

Audit

Report



OFFICE OF THE INSPECTOR GENERAL

**ADDENDUM TO THE FINAL AUDIT REPORT ON
PROCUREMENT OF SPARE PARTS AND SUPPLIES**

Report No. 93-105A

June 4, 1993

INFORMATION

This special version of the addendum
has been revised to omit proprietary data.

Department of Defense

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The following acronyms are used in this addendum.

AAV.....	Amphibious Assault Vehicle
AMCCOM.....	Army Armament, Munitions, and Chemical Command
ASO.....	Navy Aviation Supply Office
BOA.....	Basic Ordering Agreement
BPA.....	Blanket Purchase Agreement
COPAD.....	Contractor-Operated Parts Depot
DCAA.....	Defense Contract Audit Agency
DCMAO.....	Defense Contract Management Area Operations
DCSC.....	Defense Construction Supply Center
DGSC.....	Defense General Supply Center
FMS.....	Foreign Military Sales
GSA.....	General Services Administration
IDT.....	Indefinite Delivery Type
IQT.....	Indefinite Quantity Type
J&A.....	Justification and Approval
MCLB.....	Marine Corps Logistics Base, Albany
NSN.....	National Stock Number
OCALC.....	Oklahoma City Air Logistics Center
PN.....	Part Number
RTC.....	Requirements Type Contract
SAALC.....	San Antonio Air Logistics Center
SPCC.....	Navy Ships Parts Control Center
TACOM.....	Army Tank-Automotive Command
WRALC.....	Warner Robins Air Logistics Center



**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884**



June 4, 1993

**MEMORANDUM FOR COMMANDER, ARMY ARMAMENT, MUNITIONS, AND
CHEMICAL COMMAND
COMMANDER, ARMY TANK-AUTOMOTIVE COMMAND
COMMANDER, OKLAHOMA CITY AIR LOGISTICS CENTER
COMMANDER, SAN ANTONIO AIR LOGISTICS CENTER
COMMANDER, WARNER ROBINS AIR LOGISTICS CENTER
COMMANDING GENERAL, MARINE CORPS LOGISTICS BASE,
ALBANY
COMMANDER, DEFENSE CONSTRUCTION SUPPLY CENTER
COMMANDER, DEFENSE GENERAL SUPPLY CENTER
COMMANDING OFFICER, NAVY AVIATION SUPPLY OFFICE
COMMANDING OFFICER, NAVY SHIPS PARTS CONTROL
CENTER**

**SUBJECT: Addendum to the Final Audit Report on Procurement of
Spare Parts and Supplies (Report No. 93-105A)**

The enclosed addendum to our final audit report provides details on the procurements of the 141 items examined during the audit. We excluded these voluminous details from the final report because this information is of interest and use to a limited distribution.

If you have any questions on this audit, please contact Mr. Garold E. Stephenson, Program Director, at (703) 692-3179 (DSN 222-3179) or Mr. Eugene E. Kissner, Project Manager, at (703) 692-3128 (DSN 222-3128). See Part II of this addendum for additional recipients.

**Edward R. Jones
Deputy Assistant Inspector General
for Auditing**

TABLE OF CONTENTS

PART I - SUMMARIES OF ITEMS REVIEWED

Page

A - Items Reviewed at Army Buying Centers

Item No. AMCCOM	1	1
Item No. AMCCOM	2	2
Item No. AMCCOM	3	3
Item No. AMCCOM	4	4
Item No. AMCCOM	5	4
Item No. AMCCOM	6	5
Item No. AMCCOM	7	6
Item No. AMCCOM	8	7
Item No. AMCCOM	9	8
Item No. AMCCOM	10	9
Item No. AMCCOM	11	9
Item No. AMCCOM	12	10
Item No. AMCCOM	13	11
Item No. AMCCOM	14	11
Item No. AMCCOM	15	12
Item No. AMCCOM	16	13
Item No. AMCCOM	17	15
Item No. TACOM	1	16
Item No. TACOM	2	17
Item No. TACOM	3	18
Item No. TACOM	4	19
Item No. TACOM	5	20
Item No. TACOM	6	21
Item No. TACOM	7	22
Item No. TACOM	8	23
Item No. TACOM	9	24
Item No. TACOM	10	25
Item No. TACOM	11	25
Item No. TACOM	12	26
Item No. TACOM	13	27
Item No. TACOM	14	28
Item No. TACOM	15	29

B - Items Reviewed at Navy Buying Centers

Item No. ASO	1	31
Item No. ASO	2	32
Item No. SPCC	1	33
Item No. SPCC	2	34
Item No. SPCC	3	35
Item No. SPCC	4	36
Item No. SPCC	5	37

TABLE OF CONTENTS (cont'd)

PART I - SUMMARIES OF ITEMS REVIEWED (cont'd)

Page

B - Items Reviewed at Navy Buying Centers (cont'd)

Item No. SPCC 6	37
Item No. SPCC 7	38
Item No. SPCC 8	39
Item No. SPCC 9	40
Item No. SPCC 10	41
Item No. SPCC 11	42
Item No. SPCC 12	43
Item No. SPCC 13	44
Item No. SPCC 14	45
Item No. SPCC 15	46

C - Items Reviewed at Air Force Buying Centers

Item No. OCALC 1	49
Item No. OCALC 2	50
Item No. SAALC 1	51
Item No. SAALC 2	52
Item No. SAALC 3	53
Item No. SAALC 4	54
Item No. SAALC 5	55
Item No. SAALC 6	56
Item No. SAALC 7	57
Item No. SAALC 8	57
Item No. SAALC 9	58
Item No. SAALC 10	59
Item No. SAALC 11	60
Item No. SAALC 12	61
Item No. SAALC 13	62
Item No. SAALC 14	63
Item No. SAALC 15	64
Item No. SAALC 16	65
Item No. SAALC 17	65
Item No. WRALC 1	67
Item No. WRALC 2	68
Item No. WRALC 3	69
Item No. WRALC 4	70
Item No. WRALC 5	71
Item No. WRALC 6	72
Item No. WRALC 7	73
Item No. WRALC 8	74
Item No. WRALC 9	75
Item No. WRALC 10	76
Item No. WRALC 11	76
Item No. WRALC 12	77

TABLE OF CONTENTS (cont'd)

PART I - SUMMARIES OF ITEMS REVIEWED (cont'd)

Page

C - Items Reviewed at Air Force Buying Centers
(cont'd)

Item No. WRALC 13	78
Item No. WRALC 14	79
Item No. WRALC 15	80
Item No. WRALC 16	81
Item No. WRALC 17	81
Item No. WRALC 18	82
Item No. WRALC 19	83
Item No. WRALC 20	84
Item No. WRALC 21	85
Item No. WRALC 22	86

D - Items Reviewed at Marine Corps Buying Centers

Item No. MCLB 1	89
Item No. MCLB 2	90
Item No. MCLB 3	91
Item No. MCLB 4	92
Item No. MCLB 5	93
Item No. MCLB 6	94
Item No. MCLB 7	95
Item No. MCLB 8	96
Item No. MCLB 9	97
Item No. MCLB 10	98
Item No. MCLB 11	99
Item No. MCLB 12	100
Item No. MCLB 13	101
Item No. MCLB 14	102
Item No. MCLB 15	103

E - Items Reviewed at Defense Logistics Agency
Buying Centers

Item No. DCSC 1	105
Item No. DCSC 2	105
Item No. DCSC 3	107
Item No. DCSC 4	108
Item No. DCSC 5	109
Item No. DCSC 6	110
Item No. DCSC 7	111
Item No. DCSC 8	112
Item No. DCSC 9	113
Item No. DCSC 10	114
Item No. DCSC 11	115

TABLE OF CONTENTS (cont'd)

PART I - SUMMARIES OF ITEMS REVIEWED (cont'd)

Page

E - Items Reviewed at Defense Logistics Agency
Buying Centers (cont'd)

Item No. DCSC 12	116
Item No. DCSC 13	117
Item No. DCSC 14	117
Item No. DCSC 15	118
Item No. DCSC 16	119
Item No. DCSC 17	120
Item No. DCSC 18	120
Item No. DCSC 19	121
Item No. DCSC 20	122
Item No. DGSC 1	123
Item No. DGSC 2	124
Item No. DGSC 3	125
Item No. DGSC 4	126
Item No. DGSC 5	127
Item No. DGSC 6	128
Item No. DGSC 7	128
Item No. DGSC 8	129
Item No. DGSC 9	130
Item No. DGSC 10	131
Item No. DGSC 11	132
Item No. DGSC 12	132
Item No. DGSC 13	133
Item No. DGSC 14	134
Item No. DGSC 15	135
Item No. DGSC 16	136

PART II - ADDITIONAL INFORMATION

Addendum Distribution	137
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This addendum was prepared by the Contract Management Directorate, Office of the Assistant Inspector General For Auditing, DoD. Copies of the final report and the addendum to the final report can be obtained from the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate, (703) 614-6303 (DSN 224-6303).

PART I - SUMMARIES OF ITEMS REVIEWED

A - ITEMS REVIEWED AT ARMY BUYING CENTERS

Buying Center: Army Armament, Munitions,
and Chemical Command (AMCCOM)

Item No. AMCCOM 1 (judgmental sample)

Nomenclature/National Stock Number (NSN)/Part Number (PN):
Mechanical Puller/5120-00-557-6030/5576030

Unit Price: \$412.90 Quantity: 24 Extended Price: \$9,909.60

Contractor: AGH Industries, Incorporated, Fort Worth, TX

Contract No.: DAAA09-90-P-0530 Awarded: November 15, 1989

Procurement Method: Competitive Determination: Reasonable

The mechanical puller is used to remove a trailer hinge pin approximately 12 inches long by 3 inches in diameter on the M101 towed howitzer. Removal of the pin allows disassembly of the legs on the howitzer.

For contract DAAA09-90-P-0530, AMCCOM solicited five vendors and received two offers. AGH Industries submitted the low bid of \$412.90 per unit. The cost and pricing data provided by AGH Industries showed that the components of the puller were obtained from at least nine subcontractors. AGH Industries assembled, inspected (used go/no-go gauges to ensure the screw and threads met specifications), marked, packaged, and shipped the pullers. According to an AGH Industries official, it took * to * to assemble, inspect, mark, and package each puller. Cost data provided by AGH Industries showed that the \$412.90 unit contract price was composed of \$* for subcontractor material (includes * per unit for *); \$* for assembling, marking, packaging, and shipping; \$* for general and administrative expenses; and \$*, * percent of unit cost for overhead and profit. (A company determines unit cost by combining some or all direct and indirect costs, depending on company policy. Companies usually add an additional amount for profit to arrive at the unit price.) Our intrinsic value analysis of the puller supported the \$412.90 unit price.

The procurement history showed that AMCCOM paid Pyle Machine, Incorporated, \$185 each for 18 pullers on the most recent prior

*Proprietary data removed.

procurement in July 1988. Pyle Machine did not provide a quote for the sample procurement. According to AMCCOM, Pyle Machine did not bid because *. Pyle Machine was not responsive to our attempt to confirm this.

Item No. AMCCOM 2 (judgmental sample)

Unit Prices: \$5,206.73 Quantities: 1,005 (DoD)
\$5,556.24 19 (Foreign Military Sales
 (FMS))

Contractor: Saco Defense, Incorporated, Saco, ME

Procurement Method: Noncompetitive Determination: Reasonable

The sample buy of 19 machine guns to fill a FMS requirement was one of two line items on the contract. The other line item was for 1,005 machine guns to meet DoD requirements. The unit price for the FMS requirement was \$5,556. For the DoD requirements, the price was \$5,207. The \$349 price difference was a rental fee for Government-furnished equipment included in the FMS price. The fair pricing legislation included in the Department of Defense Appropriations Act, 1990 (Public Law 101-165) eliminated rental fees charged to FMS customers effective December 1989.

The procurement history showed that AMCCOM paid \$4,128 each for a quantity of 909 M60 machine guns in 1988. Cost and pricing data submitted by Saco Defense showed that the contractor * when it sold the machine gun for \$*. A contract price/cost analysis performed by AMCCOM at the contractor's plant showed

2

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

that the contractor's unit manufacturing cost for the sample procurement was \$*. Additionally, the Defense Contract Audit Agency (DCAA) audited the contractor's proposal, and the audit results were used in negotiation of the contract price.

We concluded that the machine gun was reasonably priced.

Item No. AMCCOM 3 (random sample)

Nomenclature/NSN/PN: Hose Assembly/4720-01-300-3814/9387938-3

Unit Price: \$45.93 Quantity: 37 Extended Price: \$1,699.41

Contractor: Unisys Corporation, Huntsville, AL

Contract No.: DAAA09-90-C-0751 Awarded: June 14, 1990

Procurement Method: Competitive Determination: Reasonable

The hose assembly is about 46 inches long and is a part on the Army remote target system. The hose assembly was one of several spare parts procured on contract DAAA09-90-C-0751. The total contract value was \$7,856,310, which included the acquisition and installation of the remote target system hardware as well as the spare parts. Unisys is the only contractor that has furnished and installed remote target system hardware and that has supplied related spare parts to the Army. Based on the documentation at AMCCOM, we could not determine whether AMCCOM had previously procured the hose assembly.

Twenty-three vendors were solicited for the requirements on contract DAAA09-90-C-0751, and two offers were received. Competitive negotiations were conducted; best and final offers were obtained. A firm-fixed-price contract was awarded to Unisys, the low offeror. Unisys manufactured the hose assembly. Although individual line items were priced in the offers and discussed during negotiations, contract award was based on the proposed total contract price. The Unisys proposed unit price for our sample item was \$12.18 higher than the price proposed by the second offeror, *. However, during the audit a * official stated that * would not sell the hose assembly separately to the Government. It would have to be included in a larger proposal. The Unisys proposed total contract price was \$2.6 million lower than the * proposed price.

We concluded that the hose assembly was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. AMCCOM 4 (random sample)

Nomenclature/NSN/PN: Gunner's Auxiliary Sight/1240-01259-9097/
9377900

Unit Price: \$4,000 Quantity: 698 Extended Price: \$2,792,000

Contractor: Opto Mechanik, Incorporated, Melbourne, FL

Contract No.: DAAA09-90-C-0465 Awarded: June 27, 1990

Procurement Method: Competitive Determination: Reasonable

The gunner's auxiliary sight is an eight-power optical device that is used as a backup sight for the main and coaxial armament on the M1 Abrams tank. The sight is a critical component on the Abrams tank and is on the Industrial Preparedness Planning List to maintain a domestic production capability. Competition for the sample buy was limited to items manufactured in the United States and Canada. AMCCOM solicited 75 vendors and received 7 offers. The contract was awarded to the low offeror, Opto Mechanik. The procurement history showed that on the previous buy in 1987, AMCCOM paid \$6,184 per unit to a different contractor for a quantity of 640.

We concluded that the gunner's auxiliary sight was reasonably priced.

Item No. AMCCOM 5 (random sample)

Nomenclature/NSN/PN: Dust Cover/1005-01-126-7797/12295188

Unit Price: \$8.97 Quantity: 1,541 Extended Price: \$13,822.77

Contractor: Vinyl Technology, Incorporated, South El Monte, CA

Contract No.: DAAA09-90-P-2008 Awarded: April 24, 1990

Procurement Method: Competitive Determination: Reasonable

The dust covers are made of chlorphine-coated nylon, with rubber strips and velcro fasteners, and are used on the Army tube-launched, optical-tracked, wire-guided missile launcher. There are no commercial applications for the dust cover.

For contract DAAA09-90-P-2008, AMCCOM received eight offers and awarded the contract to the low offeror. The Vinyl Technology contract unit price of \$8.97 was composed of \$* material

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

costs, \$* labor costs, \$* manufacturing overhead, and \$* freight and general and administrative expenses. Based on these costs, we estimated Vinyl Technology profit was \$* (about * percent of unit cost) per unit. A Vinyl Technology official stated that his company * its standard overhead rate * and its general and administrative rate * on the offer. The next lowest bid was \$10.43 per unit. The procurement history showed that the price of the dust cover had declined about 14.5 percent from \$10.50 paid in 1985 to the \$8.97 price on the sample procurement.

We concluded that the dust cover was reasonably priced.

Item No. AMCCOM 6 (random sample)

Nomenclature/NSN/PN: Bracket/1095-01-170-1665/40-0019710

Unit Price: \$5.20 Quantity: 136 Extended Price: \$707.20

Contractor: Hercules Engines, Incorporated, Canton, OH

Contract No.: DAAA09-90-P-2431 Award: June 29, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The bracket attaches to the water pump on the engine in the M128 land mine dispenser and the 15-kilowatt and 30-kilowatt generator sets. A Hercules official told us the bracket is normally sold as part of the generator set and that Hercules does not stock the bracket. Hercules manufactured the brackets specifically for contract DAAA09-90-P-2431. The bracket is a simple part that could be efficiently duplicated by a competent machine shop.

AMCCOM awarded contract DAAA09-90-P-2431 sole source to Hercules because it did not possess sufficient technical data to conduct a competitive procurement. AMCCOM determined it would not be cost-effective to procure the technical data or reverse engineer the item. Based on the usage rate of 0.26 per month, the 136 brackets purchased on the sample procurement will last 43.58 years. The contracting officer determined the \$5.20 price was fair and reasonable, based on a should-cost analysis performed in June 1990 that disclosed the Hercules list price was \$6.50 and that the Government would receive a favorable quantity discount. An AMCCOM contracting official told us five brackets were procured in 1984 for \$5.20 each.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Hercules computed its offer by applying its standard rates and factors to direct material, labor, and freight costs. The price data we obtained from Hercules showed that the unit price of \$* was composed of \$* material, \$* labor, \$* overhead, \$* general and administrative expenses, \$* (* percent of unit cost) profit and \$* shipping. Our intrinsic value analysis of the bracket supported the \$5.20 unit price.

We concluded that the bracket was reasonably priced.

Item No. AMCCOM 7 (random sample)

Nomenclature/NSN/PN: Target Integrated Unit/5975-01-142-2797/
9353783

Unit Price: \$3,734.97 Quantity: 302 Extended Price: \$1,127,960.94

Contractor: Unisys Corporation, Huntsville, AL

Contract No.: DAAA09-87-G-0014-0022 Awarded: April 25, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The target integrated unit is a component of the remote target system and was procured for Army training ranges in Germany. The sample item was one of several line items on contract DAAA09-87-G-0014-0022. The procurement history shows that the most recent prior purchase was in September 1987 for quantities of 147 and 30 at prices of \$1,271.61 and \$1,579.63, respectively.

The contract was awarded sole source to Unisys on the basis that only Unisys had the technical knowledge and production capabilities to deliver the equipment within the required timeframe. Before contract award, both DCAA and the Defense Plant Representative Office reviewed the Unisys proposal, which was about \$*. AMCCOM negotiated the total prices of all items on the contract to \$3,264,199.

As a result of our inquiries about the pricing of the target integrated unit, Unisys performed an internal audit of contract DAAA09-87-G-0014-0022 and other delivery orders under the contract. Unisys determined that its pricing of the contract contained errors of about \$635,000 in overcharges, with overcharges on the target integrated unit amounting to about \$351,000. A postaward audit of cost and pricing data for the contract completed by DCAA on September 26, 1991, confirmed the

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

\$635,000 overcharge and did not find additional overcharges. Unisys volunteered to reimburse AMCCOM for the overcharges. On December 24, 1991, AMCCOM modified the contract to reduce its total value by \$650,228.66, which included accrued interest of \$15,228.66. The contract modification resulted in a \$650,228.66 savings to the Government.

We concluded that the target integrated unit was unreasonably priced. We determined that this item was overpriced by \$351,000 based on the overcharges disclosed by the contractor's internal audit.

Army Comments. The Army agreed that the item was overpriced and that \$650,228.66 would be saved.

Item No. AMCCOM 8 (random sample)

Nomenclature/NSN/PN: Gun Disc/5340-99-966-8162/FL19052

Unit Price: \$14.69 Quantity: 22 Extended Price: \$323.18

Contractor: Royal Ordnance PLC, Nottingham, England

Contract No.: DAAA09-88-G-0013-0016 Awarded: June 17, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The gun disc is a wheel assembly component on the Army M119 towed light howitzer. The gun disc functions as a large washer to prevent friction between the wheel rim and the stiffening plate. The gun disc has no commercial applications. The sample item is 1 of 34 items purchased on contract DAAA09-88-G-0013-0016, which had a total value of \$111,031. The contract was awarded sole source to Royal Ordnance PLC, a British contractor, because Royal Ordnance was the only known source of spare parts for the M119 howitzer. Royal Ordnance purchased the disc from * for \$* each and added \$* for inspection, packaging, and other handling expenses and \$* (* percent of unit cost) for profit. Our intrinsic value analysis of the gun disc supported the \$14.69 unit price.

Royal Ordnance submitted a certificate of current cost or pricing data, and the proposed costs were audited by the British Ministry of Defense. AMCCOM contracting officials stated that they used the certificate of current cost and pricing data submitted by

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Royal Ordnance as their basis for determining the price was fair and reasonable. The procurement history showed that AMCCOM had not procured the gun disc in recent years.

We concluded that the gun disc was reasonably priced.

Item No. AMCCOM 9 (random sample)

Nomenclature/NSN/PN: Flow Switch/5930-01-298-4476/11024942

Unit Price: \$105 Quantity: 33 Extended Price: \$3,465

Contractor: IMO Industries, Incorporated, Plainville, CT

Contract No.: DAAA09-90-P-2331 Awarded: June 19, 1990

Procurement Method: Competitive Determination: Reasonable

The flow switch is a part on a trailer-mounted steam cleaner. The procurement was restricted to the two approved sources, IMO Industries and All-Bann Enterprises. AMCCOM did not possess sufficient technical data on the flow switch to qualify additional sources. Both vendors submitted offers, and the contract was awarded to the low offeror, IMO Industries.

AMCCOM had determined that it was not economically feasible to purchase the technical data package for the switch due to the low value of the item and the low demand for the switch. The procurement history showed no previous procurements of the flow switch. AMCCOM determined the price was fair and reasonable based on a comparable item found in the "McMaster" Car Catalog. The comparable flow switch was listed at \$120 per unit retail. Documents obtained from All-Bann showed they purchased two flow switches from IMO Industries in April 1989 for \$106 each. IMO Industries, the flow switch manufacturer, would not supply cost data for this item. However, we did obtain IMO's 1992 commercial catalog, which listed the price for the flow switch at \$115 per unit.

We concluded that the flow switch was reasonably priced.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. AMCCOM 10 (random sample)

Nomenclature/NSN/PN: Front Sight Post/1005-01-134-3625/9349056

Unit Price: \$0.57 Quantity: 34,800 Extended Price: \$19,836

Contractor: Tompkins Products, Detroit, MI

Contract No.: DAAA09-90-C-0680 Awarded: May 17, 1990

Procurement Method: Competitive Determination: Reasonable

The front sight post is a part for the M16 rifle. AMCCOM solicited 15 vendors and received 15 offers on the sample procurement. The contract was awarded to the low offeror, Tompkins Products. Tompkins Products manufactured the front sight post. Procurement history shows that the most recent prior purchase was made in January 1986 for a quantity of 125,239 at \$0.54 each.

We concluded that the front sight post was reasonably priced.

Item No. AMCCOM 11 (random sample)

Nomenclature/NSN/PN: Screw/5305-99-805-7755/FL19079

Unit Price: \$95.04 Quantity: 6 Extended Price: \$570.24

Contractor: Royal Ordnance PLC, Nottingham, England

Contract No.: DAAA09-88-G-0013-0014 Awarded: June 1, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The screw is a part on the handwheel and shaft assembly on the M119 towed light howitzer. The sample is one of several contract line items on contract DAAA09-88-G-0013-0014, which had a total value of \$72,142. Contract DAAA09-88-G-0013-0014 was awarded sole source because Royal Ordnance was the only known source of spare parts for the M119 howitzer, and AMCCOM did not possess a technical data package. However, our audit found that Royal Ordnance purchased the screws from * for \$* each. Cost data provided by Royal Ordnance showed that the unit price of \$95.04 was composed of \$* subcontractor material, \$* handling expenses, and \$* (* percent of unit cost) profit. After the procurement, the technical data for the M119 howitzer were Americanized. The Americanization resulted in identification of another part

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

number. Thus, future procurements will be competitive. The Royal Ordnance proposed costs were audited by the British Ministry of Defense. Subsequently, negotiations were conducted to arrive at the contract price.

Procurement history showed that the most recent prior procurement was in August 1988 for a quantity of 6 at \$46.64 each. An AMCCOM contracting official stated that Royal Ordnance claimed it undervalued the screw on the 1988 procurement. Our intrinsic value analysis of the screw supported the \$95.04 unit price.

We concluded that the screw was reasonably priced.

Item No. AMCCOM 12 (random sample)

Nomenclature/NSN/PN: Worm Shaft/3040-00-546-9742/8299679

Unit Price: \$16.50 Quantity: 60 Extended Price: \$990

Contractor: Arvie Manufacturing and Supply Company,
Fort Worth, TX

Contract No.: DAAA09-90-P-2247 Awarded: May 31, 1990

Procurement Method: Competitive Determination: Reasonable

The worm shaft is a part on the 106mm military recoilless rifle. AMCCOM solicited three vendors and received three offers. The contract was awarded to the low offeror, Arvie Manufacturing and Supply, a manufacturer of the worm shaft. The contracting officer determined the price was fair and reasonable based on an independent Government estimate of \$14.92 each for a quantity of 60. Procurement history shows that the most recent prior purchase was in October 1989 for a quantity of 60 at \$21 each. Our intrinsic value analysis of the worm shaft supported the \$16.50 unit price.

We concluded that the worm shaft was reasonably priced.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. AMCCOM 13 (random sample)

Nomenclature/NSN/PN: Keyboard and Cable Assembly/4933-01-076-
6771/9324592-001

Unit Price: \$897.97 Quantity: 5 Extended Price: \$4,489.85

Contractor: Mid-America Engineering and Manufacturing
Company, Grand Rapids, MI

Contract No.: DAAA09-90-P-2453 Awarded: June 28, 1990

Procurement Method: Competitive Determination: Reasonable

The keyboard and cable assembly is used to enter test codes and start the tests on the AH-1 helicopter. For contract DAAA09-90-P-2453, AMCCOM solicited seven potential sources and received two offers. The contract was awarded to the low offeror. Mid-America purchased the keyboard, manufactured the cable, and assembled the keyboard and cable assembly. The cost data Mid-America provided during the audit showed that the contract unit price of \$897.97 was composed of \$* material, \$* labor, \$* labor overhead, \$* general and administrative expenses, \$* freight, and \$* (* percent of unit cost) profit. The procurement history showed that the most recent prior purchase was in May 1988 for a quantity of 20 at \$870.42 each from Mid-America. A June 1990 AMCCOM independent Government estimate disclosed a unit price of \$911.04 for a quantity of five. Our intrinsic value analysis of the keyboard and cable assembly supported the \$897.97 unit price.

We concluded that the keyboard and cable assembly were reasonably priced.

Item No. AMCCOM 14 (random sample)

Nomenclature/NSN/PN: Hexagon Nut/5310-99-941-1309/33800S7

Unit Price: \$0.12 Quantity: 238 Extended Price: \$28.56

Contractor: Royal Ordnance PLC, Nottingham, England

Contract No.: DAAA09-88-G-0013-0016 Awarded: June 17, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The hexagon nut is a component part on the locking pin assembly for the model M119 towed light howitzer. The sample procurement

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

was for 1 of the 34 items purchased on contract DAAA09-88-G-0013-0016, which had a total value of \$111,031. The contract was awarded sole source to Royal Ordnance PLC, a British contractor because Royal Ordnance was the only known source of spare parts for the M119 howitzer; the Government did not possess sufficient technical data to conduct a competitive procurement. Royal Ordnance purchased the hexagon nut from * for \$* each and added \$* for inspection, packaging, and other handling expenses, and \$* (* percent of unit cost) for profit.

