenance test for plates, etc.

Authenticated by:



Fred Rice Superintendent of Police

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