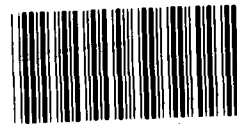


March 1986

PROCUREMENT

DOD Initiatives to Improve the Acquisition of Spare Parts



129774

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National Security and International
 Affairs Division
 B-220628

March 11, 1986

The Honorable William V. Roth, Jr.
 Chairman, Committee on Governmental Affairs
 United States Senate

The Honorable Alfonse D'Amato
 United States Senate

The Honorable Bill Nichols
 Chairman, Subcommittee on Investigations
 Committee on Armed Services
 House of Representatives

In response to your requests for an overview of the problems surrounding the procurement of replenishment spare parts and an update of the status of some of the Department of Defense's (DOD's) corrective actions, we are providing an analysis of the price growth that occurred before corrective action (see app. II), a summary of other studies that were made on spare parts procurement (see app. III), a discussion of the initiatives DOD has taken to resolve management problems (see app. IV), and the status of these initiatives (see app. V). The methodology we used is explained in appendix I.

Table 1: DOD Spare Parts Budgets for Fiscal Years 1982 Through 1986

Dollars in billions	
Fiscal year	Amount
1982	\$15.5
1983	17.3
1984	21.2
1985	21.6
1986	22.4

DOD's total procurement in fiscal year 1983 was \$140.5 billion and in fiscal year 1984 was \$146 billion. Thus, spare parts accounted for 12.3 percent of DOD's total procurement in fiscal year 1983 and 14.5 percent in 1984.

DOD annually awards millions of contracts for spare parts. In making the awards, it must assure that the prices obtained are fair and reasonable while at the same time weigh the costs of obtaining this assurance with the costs of the procurement action. Before initiation of corrective actions by DOD in 1983, in its efforts to meet productivity goals and to

minimize the amount of resources expended in analyzing low dollar value contracts, it was performing inadequate price analysis on procurements with severe price growth. We estimate DOD did not obtain adequate justification for the significant price increases on 44.5 percent of the contracts with price increases of 25 percent or more.¹ We did not do a cost benefit analysis of performing adequate price analyses on these procurements.

Two other studies of spare parts procurement found essentially the same conditions. A DOD Inspector General's report on the reasonableness of prices paid for spare parts indicates DOD paid unnecessarily high prices when less costly alternatives were available and that contractors were charging unreasonable prices when compared to costs incurred. An Office of Federal Procurement Policy report on the same subject confirmed that the procurement process for spare parts had problems. It added that while

"horror stories have created a public perception of a problem far more common and pervasive than is actually the case, they do serve as a warning that additional management attention is needed."

These studies and our work present what we believe to be the major challenge DOD faces in implementing corrective action: designing initiatives that will correct the problem while, at the same time, prove to be cost effective and a permanent solution so the problem does not reappear as it has so often in the past.

Within DOD, the Army, Navy, Air Force, and Defense Logistics Agency (DLA) now have comprehensive programs consisting of a large number of initiatives. These initiatives, which DOD estimates will take 3 to 5 years to implement, are wide ranging. They address not only the issue of spare parts pricing, but the requirements determination process, funding, technical data rights, and personnel. These initiatives are also costly. DOD, in a February 22, 1985, report, estimated fiscal year 1984 costs to implement the initiatives at \$100 million and savings or costs avoidances of \$1.2 billion. The cost estimate does not include some factors that could result in greater costs, such as acquiring technical data or inventory carrying costs.

Further, DOD may encounter problems in carrying out the initiatives, such as

¹Our review covered contracts that were awarded between January 1, 1980, and June 30, 1983.

- higher prime contractor overhead if the business base is reduced due to competitive or direct purchase of spare parts;
- higher costs resulting from increases in the time, commonly called administrative lead time, it takes to buy spare parts; and
- balancing the resources expended on the analysis of low dollar value procurements with the total cost of the procurement, that is, determining how much should be expended to assure fair and reasonable prices.

While progress varies among the services and DLA, it will be some time before any overall assessment can be made. DOD is, however, making progress and is applying the resources authorized by the Congress to the problem.

The procurement activities we visited had instituted corrective actions in addition to the service-wide initiatives such as

- requiring ascending levels of approval for procurement actions in cases where price increases are over 10 percent or more within the previous 12 months,
- providing video tapes of spare parts being procured so buyers and contracting officers can see what they are buying,
- identifying repetitive sole-source procurements to determine if they can be procured competitively,
- developing a method for forecasting buy quantities over longer time periods, and
- challenging contractor claims of proprietary rights.