Royal Ordnance submitted a certificate of current cost and pricing data with its proposal; the certified costs were audited by the British Ministry of Defense. AMCCOM contracting officials told us they used the certificate submitted by Royal Ordnance as their basis for determining if the price was fair and reasonable. Subsequently, negotiations were conducted to arrive at the contract price. The procurement history showed that AMCCOM had not procured the hexagon nut in recent years.

Subsequent to the procurement, the M119 howitzer was Americanized. The Americanization resulted in identification of a military specification (51968-9) for the hexagon nut. The hexagon nut is listed in the National Inventory Records under NSN 5310-00-785-1762 at \$33.54 for 100 units or \$0.335 per unit. AMCCOM plans to compete future procurements of the item.

We concluded that the hexagon nut was reasonably priced.

Item No. AMCCOM 15 (random sample)

Nomenclature/NSN/PN: Nonmetallic Seal/5330-01-227-5547/9376298-1

Unit Price: \$0.98 Quantity: 5,517 Extended Price: \$5,406.66

Contractor: Basic Rubber and Plastic Company, Walled Lake, MI

Contract No.: DAAA09-90-P-2437 Awarded: June 28, 1990

Procurement Method: Competitive Determination: Reasonable

The nonmetallic seal is used to seal the loader's hatch on the Army M1 Abrams tank. The seal prevents dust, water, and chemical gases from entering the hatch. On contract DAAA09-90-P-2437, AMCCOM solicited seven vendors and received three offers. The contract was awarded to the low offeror, Basic Rubber and Plastic, a manufacturer of the seal. Cost data provided by the

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

contractor showed that the contract unit price was composed of \$* material; \$* direct labor; and \$* marking, packaging, coding, and shipping cost. The contractor added * percent to the cost for overhead and profit, yielding the \$0.98 contract price. AMCCOM procurement history shows that the most recent AMCCOM prior purchase was in November 1988 for a quantity of 5,947 seals at \$0.84 each. A should-cost analysis performed by AMCCOM in June 1990 showed a unit price of \$0.92 for a quantity of 5,517.

We concluded that the nonmetallic seal was reasonably priced.

Item No. AMCCOM 16 (random sample)

Nomenclature/NSN/PN: Circuit Card Assembly/5998-01-211-6018/
7-317222545

Unit Price: \$1,127.07 Quantity: 104 Extended Price: \$117,215.28

Contractor: McDonnell Douglas Helicopter Company, Mesa, AZ

Contract No.: DAAA09-86-G-0006-0037 Awarded: June 29, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The circuit card is one of five circuit cards in the gun control box of the M230 chain gun on the Apache helicopter. The function of the card is to shape and set up the firing pulse of the gun. There are no commercial applications for the card.

The sample item was one of several line items on a contract for various spare parts for the M230 chain gun, which had a total value of \$886,421. Contract DAAA09-86-G-0006-0037 was awarded sole source to McDonnell Douglas, the prime contractor for the Apache helicopter. The contracting officer justified the sole-source procurement on the basis that McDonnell Douglas owned the rights to the technical data on the gun. A contracting official told us that the Government had unlimited rights to the circuit card drawing, but that it would not be economical to compete the circuit card. For another manufacturer to make the card, the manufacturer would, at a minimum, need a complete gun control box set up to function as required and the special tooling necessary to test the card.

McDonnell Douglas did not manufacture the circuit cards for our sample procurement. It purchased them from * for \$* each and sold them to the Army for \$1,127 each. * also manufactures the gun control box and is the only

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

source capable of providing the circuit card. * manufactured and tested the cards and packaged them in electrostatic discharged bags and shipped them to McDonnell Douglas in a box. McDonnell Douglas visually inspected the packaging to determine whether the cards were damaged; otherwise, no value was added to the cards. McDonnell Douglas applied its Government-approved rates for purchased parts sold as spares to arrive at its selling price. Markup on the cost of the purchased part was \$* (* percent of unit cost). The procurement history showed that AMCCOM had purchased the card from McDonnell Douglas since 1986 and that the price had not changed over the 1986-1990 period.

We examined the cost breakdown and bill of materials * submitted to McDonnell Douglas to support its \$* price and discussed the * manufacturing process with a McDonnell Douglas official. We concluded that the * \$* price for the card was reasonable and that AMCCOM should have broken out the circuit card assembly for procurement directly from the manufacturer.

We concluded that the circuit card assembly was unreasonably priced because it was not procured from the manufacturer and because McDonnell Douglas added no value to it. We determined that this item was overpriced by \$298 each based on *.

During the audit, AMCCOM agreed that the item was overpriced. We informed AMCCOM that the circuit card assembly should be broken out for procurement directly from the manufacturer. However, AMCCOM engineers disagreed and stated that due to the level of sophisticated inspection required for spare parts for electrical components, the item must be procured through McDonnell Douglas. We do not agree that the inspection requirement is a valid reason for not qualifying * as a procurement source for this circuit card.

Army Comments. The Army did not provide comments on this item in its comments to the audit report.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. AMCCOM 17 (random sample)

Nomenclature/NSN/PN: Handle Puller/5120-01-064-1379/SM-C-807183

Unit Price: \$14.70 Quantity: 97 Extended Price: \$1,425.90

Contractor: Lasmer Industries, Incorporated, Hunt, TX

Contract No.: DAAA09-90-P-2277 Awarded: June 1, 1990

Procurement Method: Competitive Determination: None

The handle puller is used to remove a circuit card from the Army's direct support electronics system test set. This test set is used for testing systems on the Army M1 Abrams tank and Bradley fighting vehicle. For contract DAAA09-90-P-2277, seven vendors were solicited and five offers were received. The contract was awarded to the low offeror, Lasmer Industries, a manufacturer of the handle puller. AMCCOM procurement history showed that the most recent AMCCOM prior purchase was in May 1989 for a quantity of 135 at \$24.58 each.

In January 1990, Lasmer Industries informed AMCCOM that because some material costs were omitted from its proposal, it would not be able to perform the contract. AMCCOM subsequently terminated the contract for default. After termination, AMCCOM resolicited the procurement and awarded a new contract to Dunbar Corporation for 168 handle pullers at \$22.40 each.

We were unable to determine if the handle puller was reasonably priced. However, we believe the buyer had sufficient justification for accepting the contractor's proposed \$14.70 price as fair and reasonable. The solicitation was competitive, and one of the other offers received was only \$2.15 higher than the original award price of \$14.70. The contracting officer determined that the \$14.70 price was fair and reasonable based on competition between the two low quotes received.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Buying Center: Army Tank-Automotive Command (TACOM)

Item No. TACOM 1 (random sample)

Nomenclature/NSN/PN: Inner Tube/2610-00-721-9279/None

Unit Price: \$3.07 Quantity: 138 Extended Price: \$423.66

Contractor: Cupples Company Manufacturers, St. Louis, MO

Contract No.: DAAE07-90-V-0660 Awarded: May 7, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The inner tube is a commercial item used on cart-type vehicles. The wheels have a 4-inch diameter and an outer radius that ranges from 3.5 to 4.1 inches. For contract DAAE07-90-V-0660, TACOM solicited five vendors and received one offer. TACOM awarded a sole-source contract to Cupples. Cupples did not manufacture the inner tube. It purchased the inner tubes from * for \$* each. A * official refused our request for cost data, stating that the company does not provide cost information. The official also stated that * had not made any sales to the Government and that any sale made would have to be for a bulk quantity. Cupples purchased 4,000 of the subject inner tubes from *.

* purchased the tubes from Taiwan and shipped the 4,000 tubes to Cupples. The price breakdown we obtained from Cupples showed the \$3.07 unit price included \$* material (\$* for tube, \$* freight-in and \$* for sealing cap); \$* labor/fringe; \$* packaging and shipping; and \$* (* percent of unit cost) for profit.

The Cupples commercial price for the inner tube was \$2.20 each. A Cupples official stated the basic Government price was \$*, but that the Government's special packaging requirement, which included waterproofing, and actual shipping charges increased the price to \$3.07. We obtained a commercial price quote of \$9.05 each from a Goodyear dealer in the Detroit area. The three other tire dealers we contacted did not sell the inner tube. Procurement history data shows that TACOM paid another contractor \$3.28 each in May 1986 for a quantity of 275 inner tubes. The 1986 purchase was the most recent prior procurement.

We concluded that the inner tube was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 2 (random sample)

Nomenclature/NSN/PN: Socket Wrench/5120-00-650-7829/8380406

Unit Price: \$8.90 Quantity: 2,308 Extended Price: \$20,541.20

Contractor: L. A. Martin Company, Dearborn, MI

Contract No.: DAAE07-90-V-0747 Awarded: June 7, 1990

Procurement Method: Competitive Determination: Reasonable

The socket wrench is a tool used on a variety of military vehicles. The wrench is specifically designed for military use and is not a commercial item.

For contract DAAE07-90-V-0747, TACOM solicited five sources and received two offers. The award was made to the low offeror. The contractor's cost data showed that the unit contract price included \$* labor and \$* material. The contractor added \$* (* percent of unit cost) for profit and overhead, yielding the \$8.90 price.

Procurement history showed that TACOM paid \$5.90 each for a quantity of 4,522 in January 1986, the most recent prior procurement. The prior procurement price was considerably less than the \$8.90 price of our sample procurement. However, the quantity procured on the prior procurement was double the quantity of our sample procurement, and the price included a quantity discount. Our intrinsic value analysis of the socket wrench supported the \$8.90 unit price.

We concluded that the socket wrench was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 3 (random sample)

Nomenclature/NSN/PN: Protective Dust Cap/5340-01-010-0283/
13211E7936

Unit Price: \$9.98 Quantity: 261 Extended Price: \$2,604.78

Contractor: AGH Industries Incorporated, Fort Worth, TX

Contract No.: DAAE07-90-P-1481 Awarded: June 20, 1990

Procurement Method: Competitive Determination: Reasonable

The protective dust cap is a component part for the M60 tank's vehicle launch bridge. It is not a commercial item.

For contract DAAE07-90-P-1481, TACOM solicited five vendors and received four offers. AGH Industries was the low offeror and the manufacturer of the dust cap. AGH Industries machined, assembled, packaged, and shipped the dust caps. The contractor cost breakdown showed material cost \$*, subcontractor cost \$*, machining cost \$*, and packaging and shipping cost \$*. The contractor added \$* (about * percent of unit cost) for overhead, general and administrative expense, and profit, yielding the \$9.98 contract price. The most recent prior procurement was in 1984 for a quantity of 654 at a unit price of \$8.89. The price for contract DAAE07-90-P-1481 was about 12 percent higher. Our intrinsic value analysis of the protective dust cap supported the \$9.98 unit price.

We concluded that the protective dust cap was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 4 (random sample)

Nomenclature/NSN/PN: Pneumatic Inner Tube/2610-01-264-3165/None

Unit Prices: \$5.44	Quantities: 75	
5.07	320	
4.82	527	Extended Price: \$4,570.54

Contractor: Cupples Company Manufacturers, St. Louis, MO

Contract No.: DAAE07-90-V-0546 Awarded: April 2, 1990

Procurement Method: Competitive Determination: Reasonable

The inner tube is manufactured in accordance with military specification ZZ-I-550E and is used on fork lifts. It is 7.625 inches in width, 38.50 inches in circumference, and 2.67 pounds in weight. A Cupples official stated that the tube is made of heavier material than is used in commercial tubes and is made only for the Government. For contract DAAE07-90-V-0546, TACOM solicited four vendors and received two offers. Cupples was the low offeror and the manufacturer of the inner tube. Cost data provided by the contractor showed unit manufacturing costs of \$*. The contractor added \$* (* percent of unit cost) for profit and shipping costs to reach the contract prices. Each contract line item was delivered to a different destination. The unit prices varied because shipping costs were different for each destination. The procurement history showed that the most recent prior procurement was made in May 1989 for a total quantity of 412 tubes at a unit price of \$6.38.

We concluded that the pneumatic inner tube was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 5 (random sample)

Nomenclature/NSN/PN: Flange to Hose Elbow/4730-00-074-1946/
5133535

Unit Price: \$39.38 Quantity: 221 Extended Price: \$8,702.98

Contractor: Detroit Diesel Corporation, Canton, OH

Contract No.: DAAE07-88-G-A004-0038 Awarded: May 31, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The flange to hose elbow is used on the thermostat and coolant hose assembly on the engine for the M113 armored personnel carrier. The elbow functions as a water inlet. The contract was awarded sole source to Detroit Diesel because TACOM did not possess adequate technical data to conduct a competitive procurement. Detroit Diesel's price quote for the contract shows that the \$39.38 unit price included a 20-percent discount. Procurement history showed that the most recent prior procurement was in March 1982 for a total quantity of 1,235 elbows for \$28.99 each.

A Detroit Diesel official told us that the elbow is a commercial item, that the October 1991 price was \$80.59, and that Detroit Diesel charges its distributors and dealers \$50.67 for the elbow. He further stated that the selling price to the Government would be \$50.67, the lowest price available. The official gave us a copy of the September 1991 Detroit Diesel parts price list showing the above prices. Our intrinsic value analysis of the elbow supported the \$39.38 unit price.

We concluded that the flange to hose elbow was reasonably priced.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 6 (random sample)

Nomenclature/NSN/PN: Tandem Axle Torque Rod/2530-01-155-3885/
1035-20

Unit Price: \$55.26 Quantity: 65 Extended Price: \$3,591.90

Contractor: Murdock Enterprises, Incorporated, Somerset, PA

Contract No.: DAAE07-90-V-0795 Awarded: June 25, 1990

Procurement Method: Competitive Determination: Reasonable

The tandem axle torque rod is a part on the M989 heavy material transporter, a trailer used primarily to move tanks and other large vehicles. The torque rod is commercially available through authorized distributors of Reyco Industries products. Reyco is the only known manufacturer of the torque rod and does not sell directly to the Government. Reyco holds proprietary rights to the technical data and has refused to sell it to the Government. TACOM determined it would not be cost-effective to reverse engineer the item to develop technical data suitable for competition because low demand and low unit cost would not generate sufficient savings to offset the cost of reverse engineering. For contract DAAE07-90-V-0795, TACOM solicited five vendors and received two offers. The contract was awarded to the low offeror, Murdock Enterprises, a distributor of Reyco parts. Murdock and Reyco officials refused our request for cost data on the torque rod. Procurement history showed that the most recent prior procurement was in May 1986 for 100 torque rods at \$50.95 each. Our intrinsic value analysis of the torque rod supported the \$55.26 unit price.

We concluded that the torque rod was reasonably priced.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 7 (random sample)

Nomenclature/NSN/PN: Armor Plate/9515-01-106-6199/12297290

Unit Price: \$96.75 Quantity: 120 Extended Price: \$11,610

Contractor: Lapeer Industries, Incorporated, Lapeer, MI

Contract No.: DAAE07-90-P-1405 Awarded: June 8, 1990

Procurement Method: Competitive Determination: Reasonable

The armor plate is used on the rear section of the Bradley fighting vehicle. It is manufactured from military specification A-41600 high-hardness steel, and is 0.260 inches thick, 33.72 inches long, 25 inches wide, and weighs 45 pounds. There are no commercial applications for the plate.

For contract DAAE07-90-P-1405, TACOM solicited six vendors and received five offers. Lapeer Industries was the low offeror and a manufacturer of the armor plate. The contracting officer determined the price was fair and reasonable based on the competitive quotes received. The cost breakdown we obtained from Lapeer Industries showed total costs of \$*, including \$* material, \$* labor (* at \$* per hour), \$* subcontract, and \$* packaging and freight. The contractor stated profit was included in the hourly labor rate. Procurement history shows that the most recent prior procurement was made in January 1989 for a quantity of 88 at \$89 each.

We concluded that the armor plate was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 8 (random sample)

Nomenclature/NSN/PN: Brake Plate Backing/2530-01-124-6530/
A-3211-K-2871

Unit Price: \$177.85 Quantity: 104 Extended Price: \$18,496.40

Contractor: Rockwell International Corporation, Troy, MI

Contract No.: DAAE07-90-V-0729 Awarded: May 25, 1990

Procurement Method: Competitive Determination: Reasonable

The brake plate backing is for the brake system on the M939 5-ton truck. It was developed by Rockwell, which is the only known manufacturer. It is commercially available through suppliers of Rockwell parts. Rockwell owns the technical data package for the brake plate backing and considers the data proprietary.

For contract DAAE07-90-V-0729, TACOM solicited 48 vendors and received two offers. Rockwell submitted the low offer. Procurement history shows that the most recent prior procurement was in February 1986 for a quantity of 80 at \$122.49 each from Rockwell.

The sample brake plate backing is not listed in the 1990 Rockwell commercial parts price list. A Rockwell official stated this was not uncommon because Rockwell only lists parts for which there is some level of expected demand. The official provided technical information on the sample brake plate backing and a similar item. Comparison of the technical information indicated the two brake plate backings were technically equivalent. The technically equivalent brake plate backing was included in the 1990 commercial parts price list for \$756 each. With Rockwell's customary *-percent Government discount, the price would be \$* each.

We concluded that the brake plate backing was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 9 (random sample)

Nomenclature/NSN/PN: Turret Valve Assembly/4820-01-210-8821/
VS-1072

Unit Price: \$6.50 Quantity: 6,173 Extended Price: \$40,124.50

Contractor: Eaton Corporation, Air Control Division, Roxboro, NC

Contract No.: DAAE07-90-C-0789 Awarded: May 1, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The valve assembly is used to adjust tire air pressure on the M939 5-ton truck. It is fastened to the inside of the wheel rim with one valve extended to the outside of the rim where air can be put in or taken out. Another valve extended inside the rim can be connected to an air compressor mounted in the truck and used to adjust tire pressure from inside the truck. Eaton sold 5,600 of the valve assemblies to the manufacturer of the M939 5-ton truck in June 1990 for the same \$6.50 unit price. Contract DAAE07-90-C-0789 was awarded sole source to Eaton. Documents obtained from the contract file indicated there was some confusion on whether the technical data package at TACOM could be used for competitive procurements. Eaton officials told us that Eaton designed the valve assembly to meet Army specifications and that the drawing was not proprietary to Eaton. Eaton officials also told us that several of its competitors could make the valve assembly if provided the drawing.

Cost information generated by the Eaton standard cost system showed costs of \$*, including \$* material, \$* labor, \$* overhead, \$* shipping, and \$* general and administrative expenses. Eaton added \$* (about * percent of unit cost) markup to reach the \$6.50 selling price. The Eaton markup on a similar valve assembly sold commercially was about * percent. In addition, the Eaton April 1990 price list showed prices to its distributors for similar valve assemblies were about \$4.30 higher than the \$6.50 price charged the Army for the sample item. The procurement history shows the price of the sample item had remained at \$6.50 since 1986. Our intrinsic value analysis of the turret valve assembly supported the \$6.50 unit price.

We concluded that the turret valve assembly was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 10 (random sample)

Nomenclature/NSN/PN: Nonmetallic Rod/2540-01-179-9023/12330505

Unit Price: \$1.82 Quantity: 484 Extended Price: \$880.88

Contractor: Motor Parts, Incorporated, of Michigan,
Rochester Hills, MI

Contract No.: DAAE07-90-P-1315 Awarded: May 14, 1990

Procurement Method: Competitive Determination: Reasonable

The nonmetallic (nylon) rod supports the shroud assembly on the M992 tracked vehicle. The shroud assembly functions as a tunnel over the conveyor belt on the tracked vehicle when loading ammunition to the M109 self-propelled howitzer. The part is not a commercial item.

For contract DAAE07-90-P-1315, TACOM solicited three vendors and received three offers. Motor Parts was the low offeror and the manufacturer of the rod. The cost breakdown we obtained from Motor Parts showed unit manufacturing costs of \$*, including \$* material, \$* labor and \$* overhead. The contractor added \$* for general and administrative expenses and \$* (* percent of unit cost) for profit, yielding the \$1.82 contract price. The procurement history showed that the most recent prior purchase was in January 1989 for a quantity of 343 at \$1.98 each.

We concluded that the nonmetallic rod was reasonably priced.

Item No. TACOM 11 (random sample)

Nomenclature/NSN/PN: Rubber Bushing/5365-00-088-9564/11678027

Unit Price: \$0.85 Quantity: 74,067 Extended Price: \$62,956.95

Contractor: Goodyear Tire & Rubber Company, Akron, OH

Contract No.: DAAE07-90-C-0913 Awarded: May 14, 1990

Procurement Method: Competitive Determination: Reasonable

The bushing is a rubber cylinder about 2 inches long and 1.5 inches in diameter and is a component part of the trackshoe assembly on the M113 armored personnel carrier. It is a Qualified Products List item and is designated military

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

specification T-11891-13. At the time of the procurement, there were five manufacturers on the Qualified Products List. The bushing is not a commercial item.

For contract DAAE07-90-C-0913, TACOM solicited the five qualified manufacturers on the Qualified Products List and received two offers. Goodyear Tire and Rubber was the low offeror. TACOM provided justification and approval (J&A) for other than full and open competition on the contract because only two qualified sources were able to meet the urgent requirement. The urgency resulted from an out-of-stock position; delivery was to begin 14 days after contract award at the rate of 7,500 per week. Normal lead time for delivery of the first bushings is 5 months after contract award. The contracting officer considered the \$0.85 price fair and reasonable based on procurement history and the nature of the emergency buy. Procurement history shows that the most recent prior procurement was in March 1990 for a total quantity of 482,388 at \$0.7334 each. The contractor for the March 1990 procurement could not accelerate production to meet the urgent requirement and did not make an offer on the sample procurement. Our intrinsic value analysis of the rubber bushing supported the \$0.85 unit price.

We concluded that the rubber bushing was reasonably priced.

Item No. TACOM 12 (random sample)

Nomenclature/NSN/PN: Steering Cylinder/2530-00-470-9824/F10806

Unit Price: \$1,643.75 Quantity: 12 Extended Price: \$19,725

Contractor: Murdock Enterprises, Somerset, PA

Contract No.: DAAE07-90-C-0892 Awarded: May 22, 1990

Procurement Method: Competitive Determination: Reasonable

The steering cylinder is a part for the Pettibone Model RTL10 rough terrain forklift truck. For contract DAAE07-90-C-0892, TACOM solicited 14 vendors and received 3 offers. Murdock Enterprises was the low offeror and a manufacturer of the steering cylinder. A fourth offer received was from a vendor not considered qualified. Procurement history showed that the sample procurement was the only recent TACOM purchase of the steering cylinder.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Murdock and Pettibone officials stated that they sell the cylinder commercially. Both companies provided quotes to commercial customers upon request, but neither company published a commercial price. Murdock refused our request for cost data, stating it does not provide cost data for bids under \$100,000. The Murdock 1990 commercial price was \$1,643.75, and Pettibone's commercial price was \$2,205. Pettibone submitted an offer of \$1,750 each for the sample procurement. The contracting officer determined the \$1,643.75 unit price was fair and reasonable based on competition, comparison to market price, and high set-up cost for the low quantity.

We concluded that the steering cylinder was reasonably priced.

Item No. TACOM 13 (random sample)

Nomenclature/NSN/PN: Shift Control Assembly/2520-01-142-8251/
12311017

Unit Price: \$621 Quantity: 298 Extended Price: \$185,058

Contractor: Minowitz Manufacturing Company, Roseville, MI

Contract No.: DAAE07-90-C-1013 Awarded: June 15, 1990

Procurement Method: Competitive Determination: Reasonable

The shift control assembly is part of the steering and throttle assembly on the Army M1 Abrams tank. For contract DAAE07-90-C-1013, TACOM solicited 98 vendors and received 13 offers. Minowitz Manufacturing Company was the low offeror and a manufacturer of the shift control assembly. The contracting officer determined the price was fair and reasonable based on the competitive offers received. The contractor cost data showed unit manufacturing costs of \$*, including \$* material, \$* direct labor, and \$* overhead. General and administrative expenses of \$* and profit of \$* (* percent of unit cost) were added, yielding the \$621 contract price. The procurement history showed that the most recent prior procurement was made in January 1990 for a quantity of 120 at \$769 each from another contractor. The shift control was not a commercial item.

We concluded that the shift control assembly was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 14 (random sample)

Nomenclature/NSN/PN: Driving Wheel Spindle/2530-01-268-4746/
3213-N-1574-S

Unit Price: \$162.94 Quantity: 23 Extended Price: \$3,747.62

Contractor: Rockwell International Corporation, Troy, MI

Contract No.: DAAE07-90-V-0704 Awarded: May 17, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The driving wheel spindle is a part for the rear axle assembly on the M1022 small utility trailer. Rockwell is the only known manufacturer of the spindle. The spindle is commercially available through suppliers of Rockwell parts. Rockwell claims proprietary rights to the technical data for the spindle. TACOM has determined that it would not be economically feasible to procure the technical data package or reverse engineer the item because there is no average monthly demand and no projected future buys of the spindle.

For contract DAAE07-90-V-0704, TACOM solicited two vendors, Rockwell and a supplier of Rockwell parts, and received one offer. The contract was awarded sole source to Rockwell International since the supplier did not respond to the solicitation. The procurement history showed that the most recent prior procurement was in August 1989 for a quantity of three at \$182.95 each.

The sample wheel spindle is not listed in the 1990 Rockwell commercial parts price list. A Rockwell official stated this was common because Rockwell only lists parts for which there is expected demand. The official provided technical information on the sample wheel spindle and a similar item. Comparison of the technical information indicated the two wheel spindles are technically equivalent. The technically equivalent wheel spindle was included in the 1990 Rockwell commercial parts price list for \$514 each. With Rockwell's customary *-percent Government discount, the price would be \$* each.

We concluded that the driving wheel spindle was reasonably priced.

*Proprietary data removed.

A - ITEMS REVIEWED AT ARMY BUYING CENTERS (cont'd)

Item No. TACOM 15 (random sample)

Nomenclature/NSN/PN: Fuse Cartridge/5920-01-301-3837/56724211-131

Unit Price: \$0.27 Quantity: 1,428 Extended Price: \$385.56

Contractor: Hagglunds Vehicle AB, Ornskoldsvik, Sweden

Contract No.: DAAE07-88-G-J001-0168 Awarded: April 16, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The 3.15 amp, 250-volt fuse cartridge is a part for the bilge pump of the M973 small unit support vehicle. The bilge pump is used to pump water out of the vehicle. The fuse is commercially available. TACOM awarded the contract sole source to Hagglunds Vehicle, the prime contractor for the small unit support vehicle, because adequate drawings for a competitive buy were not available. The sample procurement was the first procurement of the fuse cartridge by TACOM.

A TACOM cost/price analysis determined that the price of the fuse cartridge was fair and reasonable. Hagglunds Vehicle certified that the same price list provided to TACOM was also provided to the Swedish, Finnish, Norwegian, English, and Canadian defense departments and that the list reflected its most favorable prices and terms. A Hagglunds Vehicle official told us the \$0.27 price included a 40-percent discount off the price list incorporated in the contract. We contacted the Tandy Corporation to obtain an additional price quote for 3.15 amp, 250-volt fuse cartridges. A Tandy Corporation official stated the 1992 Tandy price to the Government for 1,400 of the fuse cartridges would be \$0.43 each.

We concluded that the fuse cartridge was reasonably priced.

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B - ITEMS REVIEWED AT NAVY BUYING CENTERS

Buying Center: Navy Aviation Supply Office (ASO)

Item No. ASO 1 (judgmental sample)

Nomenclature/NSN/PN: Mechanical Puller/5120-01-072-6396/
21C4099G001

Unit Price: \$350 Quantity: 23 Extended Price: \$8,050

Contractor: Equipment and Supply, Incorporated, Monroe, NC

Contract No.: N00383-89-C-9398 Awarded: June 6, 1989

Procurement Method: Competitive Determination: Reasonable

The mechanical puller is approximately 12 inches in length and 4 inches in diameter and is used to remove the pump seal in the after section of the General Electric T58 engines on the H-2, H-3, and CH-46 helicopters.

