



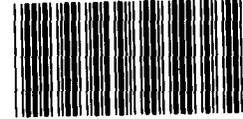
UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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GENERAL GOVERNMENT
DIVISION

JAN 27 1981
1982

The Honorable Jackie A. Strange
Assistant Postmaster General
Procurement and Supply
Department



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Dear Ms. Strange:

Subject: The Postal Service Will Reduce
Body Armor Costs By Purchasing
Competitively (GGD-82-19)

This report, one of a series addressing restrictive conditions and specifications in Postal Service procurements, concerns the Inspection Service's purchase of soft body armor (vests) on a sole source basis. In fiscal year 1981, 297 vests were purchased from Protective Materials Company, Inc., (PMI) for about \$55,000. In fiscal year 1982, the Inspection Service planned to purchase an additional 62 vests from PMI at a cost of about \$11,600.

Beginning in June 1981 we contacted Inspection Service officials to discuss the justification for purchasing body armor on a sole source basis. Later in June we informed Inspection Service officials that our preliminary data showed other suppliers were capable of meeting their armor requirements. We suggested that a planned procurement of 67 vests be delayed until this matter was resolved. The Inspection Service chose to consummate this purchase without delay, assuring us that technical data to support the sole source decision would be provided. Our subsequent review of this data did not support the Inspection Service's position.

On December 15, 1981, we met with representatives of the Inspection Service and the Director, Office of Contracts, and discussed the following matters.

BODY ARMOR WILL BE BOUGHT
COMPETITIVELY

There are many vests which provide the level of life protection required by the Inspection Service. When the Service decided to go sole source in November 1980, there were 19 other models available which gave this basic protection. (See enclosure.) As shown below, even limiting the purchase to suppliers

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on General Services Administration contracts still provides at least four models which meet protection and quality requirements and cost less than the model purchased.

<u>Manufacturer</u>	<u>Model</u>	<u>Unit Cost</u> (all sizes)
Protective Materials Co., Inc.	Standard Flex II	\$169.07
International Protectors, Inc.	Protector	\$153.00
Point Blank Body Armor, Inc.	20	\$152.00
Protective Apparel Corp. of America	WC-21	\$152.00

A competitive purchase of body armor from these 4 sources could have saved about \$2,000 on the 67 vests acquired in June and about \$9,700 on total fiscal year 1981 purchases (297 vests). At least \$2,200 can be saved on planned fiscal year 1982 purchases (62 vests). These savings, detailed below, range from \$30.40 to \$32.50 for each vest purchased.

<u>Purchase</u>	<u>Actual/Projected</u> <u>Cost</u>	<u>Cost at \$152/</u> <u>Vest</u>	<u>Savings</u>
June 1981, for 67 vests: (1 small, 41 medium, 20 large, 5 extra large)	\$12,300	\$10,200	\$2,100 (average= \$31.34/vest)
Total fiscal year 1981 for 297 vests: (21 small, 135 medium, 120 large, 21 extra large)	a/\$54,800	\$45,100	\$9,700 (average= \$32.65/vest)
Planned fiscal year 1982 estimate for 62 vests: (6 small, 18 medium, 27 large, 11 extra large)	\$11,600	\$ 9,400	\$2,200 (average= \$35.48/vest)

a/PMI Model "Premium 10KS" is priced by size at small \$169.32, medium \$175.62, large \$194.52, and extra large \$199.42.

For fiscal year 1982 and subsequent purchases, the Service stated that it will select its supplier from among all the manufacturers meeting its requirements. Purchasing will be done by procurement personnel who will insure adequate competition for these awards.

TWO OVERLY RESTRICTIVE REQUIREMENTS
WILL BE DELETED

The Inspection Service vest requirements include two which go beyond a statement of minimum needs and become unnecessarily restrictive. The first is a requirement for "in-house" quality control testing which precludes any armor supplier without in-house testing facilities from bidding. The more common practice for manufacturers is to have an independent facility (such as the Edgewood Arsenal in Maryland) do the quality control testing in accordance with national standards. We believe that using an independent testing facility serving many clients offers more assurance of unbiased quality control testing than an in-house facility concerned with profitability.

The second restrictive requirement is a product specification for an "impregnated blunt trauma layer" in the armor. This layer provides a barrier to body moisture because Kelvar, the most commonly used material in soft body armor, loses some of its protective capability when wet. This factor must be considered in assessing the life protection provided by any vest. According to Service officials, this layer also enhances protection against injury caused by a bullet's impact.

However, both these factors are achieved before a vest can pass national standards for any protection level provided. In testing against national protection standards the moisture problem is considered by making separate dry and wet ballistic tests. To be in full compliance at any given protection level, armor must pass tests under both conditions. Thus, an impregnated (moisture-proof) blunt trauma layer is not necessary for any armor which has passed its penetration and trauma tests. Also, the allowable impact on the body of a nonpenetrating bullet is part of each compliance test. If any additional protection is desired, it should be described in functional terms, not by requiring a specific way to achieve it.

The Inspection Service has agreed to remove these two restrictive requirements on future procurements. These will be replaced by functional statements of needs which require vests providing specific, measurable levels of life protection and a manufacturing process that includes quality control testing in accordance with national standards, without specifying how these conditions will be achieved.

AN EXTRA COST, UNUSABLE FEATURE
WILL NOT BE ORDERED

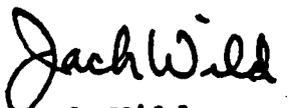
The vest purchased from PMI is its full wraparound Premium 1OKS model. This model, as opposed to PMI's Standard Flex II (which provides the same level of life protection at lesser cost), has an extra feature--removable front and back panels. However, when any of these panels are removed the unit falls below the Service's required level of life protection. Thus, the extra cost being paid PMI for the Premium model (ranging between \$0.25 and \$30.35 on various sized men's vests) is for a feature which cannot be used.

The Inspection Service stated that for fiscal year 1982 and beyond it will purchase the least expensive model which meets its needs through competitive procurement. This will preclude buying extra unusable features.

Please convey my thanks to your staff, who have been most cooperative in providing information and assistance on this matter. We would appreciate being informed on the savings obtained on fiscal year 1982 vest purchases.

If you have any questions concerning this report, please contact me or Mr. Roy Karadbil on 245-5397.

Sincerely yours,


Jack Wild
Group Director

Enclosure

BODY ARMOR MODELS OFFERING NEEDED LEVEL OF
PROTECTION PRIOR TO NOVEMBER 1980
(see note a)

<u>Model number</u> (note b)	<u>Manufacturer</u>
300	A&B Industries, Inc.
302	A&B Industries, Inc.
K15HD	American Body Armor & Equip Co.
K27HD (sp)	American Body Armor & Equip Co.
Armorhide-p	Armour of America
26018	Burlington Industries, Inc.
Mini Protector	International Protectors, Inc.
2000	Magnum Armor
20	Point Blank Body Armor, Inc.
ES-23	Progressive Apparel Co.
PGC-1	Protective Apparel Corp. of America
Standard Flex II	Protective Materials Co. Inc.
M2A2B	Safariland Ballistics, Inc.
M3-2W	Safariland Ballistics, Inc.
S32W	Safariland Ballistics, Inc.
Z	Second Chance Body Armor, Inc.
120	Smith & Wesson
217	Smith & Wesson
434C	Smith & Wesson
KXX+1	Technipol International Corp.

Data is taken from the International Association of Chiefs of Police's Consumer Product Report - Police Body Armor issued December 1978, and supplements 1 to 5 issued through December 1979.

Includes the original model numbers which may have changed.