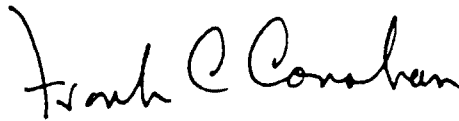
These local actions indicate an awareness of the spare parts pricing problem and a willingness to change. Such interest at this level is encouraging because the success of the initiatives depends heavily on the personnel at the procurement activities.

Also encouraging is the fact that all of the contractors we visited were aware of the spare parts pricing problems, either through media reports or meetings with DOD personnel, or both. All were aware of the seriousness with which DOD viewed the problem and of the initiatives. Even though most believed they had done a good job of providing spare parts to the military at reasonable prices, all were willing to fully cooperate and cited their participation in identifying spare parts that should be procured competitively or directly from vendors.

DOD will need time to fully implement the initiatives and make necessary adjustments. Nevertheless, DOD should be encouraged to continue its effort toward a cost effective and permanent solution. We are not making any recommendations at this time because of the initiative DOD has underway. We are, however, continuing to assess DOD efforts because of their importance and will report our observations.

We did not obtain formal comments on this report. However, we provided a draft of the report to DOD officials responsible for spare parts management, and incorporated their comments, as appropriate.

As arranged with your Offices, unless you publicly announce the contents earlier, we plan no further distribution of this report until 10 days from the date of the report. At that time we will send copies to the Secretaries of Defense, the Army, Navy, and Air Force. Copies will also be sent to the Chairmen, House and Senate Committees on Appropriations and Armed Services; the Directors, DLA and Office of Management and Budget; and other interested parties upon request.



Frank C. Conahan
Director

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Abbreviations

DESC	Defense Electronics Supply Center
DFAR	Defense Federal Acquisition Regulation
DLA	Defense Logistics Agency
DOD	Department of Defense
SA-ALC	San Antonio Air Logistics Center
SPCC	Ships Parts Control Center
TSARCOM	Troop Support and Aviation Material Readiness Command

Objectives, Scope, and Methodology

To gain a perspective on price growth, we measured the change between prices paid for the same item, then adjusted for time intervals if more than a year had elapsed between procurements. The analyses covered contracts awarded during the period from January 1980 through June 1983.

On contracts which showed price increases of 25 percent or more in a year or less, we evaluated the actions procurement officials took to justify acceptance of those increases. We selected the 25-percent criterion because annual price growth of this magnitude should have, in our opinion, resulted in close scrutiny of the offered prices. In addition, the Congress was considering Public Law 98-94¹ to limit price increases to 25 percent or less when we started our review. We did not determine the fairness or the reasonableness of the prices paid, but believe that any price that increased significantly in a short period of time should be questioned.

We visited the Army's Troop Support and Aviation Materiel Readiness Command (TSARCOM) in St. Louis, Missouri;² the Navy's Ships Parts Control Center (SPCC) in Mechanicsburg, Pennsylvania; the Air Force's San Antonio Air Logistics Center (SA-ALC) in San Antonio, Texas; and the DLA's Defense Electronics Supply Center (DESC) in Dayton, Ohio. These activities were selected because spare parts for ships, helicopters, aircraft, and electronics are acquired at these locations and therefore, a wide variety of spare parts for different types of equipment would be included in our analysis. At each location, we

- analyzed spare part unit price changes to determine the extent of price increases and decreases during the 42-month period ended June 30, 1983;
- selected a random sample of 100 procurements at each location from transactions where price growth of 25 percent or more occurred in a year or less;
- evaluated the adequacy of actions procurement officials took when significant price growth occurred on the basis of the criteria provided in

¹Public Law 98-94, Limitations on Price Increases, prescribes actions that must be taken by procuring officials when the award of a contract will result in a price increase of over 25 percent within the previous 12-month period. This requirement was added to the regulations effective January 25, 1984.

²The Army's TSARCOM was provisionally reorganized on October 1, 1983, into two separate commands, the Aviation Systems Command and the Troop Support Command.

the Defense Acquisition Regulation³ and the Armed Services Pricing Manual Number 2 (generally referred to as the small purchases manual);

- made comparisons to identify what influences certain factors, such as competition, quantity changes, and dollar value, have on price behavior; and
- interviewed officials to determine what actions had been initiated or planned to improve spare parts procurement.