For contract N00383-89-C-9398, ASO solicited 19 sources and received 19 offers. The contract was awarded to the second-lowest bidder, Equipment and Supply, because the low bidder had a history of poor performance and a high delinquency rate. Equipment and Supply manufactured the mechanical puller. The Navy Price Fighter Detachment, Norfolk, Virginia, completed a value analysis of the puller in July 1990 and determined that the pullers should cost \$581.63 each for a quantity of 23. The analysis report also stated that the only prior purchase of the puller was in 1976 when the Navy purchased 40 pullers from General Electric for \$474 each.

We concluded that the mechanical puller was reasonably priced.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. ASO 2 (judgmental sample)

Nomenclature/NSN/PN: Hydraulic Hand Jack/5120-01-043-4087/
1161AS100

Unit Price: \$1,500 Quantity: 18 Extended Price: \$27,000

Contractor: Columbus Jack Corporation, Columbus, OH

Contract No.: N00383-88-C-2960 Awarded: August 10, 1988

Procurement Method: Competitive Determination: Reasonable

The jack is a portable unit that is used to lift the H-46 helicopter when its tires are being changed. An ASO official stated that the brake system on the H-46 helicopter interferes with the insertion of standard commercial jacks and that Regent Jack part No. 8762 was the only commercial jack that could perform the task. The Navy purchased the data rights to the jack from Regent Jack to prevent potentially costly sole-source procurements from Regent Jack. There have been seven competitive awards for the jack using drawing 1161AS100 since March 1982, with prices ranging from \$901.19 each for 48 in January 1986 to \$1,536 each for 31 in December 1989. The January 1986 award was canceled because the contractor, Equipment and Supply, Incorporated, failed to pass the first article test.

For contract N00383-88-C-2960, ASO solicited 68 vendors, including Equipment and Supply, Regent Jack, and Columbus Jack, and received five offers. Equipment and Supply did not respond to the solicitation. Regent Jack and Columbus Jack offered unit prices of \$1,982 and \$1,500, respectively. The three other offers were for \$2,020, \$2,324, and \$8,385. Columbus Jack, the low offeror, manufactured the jack to order. The most recent delivered prior procurement was in March 1985 for a quantity of 17 at \$1,006 each from Columbus Jack. The contracting officer noted that the price had increased since the last procurement but accepted the price as fair and reasonable because all proposals received increased by similar amounts. The Price Fighter Detachment completed a value analysis in July 1990 that disclosed a should-cost of \$1,611.58 each for a quantity of 18. The Price Fighter Detachment also found that an operator of the commercial equivalent of the H-76 helicopter paid \$1,600 for a similar jack.

We concluded that the hydraulic hand jack was reasonably priced.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Buying Center: Navy Ships Parts Control Center (SPCC)

Item No. SPCC 1 (random sample)

Nomenclature/NSN/PN: Subassembly Amplifier/5820-01-095-9651/08465

Unit Price: \$458 Quantity: 19 Extended Price: \$8,702

Contractor: RACAL Communications, Incorporated, Rockville, MD

Contract No.: F04606-90-F-0134 Awarded: May 23, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The subassembly amplifier is the main circuit card in the RACAL R-2174(P)/URR high frequency receiver. The R-2174 is the DoD general purpose high frequency receiver. It receives and demodulates various types of signals and is capable of operating with secure voice modems. RACAL has proprietary rights to the technical data for the R-2174(P)/URR high frequency receiver.

Contract F04606-90-F-0134 was awarded by the Sacramento Air Logistics Center in response to a Military Inter-Department Purchase Request from SPCC. Sacramento Air Logistics Center was the primary inventory control point for the part. The contract price of \$458 for the amplifier was on the General Services Administration (GSA) price list. GSA negotiated with the contractor and obtained the discounted price list for use by Government contracting officers. RACAL gave us a copy of the price breakdown it prepared for GSA in August 1989. The breakdown showed the proposed unit price of \$* was composed of \$* direct labor, \$* overhead, \$* material, \$* material handling, \$* general and administrative expenses and \$* (* percent of unit cost) profit. The negotiated GSA unit price of \$458 resulted in \$* (* percent of unit cost) profit. The procurement history showed that the most recent prior procurement was made by SPCC in October 1989 for a quantity of 16 at \$445 each from RACAL.

We concluded that the subassembly amplifier was reasonably priced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 2 (random sample)

Nomenclature/NSN/PN: Circuit Card Assembly/5998-01-233-6231/
1069F72G01

Unit Price: \$5,633 Quantity: 2 Extended Price: \$11,266

Contractor: Westinghouse Electric Corporation, Annapolis, MD

Contract No.: N00104-85-G-0A90-0175 Awarded: April 19, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The circuit card is part of the AN/AQS-14 minehunting sonar system, which is designed to locate, classify, mark, and record mines. There are no commercial applications of the circuit card.

Contract N00104-85-G-0A90-0175 was awarded sole source to Westinghouse because SPCC did not have sufficient technical data to procure the circuit card from other sources. However, Westinghouse officials stated that the Government owns the technical data and should be able to competitively procure the circuit card. Westinghouse officials believe other manufacturers are capable of producing the circuit card if provided the technical data. On contract N00104-85-G-0A90-0175, Westinghouse manufactured the circuit card assembly and tested it on Government-owned test equipment.

The procurement history showed all prior procurements of the circuit card were from Westinghouse. The most recent prior procurement of a similar quantity was in April 1987 at a unit price of \$2,773. The 1987 procurement was one of several line items on a multi-line item contract valued at \$800,000. The buyer justified the \$5,633 unit price on the sample procurement by comparing it to the price of the circuit card on two multi-line item contracts valued at \$800,000 and \$600,000.

The price negotiation memorandum stated Westinghouse fixed costs were spread over a much larger base on the multi-line item contracts resulting in lower unit prices for the circuit cards. We determined that Westinghouse used its automated cost rollup system to prepare its offer for the sample procurement. The price generated by the system was based primarily on cost history, and included Government-accepted labor and overhead rates. The cost data Westinghouse provided supported the \$5,633 unit price. Total direct cost of \$* included material \$* (included \$* material overhead), labor \$* (fully

*Proprietary data removed.

PART B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

burdened labor rates), and cost of capital \$*. Total general and administrative expenses were \$*, and profit was \$* (about * percent of total cost). Our intrinsic value analysis of the circuit card assembly supported the \$5,633 unit price.

We concluded that the circuit card assembly was reasonably priced.

Item No. SPCC 3 (random sample)

Nomenclature/NSN/PN: Electrical Connector Shell/5935-00-128-8015/
2371640G1

Unit Price: \$290.03 Quantity: 13 Extended Price: \$3,770.39

Contractor: ITT Corporation, Clifton, NJ

Contract No.: N00104-87-G-0212-5001 Awarded: May 7, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The electrical connector shell is a part for the AN/URN20 navigation set on various Navy ships. On contract N00104-87-G-0212-5001, SPCC solicited two vendors and received one offer. ITT claimed the technical data on the connector shell were proprietary. ITT computed its price quote by applying its standard rates and factors to estimated direct labor and material costs. According to a DCAA official, the rates and factors ITT used for our sample contract were DCAA-approved and were in effect at the time of contract award. Actual cost data we obtained from ITT showed \$* manufacturing cost, \$* general and administrative expense, \$* headquarters service charge, \$* independent research and development, and \$* cost of money. Applying the ITT *-percent profit rate, profit would be \$* and the unit price would be \$*. The contract unit price was \$290.03.

The procurement history showed prior procurements of the connector shell in 1978 for a quantity of one and in 1987 for a quantity of nine. The 1987 unit price was \$260.26, 10 percent less than the sample procurement price.

We concluded that the electrical shell connector was reasonably priced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 4 (random sample)

Nomenclature/NSN/PN: Servo Amplifier/6615-00-984-5857/
HSF3377-0051-1

Unit Price: \$4,875 Quantity: 10 Extended Price: \$48,750

Contractor: Contraves USA, Simulation and Systems
Integration, Tampa, FL

Contract No.: N00104-89-G-A050-4009 Awarded: April 20, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The servo amplifier is a part for the fleet ballistic missile submarine ships control center. The servo amplifier provides the required drive signals to the control valves for the motion platform pitch and roll hydraulic system.

The sample procurement was awarded sole source to Contraves. The amplifier is a source-controlled item, and Contraves is the only approved source. There are no commercial applications of the amplifier. In addition to the \$48,750 for the amplifiers, contract N00104-89-G-A050-4009 included \$20,802 for three power supplies. The total contract value was \$69,552.

Contraves assembled and tested the amplifiers. For the subject procurement, Contraves paid \$* per unit for the various components it installed in the amplifiers, including a one-time engineering fee of \$* per unit that it paid to *. The fee was for the design of a new circuit card for the amplifier. The procurement history showed the only prior procurement of the amplifier was in 1983 at a unit price of \$2,546.

A Contraves official stated her company * on the sample procurement. She provided cost data that showed the actual manufacturing cost for the amplifiers and power supplies totalled \$*, which * \$* to the company. Contraves' costs were for the total order and were not broken down by individual line items on the contract.

We concluded that the servo amplifier was reasonably priced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 5 (random sample)

Nomenclature/NSN/PN: Electric Maintenance Kit/5935-00-471-8875/
M24231-40-002

Unit Price: \$192 Quantity: 183 Extended Price: \$35,136

Contractor: Roflan Associates, Incorporated, Newburyport, MA

Contract No.: N00104-90-C-E611 Awarded: June 4, 1990

Procurement Method: Competitive Determination: Reasonable

The electric maintenance kit is composed of three parts: a 24-socket plug sleeve, a mating coupling, and a cap plug. The kit is used by shipyards to repair existing electrical cables on ships.

On the sample procurement, SPCC solicited 18 potential sources and received 4 offers. SPCC then requested best and final offers from three offerors found to be in the competitive range. The contract was awarded to the low offeror, Roflan Associates. The procurement history showed no procurements of the kit in the past 5 years. A should-cost analysis performed by SPCC in 1984 showed a unit price of \$281.72 for a quantity of 108.

We concluded that the kits were reasonably priced.

Item No. SPCC 6 (random sample)

Nomenclature/NSN/PN: Male 9-Millimeter Socket Wrench/
5120-01-127-5145/9059MM

Unit Price: \$10.83 Quantity: 143 Extended Price: \$1,548.69

Contractor: Machine Craft, Incorporated, Baltimore, MD

Contract No.: N00104-90-C-KE07 Awarded: June 8, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The wrench is made of hardened and tempered steel and is 3.307 inches in length and 0.827 inches across the handle. It is part of the MK-26 tool kit used to dismantle underwater mines and torpedoes and is critical to the Navy Explosive Ordnance

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Disposal Program. The wrench is a commercial item manufactured in Germany and distributed in the United States by Metric Multistandard Components, Hawthorne, NY. We contacted three other importers and four tool manufacturers or distributors. No vendor contacted could supply the wrench. One manufacturer stated it could specially manufacture the wrench for the Government but did not provide a price quote.

The Metric Multistandard current catalog price is \$10.75. A Metric Multistandard official stated that his company sold the wrench to Machine Craft for \$* in 1990 and that his company's current price for the wrench was \$8.46. On the sample procurement, Metric Multistandard gave SPCC a quote of \$9.15 each, without the inspection/acceptance, barcoding, and packaging requirements in the solicitation. SPCC refused to change these requirements and solicited Machine Craft. However, the contract awarded to Machine Craft allowed inspection/acceptance at destination and commercial packaging, two concessions that SPCC refused to make for Metric Multistandard. The contract contained a second line item for 37 female 9-millimeter socket wrenches at \$10.83 each. The total contract value was \$1,949. The cost data Machine Craft provided during the audit supported the contract unit price for the sample item. The \$10.83 price was composed of \$* material, \$* overhead, \$* labor, \$* freight, \$* setup expenses, and \$* (* percent of unit cost) profit. Our intrinsic value of the socket wrench supported the \$10.83 unit price.

We concluded that the socket wrench was reasonably priced.

Item No. SPCC 7 (random sample)

Nomenclature/NSN/PN: Wire Rope Sling/4010-01-199-7673/28210

Unit Price: \$41 Quantity: 60 Extended Price: \$2,460

Contractor: United Standard Industries, Incorporated,
Glenview, IL

Contract No.: N00104-90-M-BJ94 Awarded: May 10, 1990

Procurement Method: Competitive Determination: Reasonable

The wire rope sling is 8 feet in length and 1/4 inch in diameter and is manufactured in accordance with Federal specifications. It is used to lift and handle nuclear reactor plant parts and equipment. There are no commercial applications for the sling.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

For the sample procurement, SPCC solicited four vendors and received two offers. United Standard Industries was the low offeror and a manufacturer of the wire rope sling. The contractor refused our request for cost data, stating company policy is not to provide cost information on competitive procurements. The contracting officer determined the \$41 unit price was fair and reasonable based on competition and previous history. The procurement history showed that SPCC's most recent prior purchase of the sling was in January 1989 for a quantity of 55 at \$43.10 each. The procurement history also showed that SPCC paid a unit price of \$44.45 in 1988 and \$35.49 in 1987. The three prior procurements were competitive awards to United Standard Industries.

We concluded that the wire rope sling was reasonably priced.

Item No. SPCC 8 (random sample)

Nomenclature/NSN/PN: Roller/1015-15-056-1981/150561981

Unit Price: \$2.86 Quantity: 462 Extended Price: \$1,321.32

Contractor: Lasmer Industries, Incorporated, Hunt, TX

Contract No.: N00104-90-P-2301 Awarded: April 24, 1990

Procurement Method: Competitive Determination: Reasonable

The roller is a part for the lower hoist mechanism of the fully automatic MK75 lightweight shield gun. Oto Melara, S.P.A., designed the MK75 and owns the technical data package. A contractual agreement between the Navy and Oto Melara permits the Navy to use the drawings for competitively procuring spare parts for the MK75 from U.S. manufacturers.

On the sample procurement, SPCC solicited four sources and received four offers. SPCC awarded the contract to the low offeror, Lasmer Industries, a manufacturer of the roller. The SPCC procurement history showed its most recent prior procurement of the roller was for a quantity of 170 at a unit price of \$7.25 in December 1986.

We concluded that the roller was reasonably priced.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 9 (random sample)

Nomenclature/NSN/PN: EM-134 Type 1/Circuit Card Assembly/
5999-01-317-3739

Unit Price: \$1,875 Quantity: 5 Extended Price: \$9,375

Contractor: Henschel Corporation, Newburyport, MA

Contract No.: N00104-90-P-2304 Awarded: April 29, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The circuit card assembly is a component part for the digital depth indicator on a class of Navy submarines. There are no commercial applications for the circuit card.

SPCC awarded a sole-source contract to Henschel because the technical data package was inadequate for competitive procurement. Henschel computed its price quote by applying its standard rates and factors to its estimated direct labor and material costs. According to a DCAA official, the rates and factors used were the same as those proposed on a larger Henschel contract awarded during the same time frame. The DCAA audit report on the larger contract made recommendations for small downward adjustments for some rates and factors. Cost and pricing data obtained from Henschel supported the contract price of \$1,875 per unit.

The procurement history showed no prior purchases of the circuit card. However, in January 1989, Henschel sold four circuit cards to General Dynamics, the submarine prime contractor, for \$2,625 each. Our intrinsic value analysis of the circuit card assembly supported the \$1,875 unit price.

We concluded that the circuit card assembly was reasonably priced.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 10 (random sample)

Nomenclature/NSN/PN: Exhaust Manifold Adaptor/2815-01-247-4578/
114D040

Unit Price: \$1,977.58 Quantity: 1 Extended Price: \$1,977.58

Contractor: Stewart and Stevenson Service, Incorporated,
Houston, TX

Contract No.: N00104-90-V-E616 Awarded: June 12, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The exhaust manifold adaptor is a part of a water-cooled engine exhaust manifold system on diesel engines in FFG-7 class frigates. It is about 30 inches in length and 7 inches in diameter and is connected to the engine turbocharger and manifold system. The adaptor removes heat and gases from the turbocharger.

The sample procurement was awarded sole source to Stewart and Stevenson because the contractor had proprietary rights to the drawings. Cost information obtained from the contractor showed the manufacturing cost was \$*. The labor, overhead, and general and administrative expense rates the contractor used to compute its actual costs approximated the DCAA recommended rates for the contractor's fiscal year ending January 31, 1990, and fell within the proposed, but unaudited, rates the contractor submitted to DCAA in August 1990. The procurement history showed that SPCC procured four adaptors in November 1987 for \$1,253 each. The contractor stated the Navy was quoted the lower price on the 1987 procurement because the contractor was already in production for a foreign customer. SPCC procured 13 adaptors on 3 separate procurements at unit prices progressing from \$1,985 to \$2,043 within the 3-month period following the June 1990 sample procurement. These purchases were also from Stewart and Stevenson.

We concluded that the exhaust manifold adapter was reasonably priced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 11 (random sample)

Nomenclature/NSN/PN: Unit Drive Gearbox/3010-01-320-9764/
1-RD-32VF

Unit Price: \$4,154.37 Quantity: 2 Extended Price: \$8,308.74

Contractor: Federal Equipment Company, Cincinnati, OH

Contract No.: N00104-90-W-SP46 Awarded: April 27, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The gearbox is used to raise and lower helicopter hangar doors onboard FFG-7 class frigates. The sample procurement was the first time the Navy procured the gearbox. Contract documentation showed that SPCC personnel performed market research and identified only one source for the gearbox, Federal Equipment Company. SPCC awarded a sole-source contract to Federal Equipment.

We determined that Federal Equipment was not the manufacturer of the gearbox. It purchased the gearboxes and related parts from Hamilton Gear of Toronto, Canada, for \$* each. A Hamilton Gear official stated his company would sell the gearbox directly to the Navy.

Hamilton Gear shipped the parts to J.C. Tower, Incorporated, Buffalo, NY, which paid custom clearance fees of \$91.33 on each gearbox. J.C. Tower added no other value to the parts.

J.C. Tower then shipped the parts to Federal Equipment Company, which inspected the parts and shipped them to the Navy. A Federal Equipment official stated his company prepared its price quote based on its estimated costs and did not maintain detailed cost records on low-dollar-value contracts. Consequently, we were unable to determine what additional costs were included in the \$* that Federal Equipment added to its purchase price and custom duties on the gearboxes.

We concluded that the unit drive gearbox was unreasonably priced because it was not procured from the manufacturer. We determined that this item was overpriced by \$1,880 each since SPCC *.

Navy Comments. In its comments to the draft audit report, the Navy agreed that the item was overpriced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 12 (random sample)

Nomenclature/NSN/PN: Elbow Pipe/4730-01-058-5485/MIL-F-23467

Unit Price: \$887 Quantity: 15 Extended Price: \$13,305

Contractor: Tri-Tech, Incorporated, Louisville, KY

Contract No.: N00221-90-C-X050 Awarded: April 11, 1990

Procurement Method: Competitive Determination: None

The part is a seamless elbow pipe manufactured from nickel-copper or nickel-chromium material. It is used in the nuclear reactor system of Navy submarines. The manufacturing process requires extensive forging, machining, and testing to form the nuclear-hardened seamless pipe.

The sample procurement was made by Mare Island Naval Shipyard in response to a Request for Contractual Procurement issued by SPCC. Mare Island solicited 93 potential offerors and received 2 responses. Best and final offers were obtained from both offerors. The contract was awarded to the low offeror, Tri-Tech. The contracting officer believed that the price was fair and reasonable based on adequate price competition.

We attempted to visit Tri-Tech to review the manufacturing process and to evaluate the cost to manufacture the elbow pipe. Tri-Tech denied our visit request stating it had been subjected to more DCAA audits in 1991 than in the previous 2 years and that the DCAA audits confirmed the reasonableness of Tri-Tech costing methods. DCAA officials advised us that they have not had any problems with the Tri-Tech contracts they reviewed. The sample procurement was a competitively awarded firm-fixed-price contract under \$100,000; as such, cost or pricing data were not required.

The procurement history showed the most recent prior procurement was in 1987 for a quantity of 20 at a unit price of \$404 from CUNICO Fitting and Valve. The CUNICO best and final offer on the sample procurement was \$1,632 each. A SPCC official stated that the CUNICO price increased because CUNICO had substantially under-estimated its costs on the 1987 procurement.

We were unable to verify if the \$887 unit price for the elbow pipe was reasonable because we were denied information on the contractor's manufacturing process and cost data.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 13 (random sample)

Nomenclature/NSN/PN: Tee Pipe/4730-01-088-4092/MIL-F-23467

Unit Price: \$920 Quantity: 5 Extended Price: \$4,600

Contractor: Tri-Tech, Incorporated, Louisville, KY

Contract No.: N00221-90-C-X050 Awarded: April 11, 1990

Procurement Method: Competitive Determination: None

The part is a seamless tee pipe manufactured from nickel-copper or nickel-chromium material. It is used in the nuclear reactor system of Navy submarines. The manufacturing process requires extensive forging, machining, and testing to form the nuclear-hardened seamless pipe.

The sample procurement was made by Mare Island Naval Shipyard in response to a Request for Contractual Procurement issued by SPCC. Mare Island solicited 93 potential offerors and received 2 responses. Best and final offers were obtained from both offerors. The contract was awarded to the low offeror, Tri-Tech. The contracting officer believed that the price was fair and reasonable based on adequate price competition. The SPCC procurement history showed no prior procurement of the tee pipe.

We attempted to visit Tri-Tech to review the manufacturing process and to evaluate the cost to manufacture the tee pipe. Tri-Tech denied our visit request, stating it had been subjected to more DCAA audits in 1991 than in the previous 2 years and that the DCAA audits confirmed the reasonableness of Tri-Tech costing methods. DCAA officials advised us that they have not had any problems with the Tri-Tech contracts they reviewed. The sample procurement was a competitively awarded firm-fixed-price contract under \$100,000; as such, cost or pricing data were not required.

We were unable to verify if the \$920 unit price for the tee pipe was reasonable because we were denied information on the contractor's manufacturing process and cost data.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 14 (random sample)

Nomenclature/NSN/PN: Blast Assembly Deflector/1005-01-229-4381/
75A732801-1007

Unit price: \$13,624.42 Quantity: 3 Extended Price: \$40,873.26

Contractor: McDonnell Aircraft Company, St. Louis, MO

Contract No.: N00383-88-G-B401-EP31 Awarded: June 29, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The blast assembly deflector is a part for the gun pod on the AV-8B Harrier aircraft. It directs the muzzle blast out the front of the pod, while keeping the extreme heat away from the gun and pod assembly. There are no commercial applications for the deflector.

The sample procurement was a sole-source contract because McDonnell Aircraft has proprietary rights to the technical data. The procurement history showed the sample procurement was the first SPCC procurement of the deflector.

The manufacturing process for the deflector involved many operations and was labor intensive. The contractor obtained the basic housing from a subcontractor and manufactured and installed various components, such as the gun blast, the duct, the beam, the supports, the stiffeners, and the gussets. The process included cutting, machining, drilling, welding, deburring, filing, grinding, blasting, sanding, degreasing, and pickling operations. Inspections were performed after each operation. Cost and pricing data obtained from McDonnell Aircraft supported the \$13,624.42 unit price and included * production and * quality assurance direct labor hours per unit. The overhead rates the contractor used to determine its unit price were slightly higher than the DCAA recommended rates. The negotiated unit price was \$* lower than the McDonnell Aircraft initial proposed price of \$*.

We concluded that the blast assembly deflector was reasonably priced.

*Proprietary data removed.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

Item No. SPCC 15 (random sample)

Nomenclature/NSN/PN: Complete Crankshaft/2815-12-321-7833/
5510302201

Unit Price: \$24,725.40 Quantity: 1 Extended Price: \$24,725.40

Contractor: Motoren and Turbinen Union, Friedrichshafen,
Germany

Contract No.: N68171-90-V-7303 Awarded: May 15, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The crankshaft was for an engine in the PEGASUS-class patrol combatant-missile (hydrofoil).

The sample procurement was made by the Naval Regional Contracting Center, London, in response to a Request for Contractual Procurement issued by SPCC. The initial request contained funding of \$3,800 for the crankshaft. The funding was subsequently increased to \$24,725.40; the contract was awarded with a June 21, 1990, required delivery date. The crankshaft was delivered to the Naval Supply Center, Norfolk, on November 26, 1990. A technical analysis of the drawing for the crankshaft performed by Naval Regional Contracting Center, London, personnel recommended acceptance of the \$24,725 as fair and reasonable. A Motoren and Turbinen Union official told us that manufacturing cost data on the crankshaft were not available. The official stated there is little demand for the crankshaft because it does not wear out or break often. The 1992 contractor parts catalog showed the commercial sales price of the crankshaft as \$29,493.91. Motoren and Turbinen Union also provided a copy of a sales invoice showing it sold the crankshaft to a commercial customer in July 1988 for \$26,123.20.

Because the item was delivered late and because the cost estimate increased from \$3,800 to \$24,725.40, we questioned whether the Navy needed the crankshaft or whether it received the crankshaft it wanted. SPCC personnel determined that the item was procured for stock but could not determine why it was required or whether the correct crankshaft was received. During the audit, SPCC personnel determined that the correct crankshaft was received and that the ship configuration data reflected in the Weapon System File were in error because the data did not show the requirement for the crankshaft. Two each of the engines are installed on the PEGASUS-class hulls two through six. The procurement of the crankshaft was justified based on population and criticality.

B - ITEMS REVIEWED AT NAVY BUYING CENTERS (cont'd)

The program manager for the PEGASUS-class ships initiated action to correct the Weapon System File and to add a numeric stocking objective of one to protect the asset in stock.

We concluded that the complete crankshaft was reasonably priced.

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C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS

Buying Center: Oklahoma City Air Logistics Center (OCALC)

Item No. OCALC 1 (judgmental sample)

Nomenclature/NSN/PN: Pliers/5120-01-188-7244/23006753

Unit Price: \$123.06 Quantity: 4 Extended Price: \$492.24

Contractor: General Motors Corporation, Allison Gas Turbine
Division, Indianapolis, IN

Contract No.: F346081-86-G-0214-0077 Awarded: February 26, 1987

Procurement Method: Noncompetitive Determination: None

The pliers are heavy-duty channel-lock pliers with curved and machined jaws. They are specially designed for crimping the TF41 engine combustion liner connector flange. The TF41 engine is installed in A-7 aircraft used by the Navy, Air Force, and one foreign country.

The sample procurement was awarded sole source to General Motors. General Motors did not manufacture the pliers. It solicited four vendors, received two offers, and purchased the pliers from the low offeror, Hamblen Gage Company, Indianapolis, IN, for \$* each. General Motors added a *-percent markup (\$*) for overhead and profit to the \$* purchase price. General Motors did not add value to the pliers. The pliers that General Motors initially delivered failed to work properly. General Motors then redesigned the pliers and in April 1989 obtained quotes from three vendors to supply the redesigned pliers. General Motors purchased the redesigned pliers from the low offeror for \$* each and provided them at no additional cost to the Air Force.

We determined from an official at the Navy A-7 aircraft overhaul facility that the Navy uses ordinary pliers to crimp the TF41 engine combustion liner connector flange. Tool control documents at OCALC indicate that the special pliers were also not regularly used by the Air Force. An OCALC official stated the pliers were needed because they were identified for use in the technical order for the TF41 engine prepared by General Motors and approved by the Air Force. General Motors provided information showing that it designed the pliers in 1982, based on modifying standard channel lock pliers.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

We were unable to determine if the pliers were reasonably priced. However, we concluded that the pliers were an unnecessary procurement because the Air Force did not have a valid requirement.

During the audit, we suggested that OCALC determine if a valid requirement exists for the special tool and, if not, delete the pliers from the supply system. An OCALC official agreed that the pliers could be deleted from the supply system because the Air Force was phasing out the TF41 engine. The TF41 engine overhaul program was discontinued at OCALC in September 1991.

Item No. OCALC 2 (judgmental sample)

Nomenclature/NSN/PN: Pliers/5120-01-195-1210/PWA38489

Unit Price: \$999.20 Quantity: 1 Extended Value: \$999.20

Contractor: United Technologies Corporation, Pratt & Whitney
Government Products Division, West Palm Beach, FL

Contract No.: F34601-89-G-6666-0030 Awarded: August 16, 1989

Procurement Method: Noncompetitive Determination: Unreasonable

The pliers are made of steel, measure about 9 inches long and 5 inches wide, and were specially designed for the Air Force. They are used for installing and removing clips on the liner segment of the inner combustion chamber duct of JF-30-111 jet engine.