We sorted spare parts by stock number and by award date, then compared the earliest unit price paid for an item to the next unit price paid for that item and computed the percent of price change. Table I.1 illustrates the methodology used to compute the price comparisons.

Table I.1: Price Comparison Methodology

Award number	Award date	Unit price
1	1-21-81	\$10
2	7-15-81	8
3	9-12-82	12
4	4-20-83	16

Price comparisons would consist of the following:

First award unit price = \$10
 Second award unit price = \$8
 Percent of price change = $(10-8) \text{ divided by } 10 = -20 \text{ percent}$

Second award unit price = \$8
 Third award unit price = \$12
 Percent of price change = $(12-8) \text{ divided by } 8 = +50 \text{ percent}$

Third award unit price = \$12
 Fourth award unit price = \$16
 Percent of price change = $(16-12) \text{ divided by } 12 = +33.3 \text{ percent}$

Table I.1 shows three price change percentages for this item. The percentages shown are absolute, that is, no allowance has been made for the time elapsed between buys. We adjusted the percentages, therefore, to allow for the time between buys. If less than 1 year had elapsed, we made no adjustments. If more than 1 year had elapsed, we calculated the price change on an annual basis. In the example, over a year elapsed between award 2 and award 3. Thus, we made the following adjustment to the price change percentage:

³The DOD supplement to the Federal Acquisition Regulation is now called Defense Federal Acquisition Regulation.

Table I.2: Conversion of Price Change Percentage to Annual Basis

Price change	= 50 percent divided by (days between awards divided by days in a year)
	= 50 percent divided by (424 divided by 365)
	= 50 percent divided by 1.16
Price change calculated on an annual basis = 43.1 percent	

We drew a random sample of 100 procurements from those with a price growth of 25 percent or more. We reviewed these sample procurements to determine what actions procurement officials took to justify acceptance of prices that had increased significantly.

To analyze the effect of competition, quantity change, and dollar value on price behavior, we compared the number of procurements that were awarded competitively to the number awarded noncompetitively. We then determined the percent of awards in each category where the price (1) decreased, (2) stayed the same, (3) increased up to 25 percent, and (4) increased more than 25 percent. We made the same comparison where the quantity of items bought had increased or decreased from the previous buy.

All of our comparisons were based on information taken from the activities' automated procurement information data bases. We compared the information obtained from these information systems to the data contained in the physical contract files. We therefore, obtained an indication of the accuracy of the data recorded in the automated procurement information systems. For example, at the Army activity, we compared 1,744 individual data items and the error rate was 0.5 percent.

The Secretary of Defense issued the spare parts initiatives on July 23, 1983, and August 29, 1983. Appendixes IV and V discuss the initiatives and their status.

In work conducted between June and December 1984, we obtained the services' and DLA's plans for implementing the spare parts initiatives announced by the Secretary of Defense. We interviewed officials who had been assigned responsibility for initiating action at the four activities. We obtained documents and statistical information to determine the status of these actions. We did not assess the effectiveness of the initiatives because it was too early; we plan to do so in future work. Our review was performed in accordance with generally accepted government auditing standards.

We did not obtain formal comments on this report. However, we provided a draft of the report to DOD officials responsible for spare parts management, and incorporated their comments, as appropriate.

Analysis of Price Growth

Contracts totaling an estimated \$187.4 million experienced price increases of 25 percent or more, yet adequate justification for accepting the price increases was not obtained. For example, price analyses were not made, prior suppliers were not solicited, and additional sources were not identified. In addition, required conditions for adequate competition were not met and written justifications for accepting offered prices were not convincing. Thus, where severe price increases occurred that should have resulted in scrutiny of proposed prices, we did not find evidence that such was the case. These conditions predate the DOD initiatives that were developed to address such problems and implementation of the initiatives is underway.

Acceptance of Significantly Increased Prices Not Justified

Even though price comparisons do not allow for distinctions between reasonable price increases due to contractors' costs and unjustified price increases, they do provide a basis for asking questions when increases appear unwarranted. Table II.1 presents the results of our analyses of price increases on the same items during the period January 1980 through June 1983.

Table II.1: Analysis of Price Increases

Price change category	Number of comparisons	Percent of comparisons	Dollars in millions	Percent of dollars
Decrease	144,026	39.04	\$1,443.6	38.67
No change	63,222	17.14	307.0	8.22
Increase up to 24.9%	111,510	30.22	1,561.4	41.82
Increase 25% or more	50,163	13.60	421.1	11.28
Total	368,921	100.00	\$3,733.1	99.99

Of the 368,921 procurement contracts we compared, 50,163 contracts showed price increases of 25 percent or more in a year or less. These 50,163 contracts represent transactions totaling \$421 million, or about 11.3 percent of total dollars spent on spare parts by the four activities visited.

From the 50,163 contracts showing price increases of 25 percent or more, we randomly selected 544 contracts for review. We could not reach a conclusion on 181 contracts because they were inaccurately coded in the automated systems or, at the time of our review, contract files could not be found. By the time personnel was able to locate the files, it was too late to include them in our review.

Of the 363 contracts where a conclusion could be reached, we found 217 with no satisfactory explanation (oral or written) for accepting the increased prices. In 146 cases, we found satisfactory explanations for accepting the significantly increased prices. Table II.2 provides detail by activity.

Table II.2: Adequacy of Procurement Activities' Actions

Activity	Sample size	Adequate		Inadequate		No Determination	
		No.	Percent	No.	Percent	No.	Percent
TSARCOM	118	34	28.8	43	41.5	35	29.7
SPCC	191	62	32.5	27	14.1	102	53.4
SA-ALC	135	41	30.4	59	43.7	35	25.9
DESC	100	9	9.0	82	82.0	9	9.0
Total	544	146	26.8	217	39.9	181	33.3

The samples taken at the four locations were projected over the universes from which they were drawn. The projections were made at the 95-percent confidence level with the associated standard error rate. We are, therefore, 95 percent confident that between 18,627 (38.2%) to 24,839 (50.9%) of the total 48,803¹ procurements were awarded without obtaining satisfactory explanations of the price increases. The median of this range, 44.5 percent applies to the \$421.1 million in table II.1 and indicates that \$187.4 million of contracts with price growth of 25 percent or more were awarded without adequate justification for accepting the price increases.

DOD Should Have Done More to Ensure Price Growth Was Justified

Both the Defense Acquisition Regulations (DAR) and the small purchases manual offer guidance for obtaining fair and reasonable prices. Yet, DOD was awarding contracts with inadequate or no justification for accepting the significantly increased prices. The DAR and the small purchases manual suggest such techniques as

- comparing bids,
- comparing prior quotations and contract prices with current quotations for the same or similar items,
- comparing bids with independent government cost estimates, or
- comparing bids with published price lists.

¹Our universe of 50,163 contracts was reduced by 1,360 because the prices of these contracts were established by activities we did not visit. Thus, it would be inappropriate to project the results of our work over the 1,360.

The guidance presumes that adequate competition should produce fair and reasonable prices and indicates that adequate competition exists when

- qualified offerors are not denied an opportunity to compete,
- proposed prices are not so far apart that they are not truly competitive, and
- responsive offers are received from two or more offerors who acted independently.

The guidance also indicates that,

“The obligation to contract at fair and reasonable prices does not diminish as we move down the scale from multi-million [dollar] contracts for system acquisition to nickel and dime items such as nuts, bolts, and screws.”

We compared the actions of DOD procurement personnel on the sampled procurements to the guidance provided in the DAR and the small purchases manual and found the following categories of inadequate price analyses:

Table II.3: Categories of Inadequate Price Analyses

Category	Number
Although buyer justified acceptance of the increased price on the basis of adequate competition, the required conditions for adequate competition were not met.	40
Buyer could not justify orally or in writing accepting significant price increases and did not use any of the standard price analysis techniques.	120
Buyer's written justification in the contract file was not convincing and procurement officials were unable to sufficiently demonstrate that prudent action was taken, particularly when one quote was received.	47
Very large price increases over short periods of time were accepted without question.	10
Total	217

The following presents more specific information on table II.3 categories.

The Required Conditions for Adequate Competition Were Not Met in 40 Procurements

Although buyers were justifying acceptance of significantly increased prices on the basis of adequate competition, in many cases, the previous supplier of the item was not solicited. Thus, qualified suppliers were denied the opportunity to compete. In other cases, the differences between proposed prices were so great as to raise a question as to

whether they were truly competitive. For example, in one case, two proposals were received, one at \$66.50 and the other at \$300. Although the difference between the two proposed prices was over 350 percent, the lower price was accepted on the basis of competition without questioning the wide difference. In other cases, two proposals were received but they were from contractors that had a prime/subcontractor relationship. The subcontractor, therefore, made the item and provided it to the prime who in turn provided it to the government. Thus, there was only one manufacturer.