The sample procurement was awarded sole source to Pratt & Whitney. Pratt & Whitney, in turn, solicited four vendors and bought the pliers from the low offeror for \$*. Pratt & Whitney added a *-percent markup (\$*) to its purchase price. In July 1990, Pratt & Whitney made voluntary refunds to OCALC in the amounts of \$330.20 on the sample procurement and \$607.36 (\$303.68 each) on a prior procurement of two sets of pliers made in 1987. The refunds resulted from media attention on the procurements. Pratt & Whitney stated that the pliers met the criteria for breakout and should have been referred to OCALC as a breakout candidate in 1985. The Pratt & Whitney response identified three potential sources for the pliers and included information showing the price of the pliers was quantity sensitive. The failure of Pratt & Whitney to identify the pliers for breakout in 1985 was apparently caused by an employee error.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

We concluded that the pliers were unreasonably priced because they were purchased from the engine prime contractor who was not the manufacturer of the pliers. We determined that this item was overpriced by \$341 based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

Buying Center: San Antonio Air Logistics Center (SAALC)

Item No. SAALC 1 (judgmental sample)

Nomenclature/NSN/PN: Mechanical Puller/5120-00-320-7498/6796339

Unit Price: \$3,355 Quantity: 1 Extended Price: \$3,355

Contractor: Dixie Air Parts Supply, Incorporated,
San Antonio, TX

Contract No.: F41608-87-M-A207 Awarded: February 28, 1987

Procurement Method: Competitive Determination: Unreasonable

The mechanical puller is used for the maintenance, repair, and overhaul of the reduction gearbox assembly on the T-56 engine, which is used on C-130 aircraft. It is needed to remove the propeller shaft front bearing inner ring, the thrust bearing, and scavenge pump drive gear from the propeller shaft assembly.

On the sample procurement, SAALC received two offers and awarded the contract to Dixie Air, the low offeror. Dixie Air purchased the mechanical puller from * for \$* and incurred packaging and freight costs of \$*. Dixie Air incurred another \$* for special Government packaging and added \$* (* percent of unit cost) for profit. The SAALC most recent prior procurement was in August 1986 for a quantity of one at \$3,285.

We concluded that the mechanical puller was unreasonably priced because it was not procured from the manufacturer and Dixie Air did not add any value to it. We determined that this item was overpriced by \$187 based on *. * has since been added as an approved source to the item source list.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 2 (judgmental sample)

Nomenclature/NSN/PN: Toilet Cover Assembly/4510-01-259-0538LH/
832862-403

Unit Price: \$1,868.15 Quantity: 2 Extended Price: \$3,736.30

Contractor: Weber Aircraft, Division of Kidde, Incorporated,
Fullerton, CA

Contract No.: F04606-88-G-0129-SA18 Awarded: August 19, 1988

Procurement Method: Noncompetitive Determination: Reasonable

The toilet cover assembly is for the lavatory holding tank in the troop compartment of the C-5B aircraft. The cover is corrosion resistant, measures 34 inches x 28 inches x 0.25 inches, and is made of honeycombed reinforced fiberglass and polyurethane plastic with a stainless steel skin on both sides. It has a cutout for the toilet seat and several cutouts for piping and mechanical components of the holding tank. It has 32 drilled screw holes and several screws bonded to its surface. The manufacturing process involves labor and time-intensive processes, such as drilling, sawing, reaming, deburring, bonding, cleaning, passivating, and inspecting after each operation.

The sample procurement was made on an order against a sole-source Basic Ordering Agreement (BOA) with Weber Aircraft, the manufacturer of the cover assembly. This was the first time the Air Force procured the cover assembly. The two covers were procured as spares should any installed cover assembly require replacement. A should-cost analysis performed by SAALC before contract award showed an estimated unit cost of \$1,709. The contracting officer stated that efforts to negotiate a lower price failed, and the contract was awarded at the quoted price of \$1,868. The contract files did not contain a record of these negotiations. The contracting officer also stated that similar cover assemblies on the VC-137 and the DC-10 aircraft cost \$2,062 and \$9,532, respectively. The cover used on the VC-137 aircraft is smaller and of the same construction. The cover on the DC-10 is considerably larger and constructed entirely of fiberglass.

A Weber Aircraft official stated that his company *. Information generated by the Weber Aircraft automated job cost system showed \$* material and direct labor costs, \$* overhead, and \$* general and administrative

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

expenses for a total unit cost of \$*. Documentation supporting the job cost data was not readily available at Weber Aircraft, and we could not verify the accuracy of the data.

We concluded that the toilet cover assembly was reasonably priced.

Item No. SAALC 3 (random sample)

Nomenclature/NSN/PN: Doubler Afterburner/2840-01-078-0410/
3903T39P01

Unit Price: \$8.70 Quantity: 474 Extended Price: \$4,123.80

Contractor: California Aero Dynamics Corporation,
Sun Valley, CA

Contract No.: F04606-90-G-0067-SA02 Awarded: April 17, 1990

Procurement Method: Competitive Determination: Reasonable

The doubler afterburner is a sheet metal component used to reinforce the installation of other components in the afterburner casing of the J85 jet engine. The J85 engine is installed in T-38 and F-5 aircraft. There are no commercial applications for the doubler afterburner.

The sample procurement was competitively awarded. SAALC solicited 11 vendors and received 7 offers. The order was awarded to the low offeror, California Aero Dynamics. California Aero Dynamics manufactured the doubler afterburner. Cost data provided by the contractor during the audit reflected a \$* on the contract (\$* per unit). The data showed total unit cost of \$* was composed of \$* material, \$* processing (heat and pickling treatments), \$* labor, \$* overhead, and \$* general and administrative expenses.

The procurement history showed two prior procurements of the doubler, one in 1989 for a quantity of 510 at \$11.03 each, and one in 1986 for a quantity of 600 at \$10.62 each. In December 1989, SAALC estimated it would cost \$11.74 each for a quantity of 196 doubler afterburners.

We concluded that the doubler afterburner was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 4 (random sample)

Nomenclature/NSN/PN: Channel-End Conveyor/1560-01-279-0080/
4F55188-101A

Unit Price: \$321.39 Quantity: 14 Extended Price: \$4,499.46

Contractor: AAR Brooks and Perkins, Incorporated, Livonia, MI

Contract No.: F09603-87-G-1393-SA15 Awarded: April 13, 1990

Procurement Method: Competitive Determination: Reasonable

The channel-end conveyor is installed in Air Force C-5 transport aircraft and is used for loading and unloading cargo. There are no commercial applications of the channel-end conveyor.

On the sample procurement SAALC solicited 11 vendors and received 3 offers. The order was awarded to the low offeror, AAR Brooks and Perkins. AAR Brooks and Perkins manufactured the channel-end conveyor. The initial solicitation was for a quantity of eight. However, the AAR Brooks and Perkins offer included an economic order quantity of 14 at \$321.39 each, as well as a \$401.98 unit price for a quantity of 8. The contracting officer determined that it was in the best interest of the Government to award the order to AAR Brooks and Perkins for a quantity of 14 without contacting the other two offerors due to urgency, time constraints, and doubtfulness that a lower price could be obtained. The other two offerors quoted unit prices of \$982 and \$1,590 for a quantity of eight. The cost data we obtained from AAR Brooks and Perkins showed that the contract unit price of \$321.39 was composed of \$* material, \$* packaging, \$* anodizing, \$* direct labor, \$* overhead, \$* general and administrative expenses, and \$* (* percent of unit cost) profit.

An AAR Brooks and Perkins official stated that AAR Brooks and Perkins had sold the channel-end conveyors to Lockheed, the C-5 aircraft prime contractor. The official also stated that the price to Lockheed was based on the quantity ordered and would have been the same price paid by the Air Force. The procurement history showed there were no prior procurements of the channel-end conveyor by SAALC. A technical estimate prepared by SAALC in January 1990 showed an estimated unit cost of \$330 for a quantity of eight.

We concluded that the channel-end conveyor was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 5 (random sample)

Nomenclature/NSN/PN: Spring Blade Retainer/2840-01-199-7362/
1304M66P01

Unit Price: \$35 Quantity: 2,064 Extended Price: \$72,240

Contractor: Laumann Manufacturing Corporation, Ronkonkoma, NY

Contract No.: F41608-90-C-1027 Awarded: May 4, 1990

Procurement Method: Competitive Determination: Reasonable

The spring blade retainer is a part for the TF39 engine installed on C-5B aircraft. It prevents both aft and axial movement of the fan blades when the engine is operating at low-speed and when the engine is windmilling. By retaining the axial movement of the blades at low speeds, wear surfaces are not depleted of their protective coatings. There are no commercial applications of the spring blade retainer.

For contract F41608-90-C-1027, SAALC solicited nine vendors and received five offers. The contract was awarded to the low offeror, Laumann Manufacturing. Laumann Manufacturing proposed to manufacture the spring blade retainer. Bids ranged from \$35 to \$99.74. The procurement history showed that SAALC paid \$56.50 and \$49.32 each for quantities of 187 and 210 during 1987 and \$34.57 each for a quantity of 600 in 1986. A July 1989 purchase request prepared by SAALC showed an estimated unit price of \$61.89 for a quantity of 2,064 retainers.

In July 1990, Laumann Manufacturing advised the contracting officer that it could not perform the contract because it could not acquire the required raw materials without procuring nine times more than was needed for the contract. On August 10, 1990, the contract was terminated for convenience at no cost to the Government. In June 1991, SAALC resolicited quotes from more than 20 vendors, received 2 offers, and procured 6,194 spring blade retainers at a unit price of \$53.67 from Moeller Manufacturing Company, Incorporated, Canton, MI, the next lowest offeror on the sample procurement solicitation. Our intrinsic value analysis of the spring blade retainer supported the \$35 unit price.

We concluded that the spring blade retainer was reasonably priced.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 6 (random sample)

Nomenclature/NSN/PN: Cable/1190-01-272-0247/47C521880G1

Unit Price: \$738.68 Quantity: 10 Extended Price: \$7,386.80

Contractor: Alamo Technology, Incorporated, San Antonio, TX

Contract No.: F41608-90-C-1051 Awarded: April 11, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The part is a two-leg electrical cable. One leg of the cable is 6 feet long and the other leg is 7 feet long. It is used to connect the radio frequency instrument console and the fuze assembly to test performance of the MK12A radar. The cable is not available commercially.

The sample procurement was 1 of 37 line items on the contract that had a total value of \$355,539. SAALC awarded the contract sole source to Alamo Technology as a small and disadvantaged business set aside. Alamo Technology manufactured the cable. The DCMAO, San Antonio, performed a field pricing review of the Alamo Technology proposal, and the DCAA Austin Branch office performed an audit of the proposal. The Alamo Technology manufacturing cost data submitted with the proposal showed that the proposed unit price of \$* for the cable was composed of \$* direct labor, \$* overhead, \$* material, \$* material handling, \$* other direct costs, \$* general and administrative expenses, and \$* (* percent of unit cost) profit. The DCMAO field pricing review recommended a unit cost of \$658.67, exclusive of profit. Allowing a 15-percent profit, the recommended price would have been \$757.47. The negotiated unit price for the cable of \$738.68 was \$18.79 less than the DCMAO-recommended cost after adding 15-percent profit. The \$738.68 unit price was also * percent less than the contractor's proposed price and * percent more than the SAALC \$* price objective. The negotiated total contract price (\$355,539) was * percent less than the proposed price (\$*) and * percent less than the SAALC \$* objective. The procurement history showed no prior procurements of the cable. A screening analysis completed by SAALC in September 1988 estimated unit cost at \$1,000 for a quantity of two cables. An official at Alamo Technology refused to provide actual manufacturing cost data for the sample procurement because providing cost data was against company policy.

We concluded that the cable was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 7 (random sample)

Nomenclature/NSN/PN: Rear Vision Mirror/1680-00-670-8412/P1144

Unit Price: \$68.40 Quantity: 553 Extended Price: \$37,825.20

Contractor: Military Aircraft Sales, Incorporated, Huntsville, AL

Contract No.: F41608-90-C-1147 Awarded: June 22, 1990

Procurement Method: Competitive Determination: Reasonable

The rear vision mirror is installed in the cockpit of the T-37 aircraft to aid the pilot in obtaining a rear view. It resembles an automobile rear view mirror, is convex, and is approximately 7.25 x 2.25 inches. On the sample procurement, SAALC solicited 29 sources and received 4 offers. The contract was awarded to the low offeror. Military Aircraft Sales manufactured the mirror.

The most recent prior procurement was for a quantity of 1,221 at \$25 each from Aircraft Cylinder and Turbine in 1987. On the sample procurement, Aircraft Cylinder and Turbine submitted a bid of \$89.50 per unit. Our intrinsic value analysis of the mirror supported the \$68.40 unit price.

We concluded that the rear vision mirror was reasonably priced.

Item No. SAALC 8 (random sample)

Nomenclature/NSN/PN: Blocker Door Assembly/1506-00-251-6261/
9648M30G41

Unit Price: \$925 Quantity: 39 Extended Price: \$36,075

Contractor: HAC Corporation, Grand Prairie, TX

Contract No.: F41608-90-C-1149 Awarded: April 11, 1990

Procurement Method: Competitive Determination: Reasonable

The blocker door assembly is a part for the thrust reverser on the TF39 engine on the C-5 aircraft. The thrust reverser slows the aircraft during landings. The sample procurement was on a contract that included a second line item for a single door assembly for a first article test at \$7,250. The total contract value was \$43,325.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

On the sample procurement, SAALC solicited 104 sources for the blocker door assembly and received 4 offers. The contract was awarded to the low offeror for both the first test article and production quantities. Actual cost data on the production units were not available since HAC had not completed production at the time of our audit. The most recent prior procurement was in August 1988 for a quantity of 81 at \$2,123.46 each from another contractor.

We concluded that the blocker door assembly was reasonably priced.

Item No. SAALC 9 (random sample)

Nomenclature/NSN/PN: Gearbox Backplate/2835-00-390-3544/366850-1

Unit Price: \$191.50 Quantity: 2,498 Extended Price: \$478,367

Contractor: Service and Sales, Incorporated, Tempe, AZ

Contract No.: F41608-90-C-1174 Awarded: May 3, 1990

Procurement Method: Competitive Determination: Unreasonable

The gearbox backplate provides a grab surface for clutch plates in the central gearbox of the F-15 aircraft. It is designed by Garrett Auxiliary Power Division, Allied Signal, Incorporated. It has no commercial applications.

On the sample procurement, SAALC received three offers and awarded the contract to the second-lowest bidder, Service and Sales. The low bidder, Thomas Instrument and Machine, bid \$* each but was not an approved source when the contract was awarded in May 1990. It subsequently became an approved source in March 1991 after submitting sample backplates for testing. When the sample contract was awarded, SAALC had two approved sources and could not seek additional sources because it did not have the technical drawing for the backplate. Garrett considered the technical data proprietary and refused to sell the rights to the Government.

Service and Sales did not manufacture the backplate. It purchased the backplate from *, for \$* each plus a one-time engineering/setup cost of \$*. Service and Sales marked up the cost of the purchased part about

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

* percent and sold the backplate to SAALC for \$191.50 each. Service and Sales inspected, bar coded, and packaged each backplate for shipment to the Government but added no other value to the backplates.

The procurement history showed that the most recent prior procurement was for a quantity of 1,184 backplates at a unit price of \$177.78 from Garrett in 1988.

We concluded that the gearbox backplate was unreasonably priced because it was not purchased from the manufacturer. The cost/benefit of the contractor *-percent markup on the cost of the purchased part was excessive considering the limited services provided. We determined that this item was overpriced by \$72 each based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

Item No. SAALC 10 (random sample)

Nomenclature/NSN/PN: Fitting Drive/1195-01-272-6394/413-10333-501

Unit Price: \$3,815 Quantity: 5 Extended Price: \$19,075

Contractor: Boeing Military Airplane Company, Wichita, KS

Contract No.: F34601-88-G-6646-SA46 Awarded: May 29, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The fitting drive is cylindrical, is primarily composed of aluminum, and is 6.35 inches long with an outer diameter of 5.5 inches. It is a component part for the adapter spline engagement and interlock mechanism on the B-52H aircraft guided missile and bomb rotary launcher. There are no commercial applications for the fitting drive.

The sample procurement was awarded sole source to Boeing because the technical data on the fitting are proprietary to Boeing. The most recent prior procurement of the fitting was in February 1986 for a quantity of one at \$4,162.83 each. An analysis performed by SAALC in 1989 identified an estimated unit cost of \$4,448.19 for a quantity of 10 fittings. In May 1990, SAALC determined the maximum order quantity based on requirements for the fitting drive was five. The quantity of five covered requirements for 3 years. Our intrinsic value analysis of the fitting drive determined a reasonable price was \$1,525.98 each for a quantity of five. This value included \$175.59 material and

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

material services, \$762.08 labor and labor overhead, \$2.02 tooling, \$213.34 military spares expense, \$110.21 general and administrative expenses, \$227.38 (18 percent of unit cost) profit, and \$35.36 cost of money.

We concluded that the fitting drive was unreasonably priced. We determined that this item was overpriced by \$2,289 each based on the \$1,526 price disclosed by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and the audit response in Part II of the Audit Report.)

Item No. SAALC 11 (random sample)

Nomenclature/NSN/PN: Retainer Assembly/2915-00-357-2503/2652943

Unit Price: \$46.50 Quantity: 522 Extended Price: \$24,273

Contractor: Allied-Signal Aerospace Company, Bendix Engine
Control Division, South Bend, IN

Contract No.: F41608-90-D-1552-0001 Awarded: June 27, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The retainer assembly is a part for the fuel control system on the F100 engine. Both the retainer and the fuel control system are manufactured by Allied-Signal. The retainer assembly is a threaded screw approximately 0.75 inches long and is manufactured by silver-brazing the tungsten carbide follower ball to the retainer. It is a flight-critical safety item.

The contract for the sample procurement was awarded sole source to Allied-Signal. Allied-Signal proposed a unit price of \$* to SAALC. Subsequently, SAALC negotiated a unit price of \$46.50. The proposed \$* was composed of \$* material, \$* overhead, \$* labor, \$* (* percent of unit cost) profit, and \$* cost of money. The negotiated price of \$46.50 reduced the Allied-Signal profit by \$* per unit to \$* or * percent of unit cost. Our intrinsic value analysis of the retainer assembly supported the \$46.50 unit price.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Allied-Signal claimed proprietary rights to the technical data on the retainer. The retainer is listed in the Allied-Signal 1990-1991 F100 Commercial Catalog for \$196.28 each. Information provided by Allied-Signal showed that from March 1990 through August 1991, it also sold the retainer to Pratt & Whitney and Pierburg Luftfahrtgerate Union GMBH at unit prices ranging from \$51.74 to \$98.14. Pratt & Whitney is the prime contractor for the F100 engine. Pierburg is a German company licensed by Allied-Signal to support the fuel control system on F100 engines used by North Atlantic Treaty Organization forces. The most recent prior procurement of the retainer was in September 1985 for a quantity of 312 at \$38.59 each.

We concluded that the retainer assembly was reasonably priced.

Item No. SAALC 12 (random sample)

Nomenclature/NSN/PN: Face Actuator Gear/1680-00-136-5984/532787-5

Unit Price: \$400 Quantity: 2 Extended Price: \$800

Contractor: Lee Air Company, Incorporated, Sun Valley, CA

Contract No.: F41608-90-M-2665 Awarded: May 3, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The face actuator gear is a steel gear, approximately 6 inches long and 4 inches wide. It is a component part of the actuator, an assembly on the C-5 aircraft that moves the wing slots forward and backward.

SAALC had a requirement to procure nine gears. Lee Air responded to the solicitation with an offer to provide two gears at \$400 each. The gears were new (not reconditioned) but surplus to the contractor. SAALC awarded the contract for the two gears because Lee Air offered a significantly reduced price. The most recent prior procurement of the gear was in February 1981 for a quantity of six at \$1,274.02 each. SAALC also received a quote in April 1990 from Allied-Signal Aerospace Company, the original manufacturer of the gear, offering to provide seven gears at \$1,822.21 each. After negotiations, Allied-Signal revised its quote in May 1990 to \$1,775. A should-cost analysis performed by SAALC personnel in July 1989 established a target price of \$1,464.79 each for a quantity of nine. Another should-cost

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

analysis performed by SAALC personnel in May 1990 established a target price of \$1,515 each for a quantity of seven.

We concluded that the face actuator gear was reasonably priced.

Item No. SAALC 13 (random sample)

Nomenclature/NSN/PN: Back End Bearing/3110-01-230-0840/
416821-22-F

Unit Price \$8.71 Quantity: 97 Extended Price: \$844.87

Contractor: Reliance Electric Company, Cleveland, OH

Contract No.: F41608-90-M-3317 Awarded: May 9, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The back end bearing is a commercial item used on the fan and compression motor assembly on the multi-purpose MK3A-1 hydraulic test stand. The bearing is approximately 0.75 inches in diameter and 0.5 inches in thickness.

The contract was awarded sole source to Reliance Electric, the original manufacturer of the fan and compression motor assembly. Reliance Electric owned the rights to the technical data package but did not manufacture the bearing. Reliance Electric purchased the bearing from the manufacturer, FAG Bearings Corporation of Stamford, CT. Cost information provided during the audit by Reliance Electric showed that the 97 bearings were purchased from FAG Bearing at a unit cost of \$* each, including freight. Reliance Electric inspected and repackaged the bearings for shipping but did not otherwise add value. The procurement history showed SAALC made no prior procurements of the bearing.

The contract was modified in May 1990 to extend the required delivery date; the unit price was reduced from \$8.71 to \$7.17 and the total contract value was reduced from \$844.87 to \$695.49 because the contractor was not able to meet the contracted May 1990 delivery date.

We concluded that the back end bearing was unreasonably priced because it was not procured from the manufacturer. Both unit prices of \$8.71 and \$7.17 were unreasonable because the contractor added an excessive markup to the cost of the purchased part (about * percent to reach the \$7.17 unit price). We

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

determined that this item was overpriced by \$4.58 each based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

Item No. SAALC 14 (random sample)

Nomenclature/NSN/PN: Clutch Bearing/3120-01-053-8423/5002632

Unit Price: \$12.90 Quantity: 232 Extended Price: \$2,992.80

Contractor: Pure Carbon Company, St. Marys, PA

Contract No.: F41608-90-M-3355 Awarded: June 7, 1990

Procurement Method: Competitive Determination: Reasonable

The clutch bearing is a part in the accessory drive gear box on the F-16 aircraft. The gear box is driven by the F100 engine and, in turn, drives hydraulic pumps and electrical generating equipment used to power numerous systems in the F-16 aircraft.

The bearing is made of a pure carbon element and is approximately 2 inches in diameter by 0.50 inch in depth. There are no commercial applications of the bearing.

On the sample procurement, SAALC solicited three potential sources of the bearing and received two offers. Contract award was made to the low offeror. Pure Carbon manufactured the bearing. A Pure Carbon official refused our request for manufacturing cost data, stating that the information could not be released without prior written approval of Sunstrand Corporation. Sunstrand is the prime contractor for the accessory drive gear box. The most recent prior procurement of the bearing was in October 1980 for a quantity of 54 at \$20.96 each.

A value analysis performed by SAALC personnel in March 1989 estimated that the bearing should cost \$19.16 for a quantity of 379. A May 1990 price analysis prepared by SAALC personnel showed that an acceptable price range for a quantity of 232 bearings was between \$20.71 and \$21.35.

We concluded that the clutch bearing was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 15 (random sample)

Nomenclature/NSN/PN: Headrest Assembly/1680-99-735-9267LS/
1A066-0675AJ

Unit Price: \$431.03 Quantity: 20 Extended Price: \$8,620.60

Contractor: Ipeco, Incorporated, Lawndale, CA

Contract No.: F41608-90-M-3728 Awarded: June 6, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The headrest assembly was for the C-130H military aircraft. The headrest assembly has an engineered aluminum substructure and is covered in leather with multiple layers of foam. It is designed to prevent smoke toxicity and to withstand heat/burn tests. Similar headrests are used in commercial aircraft. The contract was awarded sole source to Ipeco. Ipeco makes the headrest and the entire crewseat assembly at its manufacturing facility in the United Kingdom. A SAALC contracting official stated that the headrest must be procured from Ipeco because parts from different crewseat manufacturers are not interchangeable. Ipeco claims proprietary rights to the technical data package.

According to SAALC contracting officials, the demand for crewseat parts is low because the crewseats (including the headrest) normally last the life of the aircraft. Accordingly, it would not be economical to purchase the technical data package from Ipeco for competitive procurement of the headrest and other crewseat parts.

Cost data obtained from Ipeco during the audit showed that the Ipeco April 1992 cost of \$* to manufacture the headrest was composed of \$* material, \$* labor, \$* overhead, \$* outside processing, and \$* (* percent of unit cost) general and administrative expenses. Packaging, shipping charges, and profit totaling \$* are added to reach the selling price. The Ipeco 1991 price list showed the selling price for the headrest was \$477.63. The price list also showed similar headrests for the McDonnell Douglas DC-9/MD-80 aircraft and the Boeing 737 aircraft for \$506.17 and \$531.49, respectively. The procurement history showed that SAALC procured a quantity of three headrests from Ipeco in 1987 at a unit price of \$354.19.

We concluded that the headrest assembly was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. SAALC 16 (random sample)

Nomenclature/NSN/PN: Gearshaft Spur/3040-00-919-8117/A4020 REV C

Unit Price: \$110 Quantity: 63 Extended Price: \$6,930

Contractor: Simmonds Precision Products, Incorporated,
Cedar Knolls, NJ

Contract No.: F41608-90-M-3774

Awarded: May 29, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The gearshaft spur functions as a gear and pinion and is a component part of an electromechanical actuator that lowers the tail ramp support pads and opens an auxiliary door on the C-5 aircraft. According to a SAALC official, this part is also used on HH-53, RC-135, and F-105 military aircraft.

The contract for the sample procurement was awarded sole source to Simmonds, the only qualified source. According to cost and pricing data provided during the audit, Simmonds computed the selling price by applying its standard rates and factors to direct labor and materials. The procurement history showed that the two most recent prior purchases were from Simmonds in 1989 and 1988 for quantities of 52 and 75 at unit prices of \$137 and \$120, respectively. A price analysis performed by SAALC in January 1990 determined the unit price for a quantity of 63 should be \$135.57. Our intrinsic value analysis of the gearshaft spur supported the \$110 unit price.

We concluded that the gearshaft spur was reasonably priced.

Item No. SAALC 17 (random sample)

Nomenclature/NSN/PN: Handle Assembly/1680-01-052-9960/J114710-1

Unit Price: \$230 Quantity: 26 Extended Price: \$5,980

Contractor: McDonnell Douglas Corporation, Douglas Aircraft
Company, Long Beach, CA

Contract No.: N00383-88-G-B100-SA10

Awarded: April 2, 1990

Procurement Method: Competitive Determination: Unreasonable

The handle assembly is used to activate the Aces II ejection seat on the F-15 aircraft. It is a critical life-support item.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

The sample procurement was originally for a requirement of 67 assemblies. The requirement was reduced to 26 assemblies in May 1991. Initially, the procurement was a small business set aside; 11 small businesses were solicited, and two price quotes were received. Because of suspected overpricing, the contracting officer waived the small business set aside and solicited and awarded the contract to McDonnell Douglas, the prime contractor for the F-15. McDonnell Douglas purchased the part from * for \$* each, added a label, inspected, warranted, packaged, and shipped the parts. For this service, McDonnell Douglas added \$* to the cost of the purchased part, including about \$* (* percent of unit cost) profit. The procurement history showed that SAALC purchased 44 assemblies in July 1988 from McDonnell Douglas for \$131 each. McDonnell Douglas attributed the price increase to a higher price from *, an internal change in methodology for accounting for costs, and inflation.