Offered Prices Were Accepted Without Challenge in 120 Cases

Buyers and contracting officers simply accepted proposed prices without challenge. At one location, procurement officials made no attempt to find additional sources, determine if the increase in price was justified, or request price analyses from the appropriate in-house staffs. At another location, buyers and contracting officers did not take advantage of available purchase history data. Thus, they were not aware of the price increases.

As discussed on page 16, these buyers and contracting officers were encouraged to minimize the time spent on low dollar value procurements and operated in an environment where there was a strong emphasis on speedy award of contracts (productivity). While it is difficult to attribute an individual's actions solely to a single factor, we believe the emphasis and environment contributed to buyer and contracting officer willingness to accept significantly increased prices.

Written Justifications Not Convincing on 47 Procurements

While we did find written justifications in some contract files, the justifications were not convincing, particularly when the prices increased significantly. For example, in one justification the buyer stated, "The price was fair and reasonable because it compares with past history." When we looked at the contract file, we found that (1) the unit price had increased by 43 percent in less than 4 months, (2) the buyer did not ask the supplier why the price had increased even though the quantity procured had increased, and (3) a second available source was not asked to submit a quote or bid.

Large Price Increases in Short Periods of Time Were Accepted in 10 Procurements

At one location, even though 10 of the sampled procurements satisfied the technical requirements for adequate competition, multiple solicitations and multiple responses, they still experienced very large price increases over short time periods. For example, the price paid on one item increased 97 percent in 121 days and on another item 174 percent in 129 days. We asked the buyers if they had any indication of whether the solicited suppliers—other than the previously successful suppliers—could provide the required spare parts. The buyers stated they did not know whether these suppliers could provide the required parts, but simply accepted the low bid as permitted by the regulations without questioning the extraordinary price increases. We believe these situations should have prompted the buyers to make inquiries as to why the prices increased so dramatically and consider other alternatives rather than acceptance of the price. For example, the buyers could have cancelled the proposed procurement and requested a market search or conducted negotiations.

DOD Emphasized Productivity and Limited the Amount of Analysis Expended on Low Dollar Value Procurements

There was a strong emphasis on the speedy award of contracts (productivity) at the four activities visited. This emphasis was cited by a number of buyers and contracting officers and other procurement officials. In addition, buyers and contracting officers were encouraged to minimize the amount of resources expended in analyzing low dollar value procurements. We believe that these factors adversely affected the quality of pricing actions.

Productivity Emphasis

At one location, the Director of contracting wrote:

“... there is no question that in contracting, the emphasis on productivity has tended to de-emphasize the importance of competition. Developing new sources is a time consuming process that a good buyer can do, given the time and motivation to do so; however, constant pressure to meet productivity goals without similar emphasis on competition discourages the buyer from spending additional time on a given buy. We could go on and cite examples of what the emphasis on productivity without an attendant emphasis on quality has done; however, we think the emphasis on productivity pretty much speaks for itself.”

At another location, small purchases, \$25,000 or less, were processed in “assembly line fashion” with emphasis on the number of contracts awarded rather than quality. For example, buyers did not use standard

price analysis techniques to justify accepting significantly increased prices. Instead, officially approved statistical sampling procedures were used. Under these procedures, a number of items on the contract (about 5 percent) were selected for review. If the 5 percent was acceptable, 100 percent of the items were assumed to be reasonably priced. It was subsequently recognized that the potential for paying significantly higher prices under these procedures was great and they have now been eliminated. Conditions at this location, however, were not unique. A Deputy Under Secretary of Defense pointed out in testimony that “. . . our buyers . . . are endeavoring to fill ten or more purchase requests a day . . .” This official also stated “. . . the small purchase manual appears to have suffered from non-use. . .” (Underscoring supplied.) The manual referred to in the testimony is a primary source of guidance on how to perform price analysis on small purchases.

According to procurement personnel at another location, their simplified purchasing policy instructed buyers to routinely accept the low price as fair and reasonable when two or more suppliers quoted prices. This policy was not consistent, however, with DOD guidance which sets forth some of the actions a buyer should take in deciding if competition is adequate to ensure prices are fair and reasonable. These actions include assessing the differences between quotes, reviewing the price history of the item, comparing quotes to established market prices of similar items, and conducting value analyses.

Minimize Resources

In addition to emphasizing productivity, DOD discouraged buyers and contracting officers from using much of their time analyzing low dollar value procurements. For example, according to the guidance for procurements of less than \$1,000, buyers and contracting officers do not have to document their justification for accepting offered prices as fair and reasonable. In other words, they can award contracts with no written record as to why a price was acceptable.

The guidance also permits the use of simplified purchasing procedures to award contracts of \$25,000 or less. Under these procedures, buyers and contracting officers orally solicit bids (usually by telephone) and award the contract to the low offeror.

As shown in table II.4, low dollar value procurements account for a very large percentage of total procurements and an even larger percentage of those with price growth of 25 percent or more.

Table II.4: Number of Total Procurements and Procurements Increasing in Price by Over 25 Percent in Dollar Ranges During the 42-Month Period Ending June 30, 1983

Dollar range	Total procurements		Procurements with 25 percent or more price growth	
	Number	Percent	Number	Percent
\$0 - \$1,000	172,329	46.7	27,046	53.9
1,001 - 10,000	151,419	41.0	11,943	35.8
10,001 - 25,000	25,046	6.8	3,050	6.1
25,001 - 50,000	9,957	2.7	1,003	2.0
50,001 - 100,000	6,028	1.6	650	1.3
Over - 100,000	4,142	1.1	471	.9
	368,921	99.9	50,163	100.0

Table II.4 shows that small purchases (procurements of \$25,000 or less) make up 94.5 percent of all procurements and 95.8 percent of procurements with price growth of 25 percent or more. Procurements over \$25,000 make up 5.4 percent of all procurements but 4.2 percent of those with significant price growth. This may reflect DOD's policy of allocating resources for price analysis based on contract dollar value. High dollar value contracts receive greater attention than small dollars. This is most notable on procurements of \$1,000 or less. These procurements account for a disproportionate share, 53.9 percent of those with price growth of 25 percent or more when compared to their share of the total universe, 46.7 percent.

Conclusions

Significant price growth occurred in the procurement of spare parts. However, DOD personnel did not obtain adequate explanations that would justify acceptance of significantly increased prices. Instead, prices, in many cases, were simply accepted without challenge. This acceptance was, to some extent, caused by the emphasis on productivity—number of awards made—rather than the quality of prices obtained. Further, procurement personnel were encouraged to limit the amount of analyses performed on low dollar value procurements.

Other Studies on Spare Parts Procurement

The DOD Inspector General and the Office of Federal Procurement Policy did studies of spare parts procurement. Both organizations reached essentially the same conclusions that we did.

- Problems exist in the pricing of spare parts.
- The problems are generally on low dollar value contracts.
- The process and personnel are not sufficiently price conscious, preferring the “easier, faster, and safer” methods of awarding contracts.

Issued on May 25, 1984, the DOD Inspector General report—a summary of the results of individual audits by the Army Audit Agency, the Naval Audit Service, and the Air Force Audit Agency—used criteria, such as lower prices available from other sources or uneconomical quantities purchased, to demonstrate that DOD paid unnecessarily high prices. In addition, it compared the price paid by DOD with the cost incurred plus reasonable profit as reflected in contractors’ records and verified by audit to demonstrate that, to some extent, contractors charged unreasonable prices.

While the DOD Inspector General report endorses DOD’s initiatives for corrective action, it cautions that applying the initiatives to all spare parts procurements, regardless of dollar value, may not be cost effective. For example:

- The Army Audit Agency suggested developing a model to compare the additional costs that would be incurred to breakout¹ or compete spare parts with the savings from reduced prices.
- It also pointed out that an alternative to adding in-house personnel to perform breakout procedures is to contract out the function.
- Another Army Audit Agency suggestion was that a joint effort by the three services and DLA to develop an automated system to research the availability of technical data would be less expensive than having four separate efforts.
- The Air Force Audit Service suggested testing the cost effectiveness of breakout procedures at specific dollar thresholds, such as \$2,500, \$5,000, and \$7,500.
- The Air Force Audit Service stated that guidance is needed on the minimum steps that should be taken for various sizes of procurements. The concept is that some minimum amount of analyses should be performed

¹Breakout procedures are used by buying activities to determine if an item (spare part) being purchased from a single source can be acquired competitively.

on every spare parts procurement, but the cost of such analysis should result in net savings to the government.