We concluded that the handle assembly was unreasonably priced because SAALC procured it from the F-15 prime contractor who was not the manufacturer. In our opinion, SAALC could have obtained a lower price had it solicited other potential sources, such as Weber Aircraft, a manufacturer of the Aces II ejection seat (identified by SAALC as a source, but not solicited), and *. We determined that this item was overpriced by \$30 each based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements. (Note: During October 1991, DGSC assumed procurement responsibility for this item from SAALC.)

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Buying Center: Warner Robins Air Logistics Center (WRALC)

Item No. WRALC 1 (judgmental sample)

Nomenclature/NSN/PN: Mechanical Puller/5120-00-670-3308/HS7538

Unit Price: \$800 Quantity: 1 Extended Price: \$800

Contractor: Kell-Strom Tool Company, Incorporated,
Wethersfield, CT

Contract No.: F09603-87-M-1121 Awarded: February 9, 1987

Procurement Method: Noncompetitive Determination: Reasonable

The mechanical puller is used to remove and install the stationary sleeve for the pump housing on the propeller of the T56 engine. The T56 engine is used on C-2, E-2, P-3, and C-130 military aircraft. The sample procurement was awarded sole source to Kell-Strom, the manufacturer. There have been no other procurements of the puller in recent years.

An August 1990 Price Fighter Detachment value analysis disclosed that the intrinsic value of the mechanical puller for a procurement quantity of one was \$1,149. The analysis showed that the manufacturing of the puller requires 16 different machining processes, including 5 retooling procedures. Also, according to the analysis, the puller is made of a special material, known as micarta. Micarta is softer than aluminum and prevents damage to critical aircraft engine parts when the tool is used. Manufacturing cost data obtained from Kell-Strom showed the total unit cost of \$* was composed of \$* labor, \$* material, \$* overhead, and \$* (* percent of labor, material, and overhead costs) for general and administrative expenses and profit. The total unit cost was rounded up to the \$800 selling price.

We concluded that the mechanical puller was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 2 (judgmental sample)

Nomenclature/NSN/PN: Mechanical Puller/5120-00-670-6512PP/HS7721

Unit Price: \$750 Quantity: 1 Extended Price: \$750

Contractor: Kell-Strom Tool Company, Incorporated,
Wethersfield, CT

Contract No.: F09603-87-M-2976 Awarded: July 24, 1987

Procurement Method: Noncompetitive Determination: Unreasonable

The mechanical puller is used to remove the pitchlock regulator from the C-130 military aircraft propeller system. The sample procurement was for a foreign military customer. The contract was awarded sole source to Kell-Strom, the manufacturer. Cost data provided by Kell-Strom showed that the unit cost of \$* was composed of \$* labor; \$* material; \$* overhead; and \$* (* percent of labor, material, and overhead costs) for general and administrative expenses and profit. The total unit cost was rounded up to the \$750 selling price.

WRALC performed a value analysis in July 1990, which estimated a should-cost price of \$884.48 for a quantity of one. The analysis stated that the puller was made of aluminum and the manufacturing process required machining, plating, and assembly. Our intrinsic value analysis of the mechanical puller determined a reasonable price was \$331.94. This value included \$22.78 material and \$309.16 labor, indirect costs, and profit.

We concluded that the mechanical puller was unreasonably priced. We determined that this item was overpriced by \$418 based on the \$332 price disclosed by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 3 (judgmental sample)

Nomenclature/NSN/PN: Mechanical Puller/5120-00-992-3199PP/HS9549

Unit Price: \$1,375 Quantity: 1 Extended Price: \$1,375

Contractor: Kell-Strom Tool Company, Incorporated,
Wethersfield, CT

Contract No.: F09603-89-M-1993 Awarded: February 3, 1989

Procurement Method: Noncompetitive Determination: Reasonable

The mechanical puller is used to install and remove the C-130 aircraft propeller control unit from the test stand. The sample procurement was awarded sole source to Kell-Strom, the manufacturer.

A February 1988 Air Force price and cost analysis determined a should-cost price of \$1,843 for a procurement quantity of one. The analysis was based on an in-depth review of the manufacturing drawings and processes, materials required, and number and types of labor employed. Industry standard rates were applied to labor and material to calculate the should-cost price. Manufacturing cost data obtained from Kell-Strom showed the total unit cost of \$* was composed of \$* labor; \$* material; \$* overhead; and \$* (* percent of labor, material, and overhead costs) for general and administrative expenses and profit. The total unit cost was rounded down to the \$1,375 selling price.

We concluded that the mechanical puller was reasonably priced.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 4 (judgmental sample)

Nomenclature/NSN/PN: Pliers/5120-01-132-1909/PWA55673

Unit Price: \$231 Quantity: 15 Extended Price: \$3,465

Contractor: Point Machine Company, Berlin, CT

Contract No.: F09603-89-M-1475 Awarded: February 2, 1989

Procurement Method: Competitive Determination: Unreasonable

The pliers are a specially designed forming tool required to straighten the augments spray heat shield in the F100 aircraft engine. The tool is made of heat-tempered, hardened steel, weighs about 2 pounds, and is about 8.5 inches long and 4 inches wide.

On the sample procurement, WRALC solicited five vendors and received four offers. The contract was awarded to the low offeror. Cost data obtained from Point Machine during the audit showed the \$231 contract price was composed of \$* material, \$* labor, \$* processing, and \$* (* percent of unit cost) profit. The procurement history showed that WRALC paid significantly higher prices on prior procurements. Previous prices ranged from \$582 to \$863. The most recent previous buy was in August 1987 at \$582 each for a quantity of two pliers. Our intrinsic value analysis of the pliers determined a reasonable price was \$126.46 each for a quantity of 15. This value included \$25 material, \$5 special processing, and \$96.46 labor, indirect costs, and profit.

We concluded that the pliers were unreasonably priced. We determined that this item was overpriced by \$105 each based on the \$126 price disclosed by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 5 (judgmental sample)

Nomenclature/NSN/PN: Spreader/5120-01-184-9122/3C3350G01

Unit Price: \$561.04 Quantity: 8 Extended Price: \$4,488.32

Contractor: General Electric Company, Cincinnati, OH

Contract No.: F34601-88-G-6601-RJ01 Awarded: August 2, 1988

Procurement Method: Competitive Determination: Unreasonable

The spreader is a tool specifically designed to install and remove turbine blades in the turbine rotor on the jet engines for F-16 and B-1B aircraft. Contract file documents show that there are no commercial applications for the spreader. On the sample procurement, WRALC solicited 17 potential sources and received 5 offers. The contract was awarded to General Electric, the low offeror. The contracting officer concluded that the price paid for the spreader was fair and reasonable based on adequate price competition. General Electric purchased the spreader from * for \$* each, inspected, accepted, packaged, and shipped the spreaders to WRALC.

The \$* difference between the General Electric purchase price and selling price for the spreader represents General Electric material, packaging, handling, and expense factors. There have been no other procurements of the spreader by WRALC in recent years.

A price analysis prepared by WRALC in February 1988 estimated a unit price of \$202.29 for the spreader. In July 1990, WRALC updated the analysis to estimated unit prices of \$416.77 and \$317.71 for quantities of three and eight, respectively. A value analysis prepared by the Price Fighter Detachment in September 1990 determined a unit price of \$408.36. Our intrinsic value analysis of the spreader determined a reasonable price was \$500.32 each for a quantity of eight.

We concluded that the spreader was unreasonably priced because it was not procured from the manufacturer, and General Electric added no value to it. We determined that this item was overpriced by \$224 each based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 6 (judgmental sample)

Nomenclature/NSN/PN: Paper Cup Dispenser/4510-00-462-5630/
102D1109-1

Unit Price: \$120.40 Quantity: 207 Extended Price: \$24,922.80

Contractor: Space Age Manufacturing Corporation, Macon, GA

Contract No.: F09603-88-M-3845 Awarded: April 27, 1988

Procurement Method: Competitive Determination: Unreasonable

The paper cup dispenser is used to dispense styrofoam cups and is installed in the comfort pallet taken on board C-141 and C-5 aircraft when passengers are carried. On the sample procurement, WRALC received three offers and awarded the contract to the low offeror. The most recent prior procurement of the dispenser was in October 1986 for a quantity of 29 at \$186.73 each. A value analysis performed by WRALC in November 1988 showed that the dispenser should-cost price was \$161.50 each for a procurement quantity of 207. WRALC personnel also determined that the dispenser could not be replaced with a less-expensive commercial version due to rigid form and fit requirements. In an attempt to obtain a less-expensive dispenser, WRALC modified the specification that called for aluminum 5052 to allow the use of any material that meets the strength and corrosion resistance of aluminum. Our intrinsic value analysis of the dispenser determined a reasonable price was \$40.70 each for a quantity of 207. This value included \$9 material and \$31.70 labor, indirect costs, and profit.

We concluded that the paper cup dispenser was unreasonably priced. We determined that this item was overpriced by about \$80 each based on the \$41 price determined by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 7 (judgmental sample)

Nomenclature/NSN/PN: Soap Dish Cover/4510-00-469-9831JH/3016-1

Unit Price: \$43.82 Quantity: 39 Extended Price: \$1,708.98

Contractor: Anchor Fabricators, Incorporated, Dayton, OH

Contract No.: F09603-88-M-3008 Awarded: March 8, 1988

Procurement Method: Noncompetitive Determination: Unreasonable

The soap dish cover is used to hold a bar of hand soap. It is installed in lavatory sinks in C-141 aircraft. The contract for the sample procurement was awarded sole source to Anchor Fabricators, the manufacturer. Anchor Fabricators owns the proprietary rights to the technical data on the cover. The procurement history shows no prior procurements of the cover. According to an Anchor Fabricators official, the cover was made once by Anchor Fabricators in a 17-year period.

WRALC performed a value analysis in July 1990, which resulted in should-cost estimates for quantities of 39 at \$34.90 each using the DCAA 1988 recommended rates for Anchor Fabricators and \$48.58 each using 1989 industry average rates for small businesses. Our intrinsic value analysis of the cover determined a reasonable price was \$21.19 each for a quantity of 39. This value included \$1.50 material, \$2 special processing, and \$17.69 labor, indirect costs, and profit.

We discussed the function and use of the cover with C-141 flight crew and maintenance personnel at Andrews Air Force Base, MD. They stated that the soap dish cover had little utility. Bar soap is seldom used in the C-141 crew lavatory because the sink is usually not connected to a water source. Crew members stated that prepackaged moistened towelettes are usually used instead of bar soap. Of six C-141 crew lavatories we checked, only half were equipped with a soap dish cover.

We concluded the soap dish cover was unreasonably priced and was an unneeded item. We determined that this item was overpriced by \$23 each based on the \$21 price disclosed by our intrinsic value analysis. As a result of our audit, WRALC initiated action to delete the soap dish cover as a required item for the C-141.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

Item No. WRALC 8 (random sample)

Nomenclature/NSN/PN: Air Control Duct Flange/1560-ND-149-165L/
685112-1

Unit Price: \$600 Quantity: 2 Extended Price: \$1,200

Contractor: Litton Systems, Incorporated, Guidance and Control
Systems Division, Woodland Hills, CA

Contract No.: F04606-88-G-0178-RJ04 Awarded: April 27, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The flange reinforces the air duct that is used for forced air cooling of the inertial navigation unit for the F-15 aircraft. The flange has no commercial applications.

The sample procurement was the first procurement of the flange by the Air Force. WRALC solicited McDonnell Douglas, the prime contractor for the F-15 aircraft. McDonnell Douglas declined to quote but identified Litton as the source of the flange. WRALC negotiated and awarded the contract to Litton. Prior to contract award, Litton provided a cost breakdown that showed Litton procured the flange from a subcontractor. WRALC contracting personnel questioned Litton about the subcontractor cost; Litton advised that it solicited offers and prepared the quote using the lowest offer. Litton officials told us that the buy was probably not competed because the "10-year buy report" Litton used to identify sources showed only two prior procurements, both from * in 1985.

Litton purchased the flange from * for \$* each. A Litton official stated that after applying their standard rates, they *. After receipt from *, Litton inspected, packaged, and shipped the flanges to the Government.

We concluded that the air control duct flange was unreasonably priced because Litton did not manufacture the part and an uneconomical quantity was purchased. On a subsequent buy (May 6, 1991), WRALC procured 10 flanges * for \$110 each. We determined this item was overpriced by \$490 each on the sample

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

procurement based on the \$110 price paid on the subsequent procurement.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements. (Note: During May 1991, OCALC assumed procurement responsibility for this item from WRALC.)

Item No. WRALC 9 (random sample)

Nomenclature/NSN/PN: Brush Housing/1610-00-628-6897/525397

Unit Price: \$20.50 Quantity: 1,432 Extended Price: \$29,356

Contractor: Haskon Corporation, Taunton, MA

Contract No.: F09603-87-G-0872-0007 Awarded: April 4, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The brush housing is part of the deicer contact ring holder assembly in the C-130 aircraft propeller system. It is part of the assembly that transmits power from the aircraft electrical system to the propeller's anti-icing and deicing system.

WRALC solicited two vendors (Hamilton Standard and Haskon) for the sample procurement, and both vendors responded. However, the buyer did not feel that adequate price competition had been achieved because there was a "prime/vendor" relationship between the two contractors. As a result, the contracting officer prepared a J&A that stated there was only one responsible source and that the technical data were proprietary.

A March 1990 analysis performed by WRALC determined a target unit price of \$19.20. The Hamilton Standard 1991 price for the brush housing was \$47.90. The contract was terminated for default in July 1990 because Haskon failed to meet the required delivery schedule.

We concluded that the brush housing was reasonably priced.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 10 (random sample)

Nomenclature/NSN/PN: Bag/1660-00-130-0117/378612-2

Unit Price: \$59.81 Quantity: 30 Extended Price: \$1,794.30

Contractor: Space Age Manufacturing Corporation, Macon, GA

Contract No.: F09603-89-G-0051-0123 Awarded: May 4, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The bag is used to store oxygen hoses carried on C-130 military aircraft. On the sample procurement, two potential sources were solicited, and one offer was received. The procurement history showed that 84 bags were procured in August 1987 for \$59.71 each. An April 1990 WRALC analysis determined a target unit price of \$68.52. Our intrinsic value analysis of the bag supported the \$59.81 unit price.

We concluded that the bag was reasonably priced.

Item No. WRALC 11 (random sample)

Nomenclature/NSN/PN: Resistor Network/5905-01-307-3861/090039

Unit Price: \$197.65 Quantity: 3 Extended Price: \$592.95

Contractor: Wavetek Indiana Incorporated, Indianapolis, IN

Contract No.: F09603-90-C-1688 Awarded: May 3, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The resistor network is a component part of an autocal digital multimeter. The multimeter is a piece of support equipment for the F-15 aircraft tactical integrated support system.

The resistor network was initially ordered from McDonnell Douglas Aircraft Company, the F-15 prime contractor, on an undefinitized provisioning item order. During negotiations to finalize the order, WRALC officials learned McDonnell Douglas added no value to the item. McDonnell Douglas subcontracted the tactical integrated support system to Honeywell, which in turn subcontracted the parts to the actual manufacturers.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

WRALC officials estimated that Honeywell marked up the parts * percent more than the manufacturer's price and that McDonnell Douglas added an additional * percent. The officials estimated the resistor network would cost \$1,347 each for a quantity of three based on the provisioning data provided by McDonnell Douglas. The Wavetek commercial list price was \$197.65 each. WRALC canceled the provisioning item order and awarded a sole-source contract to Wavetek. The contract included 13 other tactical integrated support system parts and was valued at \$64,304. The J&A for the sole source award stated that the procurement was urgent because the initial provisioning order was canceled, because the parts were required to support nine tactical integrated support system units already fielded, and because Wavetek was the only source with the necessary technical data and facilities to produce the parts. According to a Wavetek official, manufacturing cost data for the resistor network were not available.

We concluded that the resistor network was reasonably priced.

Item No. WRALC 12 (random sample)

Nomenclature/NSN/PN: Nonmetallic Conduit/5975-01-298-0834/253355

Unit Price: \$193.34 Quantity: 13 Extended Price: \$2,513.42

Contractor: ICORE International, Incorporated, Sunnyvale, CA

Contract No.: F09603-90-C-1806 Awarded: June 20, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The nonmetallic conduit is a part for the F-15 aircraft tactical integrated support system. There are no commercial applications of the conduit. The conduit was initially ordered from McDonnell Douglas Aircraft Company, the F-15 prime contractor, on an undefinitized provisioning item order. During negotiations to finalize the order, WRALC officials learned McDonnell Douglas added no value to the item. McDonnell Douglas subcontracted the tactical integrated support system to Honeywell who in turn subcontracted the parts to the manufacturers. WRALC officials estimated that Honeywell marked up the parts * percent more than the manufacturer's price and that McDonnell Douglas added an additional * percent. The officials estimated the conduit would cost \$885.80 each for a quantity of 13 based on the provisioning data provided by McDonnell Douglas.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

WRALC requested ICORE to quote a firm-fixed price for the tactical integrated support system parts at a price not to exceed that offered to Honeywell. ICORE proposed a price of \$193.34 each for the conduit. WRALC canceled the provisioning item order and awarded a sole-source contract to ICORE. The contract included 26 other tactical integrated support system parts and was valued at \$66,430. The justification and approval for the sole-source award stated that the procurement was urgent because the initial provisioning order was canceled, because the parts were required to support nine tactical integrated support system units already fielded, and because ICORE was the only source with the necessary technical data and facilities to produce the parts.

The contracting officer stated that before contract award, she obtained an informal cost breakdown from ICORE and received assurance from DCMAO, San Francisco, that the proposed rates were reasonable. The contracting officer determined that the \$193.94 price was fair and reasonable based on the DCMAO comments, her analysis of the proposed cost, and her analysis of similar contracts that were previously determined to be fair and reasonable, based either on commercial prices or cost analyses. ICORE did not respond to our request for manufacturing cost data on the contract.

We concluded that the nonmetallic conduit was reasonably priced.

Item No. WRALC 13 (random sample)

Nomenclature/NSN/PN: Shim/5365-01-253-4869/2359502-1

Unit Price: \$14.97 Quantity: 24 Extended Price: \$359.28

Contractor: Den-Co Machine and Tool Company, Lewisville, TX

Contract No: F09603-90-M-2071 Awarded: May 9, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The shim is made of a copper alloy and is used as a spacer on AN/AAQ 17 and AN/AAQ 18 radar sets installed in C-130 aircraft. The prime contractor for the radar sets identified Den-Co as its source for the shim. The sample procurement was awarded sole source to Den-Co. Also included under the same contract were quantities of other types of shims and a spacer. The total contract value was \$1,690. The cost data we obtained from Den-Co showed that the cost to manufacture one shim was \$* and profit was \$* or * percent. A contractor representative stated his part could be produced by most machine shops.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

The procurement history showed that WRALC paid a unit price of \$6 for a quantity of three on the most recent prior procurement in July 1988 from the AN/AAQ 17 and AN/AAQ 18 prime contractor.

A December 1989 analysis by WRALC identified a target price of \$55.55 for small business and \$64.16 for large business for a quantity of 24. In both cases, the estimated material cost was \$32.50 per unit. However, Den-Co's actual cost of material for this contract was only \$* per unit. We question the accuracy of the WRALC analysis. The \$40.58 (73 percent) difference between the \$55.55 target price and Den-Co's \$14.95 price should have prompted WRALC to perform additional analysis. Also, our intrinsic value analysis of the shim determined a reasonable price was \$10.31 for a quantity of 24. This value included \$7.81 material and \$2.50 labor, indirect costs, and profit.

We concluded that the shim was unreasonably priced. We determined that this item was overpriced by \$5 each based on the \$10 price disclosed by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

Item No. WRALC 14 (random sample)

Nomenclature/NSN/PN: Floor Tiedown Well/1670-01-132-7351/356076-1

Unit Price: \$19.70 Quantity: 642 Extended Price: \$12,647.40

Contractor: International Light Metals Corporation, Torrance, CA

Contract No.: F09603-90-M-2442 Awarded: April 2, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The floor tiedown well provides a place to attach passenger seats and rings for securing cargo in the C-130 aircraft. On the sample procurement, WRALC solicited four potential sources and received one offer. International Light Metals is a manufacturer of the floor tiedown well. The procurement history showed that on the most recent prior purchase in January 1989 WRALC paid International Light Metals \$19.49 each for a quantity of 441 tiedown wells. An International Light Metals official refused our request for manufacturing cost data stating

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

sufficient competition existed to establish a market price. A March 1990 should-cost analysis performed by WRALC identified a unit price of \$19.26 for a quantity of 642. Our intrinsic value analysis of the tiedown well supported the \$19.70 unit price.

We concluded the floor tiedown well was reasonably priced.

Item No. WRALC 15 (random sample)

Nomenclature/NSN/PN: Plate/1560ND149031LFX/2128191-1

Unit Price: \$325.29 Quantity: 1 Extended Price: \$325.29

Contractor: Allied-Signal, Incorporated, Teterboro, NJ

Contract No.: F09603-90-M-2605 Awarded: April 23, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The plate is a part for a maintenance hoist used to remove transmitters from F-15 aircraft. The sample procurement was awarded sole source to Allied-Signal because WRALC did not have the technical data for the plate. The Allied-Signal price was based on a March 1990 quote from Alfa Machine and Tool Company, Incorporated. Alfa quoted \$*, \$*, and \$* for quantities of 1, 5, and 10, respectively. Allied-Signal used Alfa's \$* quote and added general and administrative expenses and profit to arrive at the quoted price of \$325.29. We obtained cost data showing the rates and factors Allied-Signal used to prepare its price quote. However, our audit found that Allied-Signal did not purchase the plate from Alfa.

In October 1990, Allied-Signal purchased 25 plates from the manufacturer, Anchor Precision Products, Incorporated, for \$* each (\$* + \$* delivery cost) and delivered 1 plate to the Air Force in November 1990. We calculated a unit selling price of \$28.21 by applying Allied-Signal's various cost elements to the actual cost of material. Allied-Signal added no value to the plate.

We concluded that the plate was unreasonably priced because it was not procured from the manufacturer. Further, Allied-Signal added no value to the plate. We determined this item was overpriced by \$297 based on our calculated \$28 price.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

Item No. WRALC 16 (random sample)

Nomenclature/NSN/PN: Gauge/4320-ND-148-100L/AA43-HPY4RWX9

Unit Price: \$72.31 Quantity: 5 Extended Price: \$361.55

Contractor: Weksler Instruments Corporation, Freeport, NY

Contract No.: F09603-90-M-2718 Awarded: April 12, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The gauge provides a readout of fluid output pressure on a portable hydrostatic pressure pump. It is a commercial item manufactured by Weksler Instruments. The sample procurement was awarded sole source to Weksler Instruments. The catalog price was \$103.30. Weksler Instruments applied a *-percent discount to the catalog price to *. A Weksler Instruments official refused our request for manufacturing cost data, stating that company policy prohibited release of cost data on commercial items. According to the procurement history, the most recent prior purchase of the gauge by WRALC was in July 1989 for a quantity of one at \$95 from the manufacturer of the portable hydrostatic pressure pump.

We concluded that the gauge was reasonably priced.

Item No. WRALC 17 (random sample)

Nomenclature/NSN/PN: Window/1280-00-475-7827/2950-123-4

Unit Price: \$23.25 Quantity: 68 Extended Price: \$1,581

Contractor: CAI, Division of Recon/Optical, Incorporated,
Barrington, IL

Contract No.: F09603-90-M-2776 Awarded: May 1, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The window is used to protect a gunsight lamp on the AWG-13 head-up target display system in A-7 aircraft. The sample procurement was awarded sole source to CAI because the contracting officer determined that it was uneconomical to compete the contract due to the low value of the procurement and the first article test requirement for a new manufacturer. However, our audit found that CAI did not manufacture the window. The window was manufactured by Vogelin Optical for CAI. The

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

procurement history showed that the most recent prior purchase was in December 1986 for a quantity of 61 windows at \$18.63 each from CAI. In 1989, WRALC made an engineering change to the drawing. The change added close tolerances making the specification more stringent. Our intrinsic value analysis of the window, including the engineering change, determined a reasonable price was \$15.89 each for a quantity of 68.

We obtained cost data from CAI and Vogelin Optical. The CAI data showed that the contract unit price of \$23.25 was composed of \$* purchase price of the window, \$* scrap expense, \$* labor, \$* overhead, \$* material handling, \$* general and administrative expenses, and \$* (* percent of unit cost) profit. Vogelin Optical data showed that the \$* unit price to CAI was composed of \$* materials and \$* for labor, overhead, general and administrative expenses, and profit. A Vogelin official stated that Vogelin manufactured the window many times in the past and that the window on the sample procurement cost more due to the higher tolerances required by the engineering change order. The official also stated that Vogelin would sell the window directly to the Government if solicited.

We concluded that the window was unreasonably priced because it was not procured from the manufacturer. Further, CAI did not add any value to the window. We determined that this item was overpriced by \$12 each based on *.

Air Force Comments. The Air Force agreed that the actual manufacturer should be solicited on future procurements.

Item No. WRALC 18 (random sample)

Nomenclature/NSN/PN: Circuit Card Assembly/7025-01-200-5520/
59492302

Unit Price: \$492 Quantity: 2 Extended Price: \$984

Contractor: Peripheral Parts Support, Incorporated, Waltham, MA

Contract No.: F09603-90-M-2916 Awarded: May 11, 1990

Procurement Method: Competitive Determination: Reasonable

The circuit card assembly is used to control loading and threading of a magnetic tape unit in the AN/FPS-115 radar set. For the sample procurement, WRALC solicited five sources, received five offers, and awarded the contract to Peripheral Parts Support, the low bidder. Peripheral Parts Support did not

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

manufacture the circuit cards. It purchased the circuit cards from Control Data Corporation, the manufacturer, for \$* each. Contract file documents state that Control Data developed the circuit card at its own expense and refused to release the proprietary rights to the technical data due to the commercial applications of the circuit card. Control Data quoted a price of \$568.95 each to WRALC in response to the solicitation for the sample procurement. Control Data refused our request for manufacturing cost data but stated that the April 1992 retail price for the circuit card was \$627.

The cost data we obtained from Peripheral Parts Support for the sample procurement showed that the \$492 contract unit price included \$* cost of purchased part, \$* overhead, \$* freight, and \$* (* percent of unit cost) profit. The procurement history showed that WRALC paid another distributor of Control Data products \$859 each for two circuit cards on the most recent prior procurement in December 1989. The 1989 Control Data catalog retail unit price was \$660.

We concluded that the circuit card assembly was reasonably priced.

Item No. WRALC 19 (random sample)

Nomenclature/NSN/PN: Retainer/1560-01-007-3007/65204-00007-104

Unit Price: \$23.91 Quantity: 25 Extended Price: \$597.75

Contractor: Falcon Manufacturing Corporation, Warner Robins, GA

Contract No.: F09603-90-M-2989 Awarded: May 8, 1990

Procurement Method: Competitive Determination: Reasonable

The retainer is a strip of metal that covers the gap between two adjacent floor panels and holds them in place on the H-53 helicopter. Falcon Manufacturing was the manufacturer of the retainer; the retainer is not commercially available. On the sample procurement, WRALC received five offers and the contract was awarded to the low offeror. The procurement history showed that, in March 1980, WRALC paid \$37.80 each to Sikorsky, the prime contractor of the H-53 helicopter, for a quantity of 51 retainers. The March 1980 procurement was the most recent prior procurement. A value analysis performed by WRALC personnel in May 1990 disclosed an estimated should-cost price of \$77.84 each for 25 retainers. Our intrinsic value analysis of the retainer supported the \$23.91 unit price.

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

We obtained cost and pricing data from Falcon Manufacturing. This data showed that the \$23.91 unit contract price was composed of \$* material, \$* labor, \$* overhead, \$* general and administrative expenses, and \$* (* percent of unit cost) profit.

We concluded that the retainer was reasonably priced.