The DOD Inspector General report expresses some reservations regarding the cost effectiveness of spare parts breakout where a major portion of any price reduction is prime contractor overhead. It points out that the savings shown in a comparison of the price previously paid the prime contractor and the price paid as a result of breakout may not reflect actual savings because the government may still pay the prime contractors' overhead, through overhead allocations to other government contracts.

The Office of Federal Procurement Policy report, issued on June 1, 1984, observes that (1) there are problems in the procurement of spare parts and some are not new, (2) the horror stories make the problems seem much more common than they actually are but do, however, serve as a warning that additional management is needed and corrective action is required, and (3) DOD's initiatives for corrective action are ambitious and will require the continued support of the Secretary of Defense, the Congress, and the managers in the departments and defense agencies. The report maintains that adequate resources, as well as time to refine and sustain the new initiatives, are essential.

Conclusions

The two studies identify the major challenges DOD will encounter during the implementation of the initiatives. These are making the initiatives cost effective and permanent in nature. We believe it will be some time before a definitive assessment can be made that will indicate the success of the initiatives and their implementation.

DOD's Initiatives to Resolve Management Problems

The Secretary of Defense set the tone for the DOD position on unwarranted price growth and/or excessive pricing on spare parts procurement. The tone was firm and serious. In the July and August 1983 memorandums, the Secretary called for

- refunds on a voluntary or legal basis;
- procedures for debarring and/or suspending contractors;
- refusal to do business with contractors guilty of excessive pricing;
- continued audit by the DOD Inspector General and service auditors; and
- identification of alternate sources, including foreign sources.

The Secretary of Defense called for each department and DLA to initiate comprehensive programs to fully address the problem. In addition, the Secretary called for efforts by the DOD Inspector General and the Deputy Secretary of Defense and established a position of Deputy Assistant Secretary for Spares Program Management.

Action by the Services and DLA

Each service and DLA initiated programs in response to the Secretary's memoranda. The programs have many similarities, such as increasing the use of competition and buying more spare parts directly rather than through prime contractors (breakout). There are also differences between the programs.

Army

The Army's plan—spare parts review initiatives—consists of 64 initiatives covering personnel, requirements, pricing, data management and rights, increased competition, and automation.

The Director of the Procurement and Production Directorate, Army Materiel Command, monitors the spare parts review initiatives and the progress of major subordinate commands. A Deputy Program Manager for Spares assists the Director. The Deputy has counterparts at each of the major subordinate commands who monitors implementation at the various locations. The commands submit quarterly reports to the Army Materiel Command which describes their progress in implementing the initiative.

As indicated in appendix III, the Army Audit Agency suggested a cost model to determine if breakout or competition was cost effective. The Army Materiel Command agreed and stated a model would be evaluated. The Army Audit Agency in a followup to its earlier audit found the model was not being used. The Army Materiel Command and Audit

Agency are currently discussing implementation of this recommendation.

The Army Audit Agency also suggested that future years' requests for additional personnel and funds for automation be evaluated using economic analysis and comparisons of in-house costs with contractors' costs. The evaluation would identify and analyze alternatives, measure the costs and benefits of each, and select the least costly. The Army Materiel Command stated this policy would be followed and pointed out that action was underway to contract out a portion of the screening and coding of spare parts at major subordinate commands.

Navy

The Navy's program—buy our spares smart—consists of 102 initiatives. Many of the initiatives are directed toward increasing the use of competition at the Navy's inventory control points: Aviation Supply Office and SPCC.

The Navy Supply Systems Command is responsible for the Navy program and established most of the initiatives. The Naval Supply Systems Command tracks the progress of the initiatives by its own activities, such as the Aviation Supply Office and SPCC, and the hardware commands, such as Naval Air Systems Command and Naval Sea Systems Command. The Naval Supply Systems Command reports twice a month to the Assistant Secretary of the Navy for Shipbuilding and Logistics on the progress of its initiatives.

Air Force

The Air Force was a leader in recognizing the problems plaguing the acquisition of spare parts. The Air Force Management Analysis Group—a group drawn from major Air Force Commands, Air Staff, General Counsel, DLA, and the Office of the Secretary of the Air Force—was among the first to conclude that the potential for paying significantly higher prices for common, low value items was great.¹

The Group presented 178 initiatives to improve spare parts acquisition. The initiatives cover many of the same areas as the Army's and the Navy's. A board of general officers meets monthly to assess the progress of the initiatives and advises the Secretary of the Air Force of the progress made.