Item No. WRALC 20 (random sample)

Nomenclature/NSN/PN: Inlet Duct Stringer/1560-00-383-0970FX/
68A328025-2012

Unit Cost: \$459.37 Quantity: 5 Extended Price: \$2,296.85

Contractor: Mac-Lyn Industries, Incorporated, Santa Ana, CA

Contract No.: F09603-90-M-3032 Awarded: May 8, 1990.

Procurement Method: Competitive Determination: Unreasonable

The stringer is made of aluminum alloy and is used for structural support of an inlet duct in the fuselage of the F-15 aircraft. Mac-Lynn Industries made the stringer for the F-15 prime contractor, as well as the Air Force. There are no commercial applications of the stringer.

WRALC solicited three vendors and received three offers for the sample procurement. The contract was awarded to the low offeror. The most recent prior purchase of the stringer by the Air Force was in 1987 for a quantity of 163 at \$192 each from Manchester Machine Manufacturing. Manchester Machine quoted a price of \$710 each for the quantity of five on the sample procurement. In 1990, Mac-Lyn sold 52 stringers to * for \$307.34 each. The owner of Mac-Lyn attributed the \$152.03 price difference between the \$459.37 unit price charged to the Air Force for a quantity of five and the price charged to * to the difference in quantities ordered. He stated the set-up time of * is required regardless of quantity made and that the machine operator becomes faster when producing large quantities. He stated that the operator needs * for each stringer on a quantity of *, and * for each stringer on a quantity of *. In January 1990, WRALC determined the economic order quantity was five based on usage rates and storage cost. In March 1990, WRALC estimated the stringer should cost \$304.55 each for a quantity of five. Our intrinsic value analysis of the stringer determined a reasonable

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

price was \$299.49 each for a quantity of five. This value included \$152 material, \$7.50 special processing, and \$139.99 labor, indirect costs, and profit.

Cost data obtained from Mac-Lyn during the audit disclosed that the contractor's proposed (and accepted) price was understated by \$74.37 (\$533.74-\$459.37). The data showed that the contractor's recalculated unit cost of \$* was composed of \$* material, \$* labor, \$* overhead, \$* outside processing, \$* general and administrative expenses, and \$* (* percent of unit cost) profit. The contractor had documentation to support its labor hours, material, and outside processing costs. However, the contractor's labor, overhead, and general and administrative expense rates had not been audited by DCAA.

We concluded that the stringer was unreasonably priced. We determined that this item was overpriced by about \$160 each based on the \$299 price disclosed by our intrinsic value analysis.

Air Force Comments. The Air Force stated the auditors were unable to provide Air Force personnel with an adequate explanation of how the intrinsic value analysis technique worked or was applied. The Air Force also stated that the use of the intrinsic value technique can result in unrealistically low estimates. (See the detailed discussion of the Air Force comments and audit response in Part II of the Audit Report.)

Item No. WRALC 21 (random sample)

Nomenclature/NSN/PN: Partition Retainer/1005-00-269-5243/175F142

Unit Price: \$24.04 Quantity: 18,260 Extended Price: \$438,970.40

Contractor: General Electric Company, Burlington, VT

Contract No.: FB09603-88-G-0105-0087 Awarded: March 30, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The retainer is a part for the ammunition-handling system for the M61A1 20mm machine gun. The M61A1 machine gun is used on A-7, F-4, F-15, and F-16 aircraft. The contract for the sample procurement contained an option for an additional 18,260 units at \$25.08 each.

The contract was awarded to General Electric, the prime contractor for the M61A1 machine gun, because of an unusual and compelling urgency. This urgent requirement resulted when a new

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

source for the part, Kitco, Incorporated, failed to qualify. The contract to Kitco was for a quantity of 70,271 retainers at \$12.13 each, contingent on Kitco producing two acceptable units before going to full production.

General Electric purchased unfinished retainers from * for \$* each. After receiving the unfinished retainers, General Electric deburred them and added a protective finish, which cost about \$* per unit in direct labor. The remaining \$* was for overhead costs and profit. WRALC had contacted * about selling the parts directly to them and * responded that it was not interested. The procurement history showed that the most recent prior procurement was for a quantity of 9,714 at \$22.75 each from General Electric in 1989. Our intrinsic value analysis of the partition retainer supported the \$24.04 unit price.

Both DCAA and the Defense Plant Representative Office performed a comprehensive review and evaluation of the General Electric proposal. The DCAA and Defense Plant Representative Office reports were used by the WRALC negotiator during contract negotiations. The negotiated contract price was 5.9 percent less than the General Electric proposed price for the basic quantity, and 6.8 percent less for the option quantity.

We concluded that the partition retainer was reasonably priced.

Item No. WRALC 22 (random sample)

Nomenclature/NSN/PN: Nozzle Bullet/5120-01-092-8319/
T1056364-ASTO-3

Unit Price: \$78.57 Quantity: 1 Extended Price: \$78.57

Contractor: HR Textron, Incorporated, Valencia, CA

Contract No.: F04606-89-G-0103-RJ02 Awarded: June 22, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The nozzle bullet is a tool used on the T-39 aircraft antiskid control brake system. The sample procurement was awarded sole source because HR Textron has proprietary rights to the technical data on the nozzle. * manufactured the nozzle bullet for HR Textron. WRALC contracting personnel stated that attempts to negotiate a lower price on the sample procurement were not successful. The price of \$78.57 was what HR Textron would charge its most favored customer. The contractor told us its current commercial price for the nozzle is \$253 and provided

*Proprietary data removed.

C - ITEMS REVIEWED AT AIR FORCE BUYING CENTERS (cont'd)

a copy of its commercial catalog showing that price effective September 27, 1990. Cost data provided by HR Textron showed that the \$78.57 unit price was composed of \$* material (from *), \$* material handling, \$* engineering and manufacturing support costs, \$* general and administrative expenses, \$* (* percent of unit cost) profit, and \$* cost of money. Subcontractor cost data provided by * showed that the \$* price to HR Textron was composed of \$* labor, \$* material, \$* delivery, and \$* (* percent of unit cost) profit. The procurement history showed that this was the only procurement of the part by WRALC.

We concluded that the nozzle bullet was reasonably priced.

*Proprietary data removed.

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D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS

Buying Center: Marine Corps Logistics Base, Albany (MCLB)

Item No. MCLB 1 (random sample)

Nomenclature/NSN/PN/: Converter/5840-01-089-3236/352D519G01

Unit Price: \$2,083.25 Quantity: 12 Extended Price: \$24,999

Contractor: Westinghouse Electric Corporation, Hunt Valley, MD

Contract No.: M67004-90-C-0018, MOD P00002 Awarded: May 16, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The converter is a part for the AN/TPS 63 radar set. It includes a circuit board that converts digital signals to analog signals to control attenuation (signal strength/weakness) in the receiver/protector unit of the radar set. There are no commercial applications of the converter.

The sample procurement was a contract modification to exercise an option for FY 1991 requirements (quantity of 12) at the basic contract unit price of \$2,083.25. MCLB sought competition on the basic contract and mailed solicitations to 19 vendors. Although MCLB procured the technical data for the converter on the initial production contract awarded in the mid-1970s, a complete technical data package was not available for issue to vendors. Consequently, only Westinghouse, the prime contractor for the radar set, submitted a proposal.

Westinghouse based its proposal primarily on cost history and included Government-accepted burden rates. MCLB obtained a DCAA and Defense Plant Representative Office review of the proposal and used the results to negotiate with Westinghouse. The negotiated price of the converter was \$397 less than the proposed price and \$204 less than the price on the most recent prior procurement (1984). Westinghouse buys the components and assembles the converter at its Hunt Valley facility. The assembly process requires hand placement and wiring of the various components, such as chips, capacitors, and resistors, and is a time-consuming process. Cost and pricing data we obtained from Westinghouse documented the manufacturing process and supported the Westinghouse proposal.

We concluded that the converter was reasonably priced.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 2 (random sample)

Nomenclature/NSN/PN: Circuit Card Assembly/5895-489-3609/
39-192612-02

Unit Price: \$6,906.67 Quantity: 5 Extended Price: \$34,533.35

Contractor: Ford Aerospace Corporation, Colorado Springs, CO

Contract No.: M67004-90-C-0059 Awarded: May 21, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The part is for the AN/TYQ-1 tactical air control system and is used in the interface between the computer and the display on the console. There is no commercial application for the circuit card.

Our sample procurement was 1 of 38 line items on a \$900,000 spare parts contract for the AN/TYQ-1. MCLB did not have specifications and drawings suitable for manufacture of the parts and stated this in its Commerce Business Daily announcement of the solicitation. Solicitations were mailed to five vendors, and the only offer received was from Ford Aerospace, the manufacturer of the AN/TYQ-1. The procurement history showed no previous procurements of the circuit card.

MCLB requested DCAA, Western Region, Denver, and DCMAO, Denver, to review the initial Ford Aerospace (October 1989) proposal. The DCAA and DCMAO reports discussed the entire proposal but did not address specific line items. The two reports questioned some costs; both were qualified because the forward pricing rates used by Ford Aerospace did not reflect the impact of a January 1990 company reorganization. Ford Aerospace submitted a revised proposal in March 1990 and included rates from its forward pricing proposal submitted to the Government in January 1990. MCLB did not request DCAA or DCMAO reviews of the March 1990 proposal. MCLB used the DCAA and DCMAO review of the initial Ford Aerospace proposal and consulted with DCAA and DCMAO, Denver, personnel during contract negotiations with Ford Aerospace. The negotiated contract price was less than the contractor's initial and revised proposals; the negotiated costs were lower than the DCAA and DCMAO recommended costs. The negotiated price on the sample item was \$3,618 (34 percent) and \$811 (10.5 percent) less than the initial and revised proposed

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

prices, respectively. The cost and pricing information we obtained from Ford Aerospace on the sample item supported the negotiated price.

We concluded that the circuit card assembly was reasonably priced.

Item No. MCLB 3 (random sample)

Nomenclature/NSN/PN: Rod End/5340-01-257-7918/6289476

Unit Price: \$6.24 Quantity: 108 Extended Price: \$673.92

Contractor: AV Technology Corporation, Troy, MI

Contract No.: M67004-90-M-1240 Awarded: June 8, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The rod end is used in the sight linkage assembly of the up-gun weapon station on the amphibious assault vehicle (AAV). It is made of low carbon steel and is zinc plated. There are no commercial applications for the rod end.

The sample procurement was 1 of 22 line items on an \$18,425 contract for spare parts for the up-gun weapon station. The procurement was made to fill urgent requirements because some AAVs were down, awaiting spare parts for the up-gun weapon station. MCLB personnel stated that, because of the urgent requirement, only proven sources of the part were solicited. Two vendors were solicited and one offer was received.

The contracting officer justified the procurement price as fair since AV Technology was in production on the up-gun weapon station and spares, combined with production quantities, could result in a lower price. However, our audit disclosed that AV Technology did not manufacture the rod end. It procured the rod end from * for \$* each. AV Technology inspected, packaged, and shipped the rod end to the Marine Corps. We obtained cost data from AV Technology and *. The AV Technology cost data showed that the contract unit price of \$6.24 was composed of \$* material; \$* freight; \$* low-cost purchased parts burden; and \$* (* percent of material, freight and purchased parts burden costs) for overhead; general and administrative expenses; and profit. The * cost data showed that the \$* unit price to AV Technology was composed of \$* material,

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

\$* labor, \$* overhead, \$* general and administrative expenses, and \$* (* percent of unit cost) profit. According to a * official, AV Technology received a substantial quantity discount on the rod end because it purchased the part in lots of 1,000. The official stated that * would sell directly to the Government, but the price would be considerably higher for a quantity of 108. Our intrinsic value analysis of the rod end supported the \$6.24 unit price.

We concluded that the rod end was reasonably priced.

Item No. MCLB 4 (random sample)

Nomenclature/NSN/PN: Bearing/3110-01-260-0179/6288996

Unit Price: \$4.52 Quantity: 104 Extended Price: \$470.08

Contractor: AV Technology Corporation, Troy, MI

Contract No.: M67004-90-M-1240 Awarded: June 8, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The bearing fits inside the control handle of the turret on the up-gun weapon station of the AAV. It is critical to the ability to rotate the turret.

The sample procurement was 1 of 22 line items on an \$18,425 contract for spare parts for the up-gun weapon station. The procurement was made to fill urgent requirements because some AAVs were down, awaiting spare parts for the up-gun weapon station. MCLB personnel stated that because of the urgent requirement, only proven sources of the parts were solicited. Two vendors were solicited and one offer was received.

The contracting officer justified the procurement price as fair on the basis that AV Technology was in production on the up-gun weapon station and spares combined with production quantities would result in a lower price. Our audit disclosed that AV Technology procured the part from *. AV Technology estimated it could purchase the bearing from a vendor for \$*, add its standard rates for processing spare parts orders, and sell the bearing to the Marine Corps for \$4.52. Instead, the AV Technology vendor charged \$* for the bearing. AV Technology *

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

in the \$4.52 contract price. A company official told us that the company * on this line item. AV Technology added no value to the bearing. Our intrinsic value analysis of the bearing supported the \$4.52 unit price.

We concluded that the bearing was reasonably priced.

Item No. MCLB 5 (random sample)

Nomenclature/NSN/PN: Azimuth Adjusting Screw/5305-01-260-0194/
6289608

Unit Price: \$64.62 Quantity: 6 Extended Price: \$387.72

Contractor: AV Technology Corporation, Troy, MI

Contract No.: M67004-90-M-1240 Awarded: June 8, 1990

Procurement Method: Competitive Determination: Reasonable

The azimuth adjusting screw is a part on the up-gun weapon station on the AAV. It is used to lock the 50mm machine gun on sight and is critical to operation of the gun.

The sample procurement was 1 of 22 line items on an \$18,425 contract for various spare parts for the up-gun weapon station. The procurement was made to fill urgent requirements because some AAVs were down, awaiting spare parts for the up-gun weapon station. MCLB personnel stated that because of the urgent requirement only proven sources of the part were solicited. Two vendors were solicited and two offers were received. The contract was awarded to the low offeror.

AV Technology manufactured the screw. Cost information provided by AV Technology showed it paid \$* each for the raw material and \$* each for subcontracted work. AV Technology officials stated that direct labor and overhead costs for each screw were \$* and \$*, respectively. AV Technology added \$* (about * percent of unit cost) for general and administrative expenses and profit and sold the screw to MCLB for \$64.62.

The contracting officer price negotiation memorandum stated that the \$64.62 price was determined fair and reasonable based on competition. Our intrinsic value analysis of the screw supported the \$64.62 unit price.

We concluded that the screw was reasonably priced.

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 6 (random sample)

Nomenclature/NSN/PN: Sight Linkage Bolt/5306-01-257-9978/
6289483

Unit Price: \$60.18 Quantity: 105 Extended Price: \$6,318.90

Contractor: AV Technology Corporation, Troy, MI

Contract No.: M67004-90-M-1240 Awarded: June 8, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The bolt is used on the up-gun weapon station on the AAV. It permits moving the gun sight and locking on target. The bolt is an assembly consisting of about 10 machined parts; it is a critical linkage in the gun sight.

The sample procurement was 1 of 22 line items on an \$18,425 contract for various spare parts for the up-gun weapon station. The procurement was made to fill urgent requirements because some AAVs were down, awaiting spare parts for the up-gun weapon station. A MCLB official stated that because of the urgent requirement she solicited only proven sources of the part. Two vendors were solicited and one offer was received.

The contracting officer price negotiation memorandum stated that the price was fair because AV Technology was in production on the up-gun weapon station, and combining spares and production requirements would result in a lower price. Our audit disclosed that AV Technology procured the bolt from *. AV Technology estimated it could purchase the bolt from a vendor for \$*, add its standard rates for processing spare parts orders, and sell the bolt to the Marine Corps for \$60.18. Instead, * charged AV Technology \$* for the bolt. * refused our request for manufacturing cost data. AV Technology * in the \$60.18 contract price and a company official told us the company * this line item. AV Technology added no value to the bolt. Our intrinsic value analysis of the bolt determined a reasonable price was \$19.54 each for a quantity of 105. This value included \$4.73 material; \$4 special processing; and \$10.81 labor, indirect costs, and profit.

We concluded that the sight linkage bolt was unreasonably priced. We determined that this item was overpriced by \$40 each based on the \$20 price disclosed by our intrinsic value analysis.

Navy Comments. The Navy stated the part was not shown to be overpriced based on the intrinsic value analysis. The Navy

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

also stated this part was reasonably priced based on price analysis. (See the detailed discussion of the Navy comments and audit response in Part II of the Audit Report.)

Item No. MCLB 7 (random sample)

Nomenclature/NSN/PN: Shoulder Pin/5315-01-257-9924/6289605

Unit Price: \$35.84 Quantity: 5 Extended Price: \$179.20

Contractor: AV Technology Corporation, Troy, MI

Contract No.: M67004-90-M-1240 Awarded: June 8, 1990

Procurement Method: Competitive Determination: Unreasonable

The pin fits under the gunner's seat on the up-gun weapon station of the AAV. It is made of industry-standard, corrosion-resistant steel and allows the gunner to lift and move the seat out of the way.

The sample procurement was 1 of 22 line items on an \$18,425 contract for various spare parts for the up-gun weapon station. The procurement was made to fill urgent requirements because some AAVs were down, awaiting spare parts for the up-gun weapon station. A MCLB official stated that because of the urgent requirement she solicited only proven sources of the part. Two vendors were solicited, and two offers were received. The contract was awarded to the low offeror.

AV Technology manufactured the pin. Cost information provided by AV Technology showed that the contract unit price of \$35.84 was composed of \$* material, \$* subcontracted work, \$* direct labor, \$* labor overhead costs, \$* low-cost purchased parts expense, \$* freight, and \$* (about * percent) for general and administrative expenses and profit.

The contracting officer price negotiation memorandum stated that the price was determined fair, based on competition. Our intrinsic value analysis of the shoulder pin determined a reasonable price was \$26.50 each for a quantity of five. This value included \$2 material, \$2 special processing, \$22.50 labor, indirect costs, and profit.

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

We concluded that the shoulder pin was unreasonably priced. We determined that this item was overpriced by \$9 each based on the \$26 price disclosed by our intrinsic value analysis.

Navy Comments. The Navy stated the part was not shown to be overpriced based on the intrinsic value analysis. The Navy also stated that it presumed the price was reasonable based on price competition. (See the detailed discussion of the Navy comments and audit response in Part II of the Audit Report.)

Item No. MCLB 8 (random sample)

Nomenclature/NSN/PN: 12-Channel Slip Ring/1010-01-258-9638/
6289517

Unit Price: \$1,420 Quantity: 11 Extended Price: \$15,620

Contractor: Poly Scientific, Blacksburg, VA

Contract No.: M67004-90-M-1268 Awarded: April 4, 1990

Procurement Method: Competitive Determination: Reasonable

The 12-channel slip ring controls communications power to the turret, a major assembly of the up-gun weapon station for the AAV.

For contract M67004-90-M-1268, MCLB solicited three vendors and received three offers. Poly Scientific was the low offeror and the manufacturer of the slip ring. The contracting officer determined the price was fair and reasonable based on competition. The price breakdown we obtained from Poly Scientific showed unit manufacturing costs of \$*, including \$* material, \$* labor, and \$* manufacturing overhead. The contractor added \$* for general and administrative expense and \$* (* percent of unit cost) for profit resulting in the \$1,420 contract price.

Information we obtained from Poly Scientific showed that the price of the slip ring was quantity sensitive. Poly Scientific sold 230 slip rings to the prime contractor for the up-gun weapon station in 1989 for \$840 each and quoted a price of \$1,175 each for a quantity of 40 in 1990. MCLB contracting officials also stated the price of the slip ring was quantity sensitive. In November 1989, a MCLB official estimated a unit price of \$1,624 for a quantity of 10. The procurement history does not show any prior purchases of the slip ring by MCLB.

We concluded that the 12-channel slip ring was reasonably priced.

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 9 (random sample)

Nomenclature/NSN/PN: PU Control Assembly/2990-01-248-3098/446002

Unit Price: \$178.65 Quantity: 22 Extended Price: \$3,930.30

Contractor: Walter Kidde, Division of Kidde, Incorporated,
Wilson, NC

Contract No.: M67004-90-M-1294 Awarded: April 24, 1990

Procurement Method: Competitive Determination: Reasonable

The control assembly is a dual-cable pull mechanism. It provides the capability to release halon gas to extinguish fires inside the light armored vehicle from either of two pull boxes, one inside and one outside the vehicle. There are no commercial applications of the mechanism. However, Walter Kidde does manufacture similar mechanisms for commercial customers. The basic design is the same, but each mechanism is manufactured to fit the particular customer requirements. Unit prices charged commercial customers in 1990 and 1991 ranged from \$210.65 to \$314.

For contract M67004-90-M-1294, MCLB solicited two sources and received two offers. The contract was awarded to the low offeror. We subsequently found that Walter Kidde also manufactured the mechanism for the other approved source, General Motors Canada. The drawing we obtained from MCLB showed the mechanism is source controlled by General Motors Canada and identified Walter Kidde as the approved source. Walter Kidde officials stated that *. The procurement history showed that the sample procurement was the first procurement of the part by MCLB.

Walter Kidde sold 25 of the mechanisms to General Motors Canada, the manufacturer of the light armored vehicle, for \$152.56 each in 1989. Walter Kidde officials estimated it cost \$* each to manufacture the 25 mechanisms in 1989 and \$* each to manufacture the 22 mechanisms it sold to MCLB in 1990. The \$* estimate included \$* for material and \$* for labor. The contractor added \$* (* percent sales margin) for overhead, general and administrative expenses, bar coding, packaging and profit, yielding the \$178.65 contract price. Walter Kidde internal reports showed its average sales margin in

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

1990 on fire equipment sales was * percent. Our intrinsic value analysis of the PU control assembly supported the \$178.65 unit price on the sample procurement.

We concluded that the PU control assembly was reasonably priced.

Item No. MCLB 10 (random sample)

Nomenclature/NSN/PN: Sleeve Spacer/5365-01-257-9939/6289460

Unit Price: \$17.64 Quantity: 11 Extended Price: \$194.04

Contractor: MDL Fabricating, Waldorf, MD

Contract No.: M67004-90-M-1303 Awarded: May 4, 1990

Procurement Method: Competitive Determination: Unreasonable

The sleeve spacer is a component part of the 40mm charger and azimuth indicator, a major assembly of the up-gun weapon station for the AAV.

For contract M67004-90-M-1303 MCLB solicited three vendors and received three offers. MDL was the low offeror. The contracting officer determined the price was fair and reasonable based on competition. The cost breakdown we obtained from MDL showed that the unit cost of \$* included \$* machining (set-up, re-tooling, labor, and profit); \$* inspection; \$* material; \$* passivating; and \$* packaging and shipping. The contractor did not have documentation to support the cost and stated the costs were estimated. The contractor stated this was the first time it manufactured the spacer and that the spacer was not a commercial item. The contractor also stated the price of the spacer was quantity sensitive. MCLB procurement history did not show any prior purchases of the spacer. Subsequent to the sample procurement, the MCLB purchased 100 of the spacers for \$4.25 each. Our intrinsic value analysis of the sleeve spacer determined a reasonable price was \$5.97 each for a quantity of 11 and \$2.72 each for a quantity of 100. This value included \$1 material, \$0.50 special processing, and \$4.47 labor, indirect costs, and profit.

We concluded that the sleeve spacer was unreasonably priced for both the sample and subsequent procurement. We determined that

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

this item was overpriced by \$12 each on the sample procurement and by \$1.50 each on the subsequent procurement based on the prices disclosed by our intrinsic value analysis.

Navy Comments. The Navy stated the part was not shown to be overpriced based on the intrinsic value analysis. The Navy also stated that it presumed the price was reasonable based on price competition. (See the detailed discussion of the Navy comments and audit response in Part II of the Audit Report.)

Item No. MCLB 11 (random sample)

Nomenclature/NSN/PN: Pin/5315-01-260-0189/6289601

Unit Price: \$17.80 Quantity: 863 Extended: \$15,361.40

Contractor: Anco Machine Company, Huntsville, AL

Contract No.: M67004-90-M-1315 Awarded: May 21, 1990

Procurement Method: Competitive Determination: Unreasonable

The pin is used to lock down the 40mm gun (missile launcher) on the up-gun weapon station for the AAV.

For contract M67004-90-M-1315, MCLB solicited two vendors and received two offers. Anco Machine was the low offeror and the manufacturer of the pin. The contracting officer determined the \$17.80 price was fair and reasonable based on competition. The cost breakdown we obtained from Anco Machine showed unit costs of \$*, including \$* material, \$* heat treatment, \$* plating, \$* special tape, \$* packaging, \$* freight, and \$* labor. Labor included overhead and general and administrative expenses. The contractor added \$* (about * percent of unit cost) profit, yielding the \$17.80 contract price. The contractor did not provide documentation to support the costs. MCLB procurement history showed that the only prior procurement of the pin was in September 1988 for a quantity of 76 at \$47 each from Anco Machine. An Anco Machine official told us the unit price decreased on the sample procurement because of the increased quantity. The official also stated that Anco Machine has not sold the pin to any commercial customers. Our intrinsic value analysis of the pin determined a reasonable price was \$10.13 each for a quantity of 863. This value included \$2 material, \$3 special processing, and \$5.13 labor, indirect costs, and profit.

*Proprietary data removed.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

We concluded that the pin was unreasonably priced. We determined that this item was overpriced by \$8 each based on the \$10 price disclosed by our intrinsic value analysis.

Navy Comments. The Navy stated the part was not shown to be overpriced based on the intrinsic value analysis. The Navy also stated that it presumed the price was reasonable based on price competition. (See the detailed discussion of the Navy comments and audit response in Part II of the Audit Report.)

Item No. MCLB 12 (random sample)

Nomenclature/NSN/PN: Control Cable/1010-01-258-9647/6289552

Unit Price: \$22.49 Quantity: 57 Extended Price: \$1,281.93

Contractor: Furon Felsted Division, Holmesville, OH

Contract No.: M67004-90-M-1316 Awarded: May 11, 1990

Procurement Method: Competitive Determination: Reasonable

The cable controls the turret vent door to permit the release of gases from the turret on the up-gun weapon station for the AAV.

For contract M67004-90-M-1316, MCLB solicited three vendors and received three offers. The contracting officer determined the price was fair and reasonable based on competition. Furon Felsted was the low offeror and a manufacturer of the control cable. A Furon Felsted official refused our request for manufacturing cost data and stated that company policy prohibits release of cost information. The official stated there are no commercial applications for the control cable.

We concluded that the control cable was reasonably priced.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 13 (random sample)

**Nomenclature/NSN/PN: Electrical Power Adapter Assembly/
5895-01-275-4781/214532**

Unit Price: \$110 Quantity: 50 Extended Price: \$5,500

Contractor: Chrisman Enterprises, Palmdale, CA

Contract No.: M67004-90-M-1327 Awarded: May 24, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The power adapter allows use of commercial or vehicle power in lieu of battery power as the power source for the AN/PSC-2 hand-held digital communications terminal. There are no commercial applications for the power adapter.

For contract M67004-90-M-1327, MCLB solicited Litton Corporation and Chrisman Enterprises, and received an offer from Chrisman Enterprises. Litton declined to bid and identified Chrisman Enterprises as a source for the power adapter. MCLB also publicized the procurement in the Commerce Business Daily, but no additional offers were received. MCLB did not have technical data on the power adapter to provide to other potential sources. A Chrisman Enterprises official stated that the power adapter is a Litton-designed product manufactured by Chrisman Enterprises. Our efforts to obtain manufacturing cost data were unsuccessful because the Chrisman Enterprises official was unable to find the cost data. The procurement history showed that the most recent prior procurement of the power adapter by MCLB was in September 1989 for a quantity of 50 at \$126 each from Chrisman Enterprises.

We concluded that the electrical power adapter assembly was reasonably priced.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 14 (random sample)

Nomenclature/NSN/PN: Tube Support/2350-01-129-9207/2600760

Unit Price: \$38.60 Quantity: 10 Extended Price: \$386

Contractor: Parts Unlimited, Dayton, OH

Contract No.: M67004-90-M-1328 Awarded: May 23, 1990

Procurement Method: Competitive Determination: Reasonable

The tube support is machined from marine-grade aluminum. It is used to support three fuel lines running below the seats in the AAV. According to contracting personnel and the contractor, there are no commercial applications of the tube support.

For contract M67004-90-M-1328, MCLB solicited 25 vendors and received two offers. The contract was awarded to the low offeror. The procurement history showed that MCLB paid \$54 each for a quantity of two on the most recent prior procurement of the tube support in January 1986. Parts Unlimited was the manufacturer of the tube support.

The owner of Parts Unlimited stated that the small quantity ordered (10), the infrequency of orders (4 years since the last order), and the specification requiring use of marine-grade aluminum contributed to the high cost of the tube support. The owner also stated that the specification may be obsolete because construction-grade aluminum may be satisfactory due to technological improvements to the material. He estimated savings of \$3 per unit if construction-grade aluminum was used. An MCLB official agreed with our suggestion for MCLB technical personnel to determine if construction-grade aluminum is a suitable material and to revise the specification if appropriate. Parts Unlimited provided cost and pricing information showing how the \$38.60 unit price for the sample procurement was computed. The owner could not provide documentation to support all costs claimed. However, based on our review of the manufacturing process and shop operations, we believe the costs were reasonable. Also, our intrinsic value analysis of the tube support supported the \$38.60 unit price.

We concluded that the tube support was reasonably priced.

D - ITEMS REVIEWED AT MARINE CORPS BUYING CENTERS (cont'd)

Item No. MCLB 15 (random sample)

Nomenclature/NSN/PN: Torque Wrench Adapter/5120-00-399-1154/
2588757

Unit Price: \$9.50 Quantity: 400 Extended Price: \$3,800

Contractor: Granco Incorporated, Grandview, MO

Contract No.: M67004-90-M-1419 Awarded: June 25, 1990

Procurement Method: Competitive Determination: Reasonable

The torque wrench is a special tool used to install and remove the final drive U-joint 12-point hex-head screw on the AAV.

For contract M67004-90-M-1419, MCLB solicited three sources and received three offers. Granco was the low offeror. The contracting officer determined the price was fair and reasonable because competition was achieved. Granco manufactured the wrench. The contractor breakdown of the \$9.50 price showed \$* material cost, \$* labor, \$* tooling and manufacturing, and \$* (* percent of unit cost) profit. The procurement history showed the most recent prior procurement by MCLB was in October 1988 for a quantity of 190 at \$10.74 each.

We concluded that the torque wrench adapter was reasonably priced.

*Proprietary data removed.

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E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS

Buying Center: Defense Construction Supply Center (DCSC)

Item No. DCSC 1 (judgmental sample)

Nomenclature/NSN/PN: Toilet Cover Assembly/4510-00-544-2579/
941673-101

Unit Price: \$405.25 Quantity: 445 Extended Price: \$180,336.25

Contractor: Naval Aviation Depot, NAS Jacksonville, FL

Contract No.: SC0700-80-J0002 Awarded: December 15, 1987

Procurement Method: Noncompetitive Determination: Reasonable

The toilet cover assembly is used on Navy P-3 aircraft. It is made of molded polycarbonate. DCSC procured the part from the Naval Aviation Depot, Naval Air Station Jacksonville, on a project order. The Naval Aviation Depot fabricated, packaged, and shipped the assemblies to their destinations.

Before 1987, DCSC procured the assemblies from Lockheed Aircraft, the P-3 prime contractor. The Lockheed unit price was \$618.25. Efforts to obtain the cover assembly from another source failed. A July 1990 independent Government estimate performed by the Navy supported the \$405.25 unit price.

We concluded that the toilet cover assembly was reasonably priced.

Item No. DCSC 2 (judgmental sample)

Nomenclature/NSN/PN: Soap Dish Assembly Cover/4510-00-759-4853/
8014-2

Unit Prices: \$117 Quantities: 7
 \$107 24 Extended Price: \$3,387

Contractor: NJCT Corporation, West Caldwell, NJ

Contract No.: DLA700-90-P-3159 Awarded: December 16, 1989

Procurement Method: Noncompetitive Determination: Unreasonable

The soap dish assembly cover holds a bar of hand soap. It is installed on lavatory sinks in C-141, C-130, and P-3 military

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

aircraft. The soap dish cover assembly serves the same function as the soap dish cover (Item No. WRALC 7, page 73) purchased by the Air Force for C-141 aircraft. The Air Force soap dish cover is an alternative item to the soap dish cover assembly for the C-141 aircraft. For contract DLA700-90-P-3159, DCSC solicited two sources and received one offer from NJCT. NJCT purchased the assemblies from the manufacturer, *, for \$* each.

DCSC personnel performed a value analysis in July 1990, which estimated the intrinsic value of the assembly to be \$36.59 each for a quantity of 36 and \$116.87 each for a quantity of 9. Our intrinsic value analysis of the soap dish cover assembly determined a reasonable price was \$72.40 each for a quantity of seven. This value included \$24 material, \$7 special processing, and \$41.40 labor, indirect costs, and profit. Additionally, we found that WRALC procured a similar item in March 1988 for \$43.82. The Air Force buy was made from a third vendor, Anchor Fabricators, Incorporated.

We met with C-141 flight crew and maintenance personnel at Andrews Air Force Base, Maryland, to discuss the function and utility of the soap dish cover assembly. They stated that the soap dish cover assembly had little utility. Bar soap is seldom used in the C-141 crew lavatories because the sink is usually not connected to a water source. Crew members stated that prepackaged moistened towelettes are usually used instead of bar soap. Of six C-141 crew lavatories we checked, only half were equipped with a soap dish cover assembly. Based on the discussions with C-141 crew and maintenance personnel, we believe the same condition may exist on the C-130 and P-3 aircraft.

We concluded that the soap dish assembly cover was unreasonably priced because it was not procured from the manufacturer and it was an unneeded item. We determined that this item was overpriced by \$18 (quantity of 24) and \$28 (quantity of 7) each based on *.

As a result of our audit, DCSC initiated action to have the cover deleted as a required item for C-141, C-130, and P-3 aircraft. The soap dish cover is now listed as a discontinued-without-replacement item in supply system records.

DLA Comments. DLA stated the part was reasonably priced because the price was consistent with past prices paid. DLA also stated that a postaward estimate prepared by DCSC supported the price. (See the detailed discussion of the DLA comments and audit response in Part II of the Audit Report.)

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 3 (judgmental sample)

Nomenclature/NSN/PN: Toilet Seat Cover/4510-01-216-1095/2915-103

Unit Price: \$84.90 Quantity: 1 Extended Price: \$84.90

Contractor: Monogram Industries, Incorporated, Compton, CA

Contract No.: DLA700-90-M-HD63 Awarded: December 1, 1989

Procurement Method: Noncompetitive Determination: Reasonable

The toilet seat cover is used on the C-130 aircraft. The procurement history showed no prior purchases of the seat cover.

The contract was awarded sole source to Monogram Industries. Monogram has proprietary rights to the technical data but does not manufacture the cover. Monogram refused to provide a detailed cost breakdown on the part but did provide information indicating its normal selling price for the cover was about \$* and special packing and marking requirements increased the cost by \$*. Monogram sells a similar cover to commercial airlines for \$99.97.

The three other suppliers of aircraft parts stated that they paid about \$* for the toilet seat cover. Two suppliers identified Monogram Industries as the source, and the third supplier did not disclose its source. One supplier stated that its markup would be about * percent, making the price \$76.92. We determined that with packaging and shipping charges and markup, the quotes from the other three suppliers were higher than the DCSC contract price.

DCSC performed an independent Government estimate in July 1990 that showed the estimated cost to manufacture the cover would be \$20.63 (\$15 for the basic lid and \$5.63 to modify it). The Government also estimated the Monogram cost (before markup) to be \$49.89. According to the estimate, the \$49.89 unit cost appeared reasonable when DCAA recommended rates were applied.

We concluded that the toilet seat cover was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 4 (judgmental sample)

Nomenclature/NSN/PN: Fountain Dust Cover/4510-01-285-0720/9100

Unit Price: \$96.31 Quantity: 2 Extended Price: \$192.62

Contractor: O and S Supply, Incorporated, Sumter, SC

Contract No.: DLA700-89-A-AY65-0163 Awarded: February 25, 1989

Procurement Method: Competitive Determination: Reasonable

The dust cover is a stainless steel disc 10.25 inches in diameter used on five series of eye-wash bowls manufactured by Haws Drinking Faucet Company to cover the eye-wash openings, as well as the bowl. The dust cover is primarily sold to commercial industry for use in manufacturing environments with high amounts of dust. The Navy uses the dust cover on stainless steel eye wash systems in aviation composite material repair shops on aircraft carriers to protect workers' eyes against heavy dust particles, metal filings, and other materials. A Haws official told us it does not sell directly to the Government and that the item must be purchased through a distributor of Haws products.

The sample procurement was made on a call order against a blanket purchase agreement (BPA). The BPA was part of an automated system to rotate procurements of \$2,500 or less between more than 900 small businesses included under the system. Cost data we obtained from O and S Supply showed that O and S paid Haws \$* each for the dust covers and incurred unit expenses of \$* for packaging, \$* for bar coding, and \$* for freight. O and S added \$* (about * percent of unit cost) for overhead and profit. Procurement history showed that the most recent prior purchase of the dust cover was for a quantity of two at \$105 each in October 1988. The 1988 procurement was awarded to a vendor other than O and S Supply. DCSC performed a should-cost analysis in 1990 that estimated the cost of the cover to be \$88.73 each plus or minus 25 percent (\$66.55 to \$110.91). The Price Fighter Detachment also analyzed the price in 1990 and determined the \$96.31 price was fair and reasonable. Price Fighter Detachment personnel found that the dust cover was commercially available in 1990 at a unit price of \$110. A price quote we obtained in March 1992 from a distributor other than O and S Supply stated the 1992 unit price was \$117.

We concluded that the fountain dust cover was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 5 (judgmental sample)

Nomenclature/NSN/PN: Sink Cover Assembly/4510-00-493-1645/
M316-132

Unit Price: \$134 Quantity: 14 Extended Price: \$1,876

Contractor: Stainless Steel Products, Incorporated, Burbank, CA

Contract No.: DLA700-90-P-3157 Awarded: December 16, 1989

Procurement Method: Competitive Determination: Unreasonable

The sink cover assembly is an 18 3/4 inch by 9 7/8 inch stainless steel sheet with four L-shaped guides welded to the bottom. These guides fit tightly to the sink wall, preventing the cover top from moving around during flight operations. The sink cover is used in the galley on C-130 military aircraft. There are no commercial applications for the sink cover.

The sample procurement was competitively awarded. DCSC received three offers and awarded the contract to the low offeror. Stainless Steel Products manufactured the sink cover. The two other offerors were dealers. DCSC identified American Sterilizer as a source after contract DLA700-90-P-3157 was awarded. American Sterilizer manufactures and supplies the galley, including the sink cover to Lockheed Corporation, the C-130 prime contractor. In July 1990, DCSC obtained a price quote of \$45.24 each for the sink cover from American Sterilizer. DCSC added American Sterilizer to the list of sources for the sink cover.

We concluded that the sink cover assembly was unreasonably priced because the American Sterilizer unit price is significantly less than the price paid Stainless Steel Products. More thorough market research before the procurement would have identified American Sterilizer as a potential source. We determined that the sink cover was overpriced by \$89 each based on American Sterilizer's \$45 price.

DLA Comments. DLA stated that overpricing was not substantiated because DCSC has not made any subsequent purchases of the part to verify the lower price, and because a should-cost estimate prepared by DCSC supported the price paid. (See the detailed discussion of the DLA comments and audit response in Part II of the Audit Report.)

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 6 (random sample)

Nomenclature/NSN/PN: Filter Element/2940-01-174-5978/
2940011745978

Unit Price: \$40.89 Quantity: 1 Extended Price: \$40.89

Contractor: Wheeler Brothers, Incorporated, Somerset, PA

Contract No.: DLA700-86-D-A001-UGQV Awarded: May 5, 1990

Procurement Method: Competitive Determination: Reasonable

The filter element is an air filter, 12 inches in diameter and 9 inches in length, for diesel engines in large utility trucks. The sample procurement was a call against a competitively awarded indefinite-quantity type (IQT) contract with the contractor-operated parts depot (COPAD) contractor. The IQT contract required the contractor to establish a parts depot on Government property for automotive, material handling, and construction equipment repair parts and component that are listed in commercial published price lists. The purpose of the IQT was for the Government to use the expertise and efficient procedures of private industry to obtain and ship repair parts quickly and at the lowest cost to the Government. Award of the contract was based, in part, on the highest discount from the commercial suggested list price. The minimum value of the IQT contract was \$9 million, and the contract covered thousands of parts listed in nationally published price lists and provided by 271 vendors. The primary reason for establishing this contractual arrangement was to expedite the procurement and delivery of commercial parts that have a low demand in the DoD supply system. The procurement history showed DCSC made 16 small-quantity procurements from August 1989 through May 1990 at unit prices ranging from \$40.38 to \$40.89.

We obtained the published commercial price lists of the three suppliers listed in the COPAD contract and confirmed that the contractor applied the contract discount rate (46 percent) to the suggested list price of the filter. The price quotes we obtained by telephone from the three air filter vendors ranged from \$33.86 to \$36.43 if purchased on an IQT contract with the Government. DCSC does not have individual IQT contracts with the vendors.

We concluded that the filter element was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 7 (random sample)

**Nomenclature/NSN/PN: Engine Crankcase Oil Pan/2815-00-354-1188/
5153942**

Unit Price: \$172.93 Quantity: 3 Extended Price: \$518.79

Contractor: Penn Detroit Diesel Allison, York Haven, PA

Contract No.: DLA700-90-D-A003-0553 Awarded: April 24, 1990

Procurement Method: Competitive Determination: Reasonable

The oil pan is used on various engines manufactured by GMC Detroit Diesel Allison Division and is made of cast iron and sheet metal. The procurement was made on a call order issued against an indefinite-delivery type (IDT) contract for parts and accessories for engines manufactured by GMC Detroit Diesel Allison Division. The IDT contract covered approximately 80,000 items listed in the GMC Detroit Diesel Allison commercial published price list and had an estimated total value of \$3.6 million with a minimum value of \$900,000. DCSC initially solicited 57 vendors and received 11 offers for the IDT contract. Penn Detroit Diesel Allison was the low offeror. The initial solicitation allowed offerors to propose interchange catalog prices. DCSC later determined that only parts and accessories specially designed and manufactured by or for GMC Detroit Diesel were acceptable because the items were components of GMC Detroit Diesel engines in weapon systems. One of the initial offerors protested the rejection of its interchange catalog. The Comptroller General of the United States dismissed the protest and agreed that only GMC Detroit Diesel parts were acceptable. The contracting officer subsequently determined that Penn Detroit Diesel Allison was the only offeror that could satisfy the Government requirements and executed a J&A for award of the contract on other than a full and open competition basis. The prices offered by Penn Detroit Diesel Allison were discounted 20.76 percent from the dealer net prices shown in the GMC Detroit Diesel Allison commercial published price list.

The procurement history showed that prior procurements of the oil pan in 1988 and 1989 ranged from \$184.31 to \$191.50. In March 1992, we obtained price quotes from three dealers offering the oil pan. The quoted 1992 prices for three oil pans ranged from \$211.40 to \$279.64 each.

We concluded that the oil pan was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 8 (random sample)

Nomenclature/NSN/PN: Hose Assembly/4720-00-262-1123/
D200738A001-4

Unit Price: \$459.44 Quantity: 1 Extended Price: \$459.44

Contractor: Lin-Fasteners, Incorporated, Berlin, NJ

Contract No.: DLA700-90-A-BG20-0429 Awarded: May 24, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The hose assembly is commercially available and is made of textured yarn and synthetic rubber with brass fittings at both ends. It is 338 inches long with a maximum outside diameter of 0.938 inches. It is used to carry various fluids, such as hydraulic, water base, hydrocarbon, and fuel oil at a maximum operating pressure of 350 pounds per square inch. The end item for the hose assembly is a crane bi-rail.

The sample procurement was made on a call order issued against a BPA. The BPA was part of an automated system designed to rotate procurements of \$2,500 or less between more than 900 small businesses included under the system. Lin-Fasteners did not manufacture the hose assembly. It purchased the assembly from the manufacturer, *, for \$*. After receipt, Lin-Fasteners repackaged the hose assembly. Lin-Fasteners based its price on the cost of the purchased part plus packaging, freight, general and administrative expenses, and profit. Total markup on invoice cost was approximately * percent. Lin-Fasteners was the only source listed in the automated system for the hose assembly.

The procurement history showed that the last three prior procurements were made from Lin-Fasteners during March 1989, May 1989, and March 1990 at prices ranging from \$186.25 to \$425 each.

A DCSC contracting officer stated that under the automated BPA system, any price increase of 25 percent or more should be reflected on a price variance report. The report is used by the DCSC Cost and Price Analysis Branch to identify procurements for postaward review. However, a postaward review of the March 1990 procurement was not performed. The May and June 1990 reports were not available to determine if the report was prepared and not used, or not prepared. At our request, DCSC performed a postaward review of the March 1990 contract that determined the

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

hose assembly should have cost \$200. Additionally, DCSC personnel identified another source that would have supplied the hose assembly for \$149.34.

We concluded that the hose assembly was unreasonably priced because it was not procured from the manufacturer. Further, Lin-Fasteners added little value to the hose assembly. We determined that this item was overpriced by about \$112 based on *.

DLA Comments. DLA agreed that the item was overpriced.

Item No. DCSC 9 (random sample)

Nomenclature/NSN/PN: Piston/None/3011007

Unit Price: \$210 Quantity: 1 Extended Price: \$210

Contractor: Peltier Companies International, Incorporated,
Sterling Heights, MI

Contract No.: DLA700-90-M-HX25 Awarded: June 19, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The piston fits inside a 10-ton hydraulic cylinder on a large floor crane. The piston lifts the arm of the crane. The contract for the piston was awarded sole source to Peltier. The contract also included a separate line item for a hydraulic cylinder costing \$329. The total contract value was \$539. The small purchase pricing memorandum prepared by the contracting officer stated that Peltier was the only known source for the piston. Peltier officials stated that the technical data on the piston were proprietary. The officials also stated their company had not made any commercial sales and only three Government sales of the piston. Because of the infrequent demand for the item, the contractor does not keep the piston in inventory. Peltier manufactured the piston after receiving the order.

Peltier provided cost data to support the contract price. The cost data showed that the \$210 was composed of \$* material, \$* labor, \$* quality assurance, \$* packaging and mailing, and \$* (* percent) profit and indirect costs. Peltier was unable to break out the costs separately for profit and indirect costs.

We concluded that the piston was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 10 (random sample)

Nomenclature/NSN/PN: Faucet Stem/4510-01-257-9855/AS-17R

Unit Price: \$5.21 Quantity: 51 Extended Price: \$265.71

Contractor: Alabama Valve & Specialties, Incorporated,
Anniston, AL

Contract No.: DLA700-90-M-HX86 Awarded: June 29, 1990

Procurement Method: Competitive Determination: Unreasonable

The faucet stem is commercially available and is a component of a sink faucet assembly. DCSC solicited two sources, received two offers, and awarded the contract to the low offeror. The quoted unit price on the other offer was \$11.68. The procurement history showed that the most recent prior purchase was in September 1987 for a quantity of 1,007 at \$1.98 each. It also showed a subsequent procurement in February 1991 for a quantity of 1,330 at \$1.90 each from A Better Way, Incorporated, Crimora, Virginia. The vendor on the 1987 procurement was not solicited because the company was listed on the DCSC contract review list for delinquent contractor performance. American Standard, the original manufacturer of the faucet, declined to provide a price quote because it no longer manufactured this item.

Alabama Valve & Specialties purchased the faucet stem from *. The \$5.21 unit selling price was composed of \$* cost of the faucet stem, \$* marking, \$* packaging, \$* freight, and \$* (* percent of unit cost) overhead and profit. * refused to provide cost data or its source for the faucet stem. However, a * official said her company would sell the faucet stem directly to the Government. The * official quoted unit selling prices of \$3.99, \$3.49, and \$2.99 for quantities of 51, 100, and 1,000, respectively.

We concluded that the faucet stem was unreasonably priced because it could have been procured from another source for a lower price. We determined that this item was overpriced by about \$1 each since DCSC could have purchased it for \$3.99 from another source.

DLA Comments. DLA stated that the \$1.90 price was for a larger quantity with a special, one-time price reduction, and that the manufacturer's actual price for a quantity of 51 was

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

\$3.99. DLA also stated that any overpricing determination should not be based on the \$1.90 price. (See the detailed discussion of the DLA comments and audit response in Part II of the Audit Report.)

Based on the DLA comments, we changed the amount of overpricing from \$3 each to \$1 each to reflect the \$3.99 price.

Item No. DCSC 11 (random sample)

Nomenclature/NSN/PN: Hubcap/None/2304-E5TZ1130D

Unit Price: \$20.89 Quantity: 1 Extended Price: \$20.89

Contractor: Wheeler Brothers, Incorporated, Somerset, PA

Contract No.: DLA700-86-D-A001-VLFN Awarded: June 29, 1990

Procurement Method: Competitive Determination: Reasonable

There was no procurement history on the hubcap at DCSC. The hubcap is used on Ford series 100/500 trucks (F350 models). The procurement was made using a call against a competitively awarded IQT contract with the COPAD contractor. The IQT contract required the contractor to establish a parts depot on Government property for automotive, material handling, and construction equipment repair parts and components that are listed in commercial, published price lists. The purpose of the IQT was for the Government to use the expertise and efficient procedures of private industry to obtain and ship repair parts as quickly as practical at the lowest cost to the Government. Award of the contract was based, in part, on the highest discount from the commercial suggested list price. The minimum value of the IQT contract was \$9 million and the contract covered thousands of parts listed in nationally published price lists and provided by 271 vendors. The primary reason for establishing this type of contractual arrangement was to expedite the procurement and delivery of commercial parts that have a low demand in the DoD supply system.

We obtained the published commercial price list of the vendor, Ford, from which the COPAD purchased the hubcap. The price list showed the suggested list price was \$38.68 each and the dealer price was \$23.21 each. We confirmed that the contractor discounted the hubcap using the 46-percent contracted discount rate.

We concluded that the hubcap was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 12 (random sample)

Nomenclature/NSN/PN: Pedal Pad/2540-01-167-9273/3492 833

Unit Price: \$2.84 Quantity: 2 Extended Price: \$5.68

Contractor: Wheeler Brothers, Incorporated, Somerset, PA

Contract No.: DLA700-86-D-A001-ULNX Awarded: May 12, 1990

Procurement Method: Competitive Determination: Reasonable

The pedal pad is part of the rubber foot pedal brake/clutch assembly on Dodge light-duty trucks (1974-76 models). Procurement history shows several procurements were made between 1985 and 1990 with unit price ranging from \$2.49 (1985) to \$2.84 (1990). The sample procurement was made using a call against an IQT contract with the COPAD contractor. The overall IQT contract was competitively awarded.

The COPAD contractor functions as a quick supply source for commercial truck and auto parts that have a relatively low demand in the DoD supply system. Parts procured from the COPAD are not available through other normal Defense Logistics Agency sources. The IQT contract requires that the COPAD contractor offer specific discounts on parts purchased from COPAD. We obtained the published commercial price list of the vendor, Chrysler, from which the COPAD purchased the pedal pad. The price list showed the suggested list price was \$5.25 each and the lowest dealer price was \$2.95 each. We confirmed that the contractor discounted the pedal pad using the 46-percent contracted discount rate.

We concluded that the pedal pad was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 13 (random sample)

Nomenclature/NSN/PN: Tube-to-Hose Elbow/4730-00-618-8862/
M83798/3-4

Contractor: Stratoflex Incorporated, Fort Worth, TX

Contract No.: DLA700-90-W-0366 Awarded: April 26, 1990

Unit Price: \$5.34 Quantity: 991 Extended Price: \$5,291.94

Procurement Method: Competitive Determination: Reasonable

The tube-to-hose elbow is an aluminum and steel fitting having a 90-degree flow angle and is approximately 2 inches long. It is used on CH-47 military cargo transport helicopters. The elbow has a critical application and must be procured from vendors whose products are on the qualified-products list. Stratoflex is the manufacturer of the elbow. DCSC solicited three qualified vendors, received three offers, and awarded the contract to the low offeror. Procurement history showed that the most recent prior purchase was in January 1990 for a quantity of 1,356 elbows at \$5.09 each. Our intrinsic value analysis of the tube-to-hose elbow supported the \$5.34 unit price.

We concluded that the tube-to-hose elbow was reasonably priced.

Item No. DCSC 14 (random sample)

Nomenclature/NSN/PN: Seatless Valve/4820-00-618-9073/9111937

Unit Price: \$142.50 Quantity: 2 Extended Price: \$285

Contractor: Vickers, Incorporated, Jackson, MS

Contract No.: N00383-88-G-B382-UBC4 June 28, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The seatless valve is made of steel and is 5.5 inches long, 2 inches wide, and 6 inches high. It is a commercial item used on the strategic missile system in Poseidon submarines. The contract was awarded sole source to Vickers, Incorporated, the manufacturer. The price of the seatless valve included a discount of 50 percent off the commercial list price shown in the Vickers master parts price list. Vickers refused to provide

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

manufacturing cost on the valve. The procurement history showed that the most recent prior procurement was for one at \$130 in 1988 from Vickers.

We concluded that the seatless valve was reasonably priced.

Item No. DCSC 15 (random sample)

Nomenclature/NSN/PN: Spray Nozzle/4330-00-034-8266/16102394

Unit Price: \$59.25 Quantity: 3 Extended Price: \$177.75

Contractor: Colt Industries, Fairbanks Morse Engine Division,
Beloit, WI

Contract No.: DLA700-83-G-5003-1486 Awarded: April 9, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The nozzle is made of steel and is used in large diesel engines in Navy and commercial ships. The part was procured sole source because Colt Industries had proprietary rights to the technical data. Colt Industries manufactured the part. The July 1990 Colt Industries commercial price list shows a unit price of \$62.45 for the spray nozzle. The procurement history showed that the most recent prior procurement was for a quantity of two at \$39.24 each in 1984 from Colt Industries. Our intrinsic value analysis of the spray nozzle supported the \$59.25 unit price.

We obtained estimated cost data from Colt Industries. This data showed the unit price of \$59.25 was composed of \$* material, \$* labor, \$* labor burden, \$* guarantee and development, \$* general and administrative, \$* cost of money, and \$* (* percent of unit cost) profit.

We concluded that the spray nozzle was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 16 (random sample)

Nomenclature/NSN/PN: Tie Rod End/2530-01-176-4298/EOTZ3A131-D

Unit Price: \$41 Quantity: 4 Extended Price: \$164

Contractor: Dick Masheter Ford, Columbus, OH

Contract No.: DLA700-90-Y-1127 Awarded: April 12, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The tie rod end is a component part on 1981 Ford series F100 and F350 trucks. The procurement was made for reasons unknown at a local Ford dealer using DCSC imprest funds. The procurement history showed that several purchases of the tie rod end were made during 1990 for quantities ranging from 1 to 12 at \$28.52 each. These procurements were all made from the COPAD contractor in Mechanicsburg, PA.

The mission of the COPAD is to provide military requisitioners with a quick source of supply for commercial truck, auto, and other vehicle parts. Parts offered through the COPAD are generally low demand and are not available through other normal DLA supply channels. Currently, the COPAD average delivery time is 13 days for stocked items.

We concluded that the tie rod end was unreasonably priced because it was procured during 1990 at significantly lower unit prices. We determined that this item was overpriced by \$12 each based on the COPAD \$29 price.

DLA Comments. DLA stated that since the urgency and other considerations surrounding the purchase could not be determined, DLA could not determine whether the price was reasonable under the circumstances. DLA also stated it agreed that the item represented an opportunity for purchase at a reduced price. (See the detailed discussion of the DLA comments and audit response in Part II of the Audit Report.)

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DCSC 17 (random sample)

Nomenclature/NSN/PN: Fuel Injector/2910-00-404-3054/3054250

Unit Price: \$32.74 Quantity: 1,840 Extended Price: \$60,241.60

Contractor: Interstate Diesel Service, Cleveland, OH

Contract No.: DLA700-90-C-1572 Awarded: March 6, 1990

Procurement Method: Competitive Determination: Reasonable

The fuel injector is used on a Cummins diesel engine installed in five-ton trucks. The contract was competitively awarded. DCSC solicited nine vendors, received four offers, and awarded the contract to the low offeror. Interstate Diesel Service manufactured the fuel injector. The procurement history showed that DCSC paid \$38.02 for this part on the most recent prior procurement in March 1990.

We concluded that the fuel injector was reasonably priced.

Item No. DCSC 18 (random sample)

Nomenclature/NSN/PN: Lift Channel/2540-01-158-8813/340053

Unit Price: \$9.62 Quantity: 263 Extended Price: \$2,530.06

Contractor: T&M Distributors, Incorporated, Flanders, NJ

Contract No.: DLA700-90-D-A002-1645 Awarded: June 26, 1990

Procurement Method: Competitive Determination: Reasonable

The lift channel is for glass windows on Chevrolet trucks, model M1009 (the military version of a Blazer). The procurement was made on a call order issued against a competitively awarded IQT contract. DCSC solicited 44 vendors, received 4 offers, and awarded the IQT contract to the low offeror. The IQT contract covered approximately 330,400 items and had an estimated value of \$3 million. The purpose of the IQT contract was to use contractor expertise to locate required items in the commercial market place.

The IQT contract included a 23.5-percent discount of prices in the General Motors dealer's parts and accessories price schedule. Cost data obtained from T&M Distributors showed that T&M

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Distributors paid \$* each to Coach and Motors Company for the lift channels. A T&M Distributors official stated that the price to the Government was based on the discount of the General Motors dealer price, not on the cost to T&M Distributors. Coach and Motors procured the lift channels from the manufacturer, Riverside Corporation, for \$* each. Riverside has since gone out of business. Randall Textron now manufactures the lift channel for General Motors. A Randall Textron official stated his company cannot sell the lift channel to the Government or commercially because General Motors owns the tooling used to manufacture it. A General Motors official stated General Motors would sell the lift channel to the Government. However, General Motors was solicited for the IQT contract and did not bid. Cost or pricing data were not available from General Motors, Riverside, or Randall Textron. The procurement history showed that the DCSC most recent prior procurement was in March 1990 for a quantity of 452 lift channels at \$9.62 each from T&M Distributors. In March 1992, we obtained price quotations from another dealer offering the lift channel. The dealer stated its June 1990 price to the Government would have been \$15.80 each and the current (1992) price is \$18.50 each.

We concluded that the lift channel was reasonably priced.

Item No. DCSC 19 (random sample)

Nomenclature/NSN/PN: Tube Elbow/4730-00-254-6443/None

Unit Price: \$2.94 Quantity: 3,725 Extended Price: \$10,951.50

Contractor: Mindeco Corporation, Oceanside, NY

Contract No.: DLA700-90-W-0707 Awarded: June 18, 1990

Procurement Method: Competitive Determination: Reasonable

The tube elbow is a copper alloy 2-inch diameter tube with a 90-degree flow angle. It is used on chill-water air conditioning systems.

DCSC received four offers and awarded the contract to Mindeco Corporation, the low offeror. Mindeco was not the manufacturer of the tube elbow and was unresponsive to our request for cost and pricing data, including the disclosure of the manufacturer. We obtained a price quote from Harry Alter Company, Incorporated, Elmhurst, IL. Harry Alter quoted a unit price of \$6.46 for a quantity of 3,700 tube elbows. The most recent prior procurement

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

was in January 1990 for a quantity of 1,555 at \$2.98 each from Mindeco.

We concluded that the tube elbow was reasonably priced.

Item No. DCSC 20 (random sample)

Nomenclature/NSN/PN: Cleaning Brush/1005-00-556-4174/5564174

Unit Price: \$0.306 Quantity: 25,313 Extended Price: \$7,745.78

Contractor: The Mill-Rose Company, Mentor, Ohio

Contract No.: DLA700-89-D-0093-0002 Awarded: April 9, 1990

Procurement Method: Competitive Determination: Reasonable

The cleaning brush is 3 inches long and has brass bristles. It is used to clean 0.30 caliber and 7.62mm rifles and the M60 machine gun. Mill-Rose is the manufacturer of the cleaning brush. The sample procurement was made using an order against a competitively awarded requirements type contract (RTC). For the RTC, DCSC solicited 34 vendors, received 3 offers, and awarded the contract to the low bidder. The DCSC most recent prior procurement was in November 1989 for a quantity of 60,389 at \$0.27007 each.

Cost data on the sample procurement was not available. However, Mill-Rose did provide manufacturing cost data for a September 1991 order made against the RTC. This data showed that the 1991 unit price of \$0.322 was composed of \$* material, \$* labor, \$* overhead, and \$* (* percent of unit cost) profit.

We concluded that the cleaning brush was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Buying Center: Defense General Supply Center (DGSC)

Item No. DGSC 1 (judgmental sample)

Nomenclature/NSN/PN: Altar Vase/9925-00-273-4546/None

Unit Price: \$343.08 Quantity: 41 Extended Value: \$14,066.28

Contractor: Herman J. Wolf Company, Philadelphia, PA

Contract No.: DLA400-89-M-1479 Awarded: October 20, 1988

Procurement Method: Noncompetitive Determination: Unreasonable

The altar vase is used by military chaplains to display fresh flower arrangements during religious services. It is approximately 10 inches high, is made of chromium-plated brass, and is purchased in a set of two vases. On the sample procurement, DGSC awarded a sole-source contract to Wolf at its quoted price. The procurement history showed that the most recent prior purchase was from Wolf in September 1987 for a quantity of 61 pairs at \$253.00 each. This reflects a 35.6 percent (\$90.08/\$253.00) price increase over a 1-year period. In July 1990 DGSC performed a should-cost value analysis that determined the cost should have been \$147.62 for a pair of altar vases when procuring a quantity of 41 pairs.

According to data provided by Wolf to support its quote, higher than actual cost figures were used for certain materials. Based on the actual cost of materials, the unit selling price would have been \$298.06, or a difference of \$45.02 per unit. Consequently, the contract was overpriced by at least \$1,845.82 (\$45.02 x 41).

Wolf had the vases made to special specifications. The vases were bought to military specification No. MIL-V-43535, although the commercial item description that became effective in January 1988 was available. The commercial item description allowed more flexibility than the military specification. For example, the military specification stipulated that the vase must be 9 7/8 inches high. The commercial item description stated, "the vase shall measure approximately 10 inches in height," which permitted the buyer to procure a 9- or 11-inch vase.

We identified other vendors that offered chromium-plated vases in 8-, 9-, and 11-inch sizes and with price ranging from \$331 to \$457 per pair. None of these vendors offered 9 7/8 inch chromium-plated vases.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

We concluded that the altar vase was unreasonably priced because the contractor used higher than actual cost figures to calculate the selling price and DGSC bought the vase to military specifications instead of the more flexible commercial item description. We determined that this item was overpriced by \$45.02 each based on our analysis of the contractor cost data in support of the contract price.

During the audit, we recommended that DGSC request a voluntary refund of \$1,846 from the contractor. On February 10, 1992, DGSC requested a voluntary refund from Wolf Company. The contractor subsequently rejected by telephone the DGSC request for a refund.

DLA Comments. DLA disagreed that the altar vase was overpriced. DLA stated that the use of after-the-fact information on actual cost does not in itself validate overpricing. (See the detailed discussion of the DLA comments and audit response in Part II of the Audit Report.)

Item No. DGSC 2 (random sample)

Nomenclature/NSN/PN: Electrical Lead/6150-01-261-2500/2903397-1

Unit Price: \$48 Quantity: 3 Extended Price: \$144

Contractor: Texas Instruments, Incorporated, Dallas, TX

Contract No.: DLA400-90-M-S389 Awarded: June 17, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The electrical lead is a 3.3-inch-long copper-stranded cable assembly and is a component part of the low-altitude navigation and targeting infrared system for night, more commonly known as LANTIRN. The sample procurement was awarded sole source to Texas Instruments because Texas Instruments was the only known manufacturer of the electrical lead, and DGSC did not have sufficient technical data for competition. Texas Instruments provided us data to support its contract price. The procurement history shows that the most recent prior purchase was from Texas Instruments in April 1988 for a quantity of three at \$100 each. Our intrinsic value analysis of the electrical lead supported the \$48 unit price.

We concluded that the electrical lead was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DGSC 3 (random sample)

Nomenclature/NSN/PN: RF Cable Assembly/5995-01-106-2031/
11459590-1

Unit Price: \$356 Quantity: 20 Extended Price: \$7,120

Contractor: Raytheon Company, Andover, MA

Contract No.: DAAH01-88-G-0012-TY12 Awarded: April 12, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The RF cable assembly is a component part of the Patriot missile system. The sample procurement was awarded sole source to Raytheon because the buyer was not aware that the assembly was previously purchased from another vendor and that the Government had a technical data package suitable for competition.

The procurement history the buyer used to determine potential sources incorrectly showed that there were no previous procurements of the cable assembly. Also, the purchase request trailer listing used by the buyer incorrectly showed that the Government did not have sufficient technical data to purchase the cable assembly from other than the current source, Raytheon. The small-purchase pricing memorandum and another memorandum, both dated March 15, 1990, showed that DGSC contracting personnel believed that the sample procurement (April 1990) was the first buy of the cable assembly and that the Government did not possess sufficient technical data to conduct a competitive procurement.

The procurement history that we obtained from DGSC was generated from the parts master database and showed seven procurements of the cable assembly before April 1990: two from UNICOR and five from Raytheon. The history also showed that the most recent prior procurement was for a quantity of 34 at a unit price of \$110.56 from UNICOR in March 1986.

A technical operations official at DGSC stated that the cable assembly was assigned a new NSN when management of the assembly was transferred from the Army Missile Command to DGSC in 1989 and that the parts master database showed the complete procurement history. A contracting official stated the parts master database is not routinely used by contracting personnel and that the

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

buyer relied on the standard automated material management system, which incorrectly showed no prior procurements of the cable assembly. DGSC corrected the system by coding the item for competitive procurement.

Our intrinsic value analysis of the cable assembly determined a reasonable price was \$231.53 each for a quantity of 20. This value included \$11.88 material and material overhead, \$99.91 labor and labor overhead, \$29.25 material production control, \$20.90 engineering support, \$11 packaging, \$9.85 maintenance and modification of test equipment, \$14.99 general and administrative expense, \$30.85 (15.6 percent of unit cost) profit, and \$2.90 cost of money.

We concluded that the cable assembly was unreasonably priced. We determined that this item was overpriced by \$124 each based on the \$232 price disclosed by our intrinsic value analysis.

DLA Comments. DLA agreed that the item was overpriced, and suggested \$266 as a reasonable price based on a recent procurement of the RF cable assembly.

Item No. DGSC 4 (random sample)

Nomenclature/NSN/PN: Rapid Picture Pack Film/6750-00-252-9553/
603106

Unit price: \$5.52 Quantity: 50 Extended Price: \$276

Contractor: Polaroid Corporation, Cambridge, MA

Contract No.: DLA400-90-A-0001-2840 Awarded: April 12, 1990

Procurement Method: Competitive Determination: Reasonable

The rapid picture pack (eight prints) is black and white, high-speed instant-print photographic film. Polaroid is the only producer of the specialized film. The film is widely available on the commercial market. The sample procurement was made using a call order against a BPA with Polaroid. DGSC solicited 30 vendors, received two offers, and awarded the BPA to the low offeror. The BPA price was in accordance with a GSA Federal Supply Schedule.

The procurement history showed that numerous BPA call orders for the film were awarded to Polaroid during 1989 and 1990, and the

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

price of the film increased moderately during the 2-year period. Such price increases were in accordance with the terms of the BPA.

We contacted three photographic film retailers for price quotes on the film. The three quotes we received ranged from 10 to 16 percent higher than the price paid on our sample order.

We concluded that the film was reasonably priced.

Item No. DGSC 5 (random sample)

Nomenclature/NSN/PN: Photographic Film/6750-01-058-9766/VPS220

Unit Price: \$27.87 Quantity: 3 Extended Price: \$83.61

Contractor: Eastman Kodak Company, Rochester, NY

Contract No.: DLA-400-89-D-0046-J810 Awarded: April 23, 1990

Procurement Method: Competitive Determination: Reasonable

The photographic film is Kodak Vericolor III Professional Film 6006, Type S (five rolls per pack). It is a professional series color negative film that can be used with electronic flash, blue flashbulbs, or daylight exposure. The sample procurement was made using an order against a BOA that was competitively awarded to Kodak. The procurement history showed that the unit price of the film ranged from \$21.38 to \$27.87 over the 4-year period from 1986 through 1990.

We contacted three photographic film retailers for price quotes. The three quotes we received were from 7 percent to 25 percent higher than the price paid on the sample order.

We concluded that the film was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DGSC 6 (random sample)

Nomenclature/NSN/PN: Medical Equipment Maintenance Manual/
None/912901

Unit Price: \$60 Quantity: 1 Extended Price: \$60

Contractor: American Hospital Association, Chicago, IL

Contract No.: DLA400-90-M-K247 Awarded: April 4, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The manual is entitled Maintenance Management for Medical Equipment by W. Thomas Schipper. It contains 270 pages and provides details and advice on how to manage a medical equipment maintenance program. The sample procurement was awarded sole source to the publisher of the manual, the American Hospital Association. The contract price was based on the contractor commercial catalog price of \$60 for American Hospital Association members. Nonmembers pay \$100 for the manual. We confirmed the commercial price by checking the 1991 American Hospital Association catalog. DGSC had no documented previous procurements of the manual.

We concluded that the manual was reasonably priced.

Item No. DGSC 7 (random sample)

Nomenclature/NSN/PN: Dial Thermometer/None/63136 KKFWCDT

Unit Price: \$93 Quantity: 5 Extended Price: \$465

Contractor: Keyser Stainless Corporation, Keyser, WV

Contract No.: DLA400-90-M-L508 Awarded: April 20, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The dial thermometer is a component part of a commercial food-warming cabinet. The sample procurement was awarded sole source to Keyser at its quoted price. Keyser purchased the dial thermometers from the manufacturer, Miljoco Corporation, for \$* each.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

The \$93 unit contract price was composed of \$* purchased parts, \$* freight (in/outgoing), \$* packaging, \$* administration costs, \$* calibration, and \$* (* percent of unit cost) overhead and profit. The Miljoco invoice stated that the total freight charge was \$* for shipping 12 thermometers, or \$* per unit. Also, according to a Miljoco representative, calibration was unnecessary because the thermometers were calibrated before shipment to Keyser. The DGSC price analysis of the contractor cost data disclosed a reasonable price of \$25 each for the thermometer.

We concluded that the dial thermometer was unreasonably priced because it was not procured from the manufacturer and because the contractor added excessive charges for freight, overhead, and calibration. We determined that this item was overpriced by \$68 each based on the \$25 price disclosed by the DGSC price analysis.

In a December 3, 1991, letter, DGSC requested a voluntary refund of \$340. In a February 6, 1992, letter, the contractor rejected the DGSC request for a refund.

DLA Comments. DLA agreed that the item was overpriced.

Item No. DGSC 8 (random sample)

Nomenclature/NSN/PN: Pinion and Gear Assembly/6680-00-673-6906/
B20623-1

Unit Price: \$19.50 Quantity: 72 Extended Price: \$1,404

Contractor: S.S. Precision Company, Corona, NY

Contract No.: DLA400-90-M-M600 Awarded: April 21, 1990

Procurement Method: Competitive Determination: Reasonable

The pinion and gear assembly is a component part on the T-2 military training aircraft instruments panel and is not sold commercially. For contract DLA400-90-M-M600, DGSC solicited three vendors and received three offers. S.S. Precision was the low offeror and a manufacturer of the pinion and gear assembly. The cost breakdown we obtained from S.S. Precision showed the \$19.50 contract price was composed of \$* material, \$* labor, \$* packaging and \$* (* percent of direct cost) for profit and indirect costs. The procurement history shows that over a 12-year period the unit price for the pinion

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

and gear assembly decreased by \$1.41. Our intrinsic value analysis of the pinion and gear assembly supported the \$19.50 unit price.

We concluded that the pinion and gear assembly was reasonably priced.

Item No. DGSC 9 (random sample)

Nomenclature/NSN/PN: Photographic Film/6750-01-038-1726/
160-3646

Unit Price: \$6.14 Quantity: 144 Extended Price: \$884.16

Contractor: Eastman Kodak Company, Rochester, NY

Contract No.: DLA400-89-D-0046-L739 Awarded: June 6, 1990

Procurement Method: Competitive Determination: Reasonable

The photographic film is Kodak Ektachrome 50 Professional Film-36 exposure. It is a professional series color-reversal film for exposures with tungsten lamps. The film is available on the commercial market. The sample procurement was made using an order against a BOA that was competitively awarded to Kodak. The procurement history showed that numerous orders were awarded to Kodak and that prices ranged from \$5.04 to \$6.14 over the 3-year period from 1988 through 1990.

We contacted two photographic film retailers and one wholesaler for price quotes. The three quotes we received were 7 percent to 20 percent higher than the price paid on the sample order.

We concluded that the film was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DGSC 10 (random sample)

Nomenclature/NSN/PN: Color Print Rapid Producing Picture Pack
Film/6750-07-246-8104/NSC PUG 880023

Unit Price: \$9.25 Quantity: 60 Extended Price: \$555

Contractor: Polaroid Corporation, Cambridge, MA

Contract No.: DLA-400-90-A-0001-4305 Awarded: June 29, 1990

Procurement Method: Competitive Determination: Reasonable

The color print rapid-producing picture pack film (10 prints) is Polaroid Spectra instant print color photographic film. Polaroid is the only producer of the specialized film. The film is available on the commercial market. The sample procurement was made using a call order against a BPA with Polaroid. DGSC solicited 30 vendors, received 2 offers, and awarded the BPA to the low offeror. The BPA price was in accordance with a GSA Federal Supply Schedule.

The procurement history showed that numerous BPA call orders for the film were awarded to Polaroid during 1989 and 1990 and the price of the film increased by 4.5 percent during the 2-year period. Such price increases were in accordance with the terms of the BPA.

We contacted two photographic film retailers and one wholesaler for price quotes on the film. The three quotes we received ranged from 7 percent to 19 percent higher than the price paid on the sample order.

We concluded that the film was reasonably priced.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DGSC 11 (random sample)

Nomenclature/NSN/PN: Incandescent Lamp/6240-00-246-5052/
100ARS120V

Unit Price: \$0.437 Quantity: 480 Extended Price: \$209.76

Contractor: GTE Products Corporation, Springfield, VA

Contract No.: DLA400-88-D-0013-1789 Awarded: April 26, 1990

Procurement Method: Competitive Determination: Reasonable

The incandescent lamp is a 100-watt rough-service light bulb, which is available on the commercial market. It is manufactured by GTE. The sample procurement was made using an order against a BOA with GTE. For the BOA, DGSC solicited 95 vendors, received 9 offers and awarded the contract to the low offeror.

The procurement history showed that the unit price of the light bulb ranged from \$0.325 to \$0.62 over a 6-year period from 1984 through 1990. The price quotes we received from two commercial electrical suppliers were 220 percent and 367 percent higher than the price paid on the sample procurement.

We concluded that the incandescent lamp was reasonably priced.

Item No. DGSC 12 (random sample)

Nomenclature/NSN/PN: Full-Face Film Cover/4240-01-248-6435/
7899-100

Unit Price: \$41.20 Quantity: 4 Extended Price: \$164.80

Contractor: 3M Company, St. Paul, MN

Contract No.: DLA400-89-D-0005-7829 Awarded: April 9, 1990

Procurement Method: Noncompetitive Determination: Reasonable

The full-face film cover is a thin, transparent piece of plastic shaped to fit over the lens on a commercial respirator used for welding operations. Its purpose is to protect the lens from becoming marred or scratched. The film cover is available to

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

commercial customers. The unit of issue is a box containing 100 film covers. The 3M Company suggested retail price is \$58.85 per box. The 3M price to distributors is \$41.20 per box.

The DGSC procurement history showed that the unit price ranged from \$39.42 to \$43.25 during 1988 through 1990.

The contract was awarded sole source to 3M Company, the manufacturer of the film cover. The J&A for the sole-source award stated that a Federal Occupational Safety and Health Administration Regulation (30 CFR part 11.2-1) required that items involving the safety and health of operators be certified by the National Institute of Occupational Safety and Health. 3M was the only source because National Institute of Occupational Safety and Health will only certify end items, and all replacement parts must be procured from the end item manufacturer. The film covers were for respirators produced by 3M.

We concluded that the film covers were reasonably priced.

Item No. DGSC 13 (random sample)

Nomenclature/NSN/PN: Mix and Storage Polyethylene Tank/None/
2509-6ST5

Unit Price: \$43 Quality: 4 Extended Price: \$172

Contractor: California Stainless Manufacturing, Incorporated,
Camarillo, CA

Contract No.: DLA400-90-M-S639 Awarded: June 10, 1990

Procurement Method: Noncompetitive Determination: Unreasonable

The 5-gallon capacity mix and storage tank is made of polyethylene and is used to mix and store photographic processing chemicals. The procurement was a special purchase with the requester identifying the item and its source. The contract was awarded sole source to California Stainless at its catalog price.

California Stainless did not manufacture the tanks. According to a California Stainless official, the tank was an accessory to his main lines of stainless steel sinks and manual processors.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

California Stainless procures about 10 tanks once a year from U.S. Plastic. We were unable to determine the cost of the tank to California Stainless. However, the 1991 catalog provided by a U.S. Plastic official shows similar 5-gallon polyethylene chemical storage tanks with prices ranging from \$14.24 to \$17.92, less 10 percent for a quantity of four.

DGSC stated that at the time of the procurement they did not have an NSN or item description and that, due to the high volume and low value of these types of procurements, it was not feasible to research the item further.

We concluded that this item was unreasonably priced because it could have been procured from another source at a lower price. We determined that the storage tank was overpriced by \$30 each since it could have been purchased from another source for \$13 each (\$14.24 less 10 percent).

DLA Comments. DLA agreed that the item was overpriced.

Item No. DGSC 14 (random sample)

Nomenclature/NSN/PN: Indicator Light/6210-01-259-1354/
351-24513-134

Unit Price: \$169.40 Quantity: 1 Extended Price: \$169.40

Contractor: Related Components, Dayton, OH

Contract No.: DLA400-89-A-B769-0056 Awarded: April 10, 1990

Procurement Method: Competitive Determination: Reasonable

The indicator light is about 3 inches long, has a horizontal split display, and accommodates white, red, and yellow light emitting diodes. It is manufactured by Eaton Corporation and is used on Trident submarines. The sample procurement was made on a call order against a competitively awarded BPA. Related Components is a distributor of Eaton parts.

Cost data we obtained from Related Components showed that Related Components paid \$* to Eaton for the light and \$* to package and ship it to the Government. Related Components added \$* (about * percent of direct costs) for processing the order to reach the \$169.40 selling price. Eaton refused our request for manufacturing cost data, stating that company policy prohibited release of cost data. The most recent prior procurement was in February 1990, when DGSC paid another

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

distributor \$241.56 each for two lights. Another Eaton distributor we contacted quoted a 1992 price of \$177 each for quantities ranging from one to nine.

An Eaton official told us that Eaton sells directly to the Government if the amount of the order is \$2,500 or more. Eaton refers orders of less than \$2,500 to its distributors.

However, according to DGSC contracting records, demand for the indicator light is only three per year. As a result, DGSC established a safety stock level of three units. Considering the annual demand and the \$2,500 minimum buy required by Eaton and assuming Eaton would sell the light for \$* (\$* plus \$* packaging), DGSC would have to buy * (\$*/\$*) lights, or * times the annual demand.

We concluded that the indicator light was reasonably priced.

Item No. DGSC 15 (random sample)

Nomenclature/NSN/PN: Photographic Film/6750-01-033-8488/120 8289

Unit Price: \$224.15 Quantity: 15 Extended Price: \$3,362.25

Contractor: Eastman Kodak Company, Rochester, NY

Contract No.: DLA400-89-D-0046-K873 Awarded: May 18, 1990

Procurement Method: Competitive Determination: Reasonable

The photographic film is Kodak Ektachrome 64T Professional Film. Unit of issue is 1 box of 50, 8- by 10-inch exposures. It is a professional-series color-reversal film for exposure with tungsten lamps. The film is commercially available. The sample procurement was made using an order against a BOA that was competitively awarded to Kodak. The procurement history showed that the unit price of the film ranged from \$179.32 to \$224.15 over the 4-year period, 1987-1990.

We contacted three photographic film retailers for price quotes on the film. The three quotes received were from 7 percent to 32 percent higher than the price paid on the sample order.

We concluded that the photographic film was reasonably priced.

*Proprietary data removed.

E - ITEMS REVIEWED AT DEFENSE LOGISTICS AGENCY BUYING CENTERS
(cont'd)

Item No. DGSC 16 (random sample)

Nomenclature/NSN/PN: Altar Candle/9925-00-161-4300/None

Unit Price: \$25.61 Quantity: 332 Extended Price: \$8,502.52

Contractor: Will and Baumer, Incorporated, Liverpool, NY

Contract No.: DLA400-90-M-R153 Awarded: May 24, 1990

Procurement Method: Competitive Determination: Reasonable

The altar candles are used in military chapels for religious services. They are approximately 12 inches high, 7/8 inch in diameter, and 51 percent beeswax. The candles are commercially available. The unit of issue is a box of 24 candles. On the sample procurement, DGSC received two offers and awarded the contract to the low offeror. The procurement history showed that the most recent prior purchase was in May 1988 for a quantity of 500 boxes at a unit price of \$25.91.

We contacted five commercial suppliers of altar candles and requested price quotes for a large quantity (about 8,000) of the candles. The five quotes we received ranged from \$29.06 to \$42.84 per box of 24 candles.

We concluded that the altar candles were reasonably priced.

PART II - ADDITIONAL INFORMATION

ADDENDUM DISTRIBUTION

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition
Director of Defense Procurement

Department of the Army

Inspector General, Department of the Army
Commanding General, Army Materiel Command
Commander, Army Armament, Munitions, and Chemical Command
Commander, Army Tank-Automotive Command

Department of the Navy

Assistant Secretary of the Navy (Financial Management)
Commander, Naval Supply Systems Command
Commanding General, Marine Corps Logistics Base, Albany
Commanding Officer, Navy Aviation Supply Office
Commanding Officer, Navy Ships Parts Control Center

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and
Comptroller)
Commander, Air Force Materiel Command
Commander, Oklahoma City Air Logistics Center
Commander, San Antonio Air Logistics Center
Commander, Warner Robins Air Logistics Center

Defense Activities

Director, Defense Logistics Agency
Commander, Defense Construction Supply Center
Commander, Defense General Supply Center

Non-Defense Individuals

The Honorable William V. Roth, Jr., United States Senate
The Honorable Charles E. Grassley, United States Senate

AUDIT TEAM MEMBERS

David K. Steensma, Director, Contract Management Directorate
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Jeffery A. Lee, Senior Auditor

Keith A. Vancey, Senior Auditor

Herbert Braun, Auditor

Timothy A. Bulman, Auditor

Johnetta R. Colbert, Auditor

George A. Ford, Auditor

Robert Harris, Auditor

Vanessa Springfield, Auditor

Cecil B. Tucker, Auditor

Milton Kaufman, Cost Price Analyst/Engineer

Janice Alston, Administrative Support

Robin Hysmith, Administrative Support