¹The Air Force Management Analysis Group report, October 1983.

One of the areas developed in the Management Analysis Group report was the effect of requesting a prime contractor to provide a variety of services. The costs of these services, such as configuration management, provisioning, and repair management, and repair procedures development are allocated to production contracts, including those for spare parts. Prime contractors, therefore, find it difficult to compete with vendors or subcontractors who are not required to provide the same services. For example, a prime contractor provides a quote that reflects its costs of producing the spare part plus an allocated portion of the costs it incurred to provide various services. A vendor or subcontractor quotes the cost of producing the spare part, but is not required to provide such services. The reduction in price or "savings," therefore, may be significantly less than the difference between prime contractor and vendor quotes because the allocated prime contractor costs must still be paid. The net effect may very well be a transfer of such costs from spare parts contracts to other government contracts with little reduction in overall cost to the government. The Group's report noted there could even be an increase in costs if the government assumes responsibility for performing the related services on the spare parts procured competitively or directly from vendors.

DLA

Initially, DLA implemented the spare parts initiatives within its existing organization and monitored the implementation through its Competition Advocacy Program. As of May 1985, DLA reorganized and established the Spare Parts Pricing and Competition Office to centralize and provide oversight on efforts to implement the spare parts initiatives.

DLA has, for example, had its senior managers visit contractors to obtain data that should allow more items to be bought competitively. DLA also made a number of changes in its Directorates of Technical Operations at its hardware centers to (1) improve liaison with buyers, (2) implement the breakout programs with increased staff, and (3) improve data storage and retrieval capabilities to be more responsive to buyers' needs.

The DOD Inspector General audited DLA's spare parts pricing. The Inspector General reported that proposed or offered prices on procurements of \$1,000 or less were accepted with no analysis. This observation is significant because most of DLA's procurements are for \$1,000 or less. For example, at DESC 53.3 percent, or 98,022 awards, were for \$1,000 or less over the period January 1980 through June 1983. DESC reported a

fiscal year 1983 competition rate of 56 percent. Thus, it can be estimated that 43,130 noncompetitive procurements were made where the prices proposed or offered were accepted with no analysis.

The auditors pointed out that implementation of a series of corrective actions had already begun and concluded these actions should substantially reduce pricing problems. The auditors suggested additional steps such as challenging the contractor's proprietary claims to data, identification of items that show excessive prices, procurement in quantities that take advantage of price breaks, and greater consideration of alternate vendors. DLA concurred and agreed to act on most of the suggestions.

Other DOD Officials Are Focusing on the Problem

The Secretary of Defense assigned spares responsibilities to three prominent officials. First, the Secretary ordered the DOD Inspector General to

- notify the secretaries of the departments and the Director, DLA, of unreasonable pricing so refunds are sought in all cases where appropriate;
- audit, with the Defense Contract Audit Agency's assistance, defective pricing at contractor plants where spare parts pricing had been found unreasonable; and
- work with the secretaries and the Director, DLA, to set implementation dates for the corrective action and to schedule follow-up audits.

Second, the Secretary of Defense designated the Deputy Secretary of Defense as the official responsible for monitoring the progress of the initiatives. The Deputy Secretary, in a May 31, 1984, letter to the service secretaries and directors of defense agencies stated:

"As Chairman of the Defense Council on Integrity and Management Improvement, I shall continue to serve as the DOD focal point for sustained high-level management attention to the spare initiatives.

"You are presently reporting costs and benefits being achieved in your programs in periodic meetings with Dr. James P. Wade, Jr., Principal Deputy Under Secretary of Defense for Research and Engineering. I wish this activity to continue for the present. It has proven an excellent vehicle for coordinating activities, transfusing ideas, conforming policy, sharing concerns, and working problems. While our emphasis might ultimately shift, the concept and format are sound."

The meetings referred to by the Deputy Secretary of Defense were held quarterly and are continuing. At these meetings, the departments and DLA presented the status of their implementation efforts.

Third, the Secretary of Defense named a Deputy Assistant Secretary of Defense for Spares Program Management to

- organize and improve consistency among initiatives already undertaken,
- define areas to which additional attention should be dedicated, and
- develop a strategy to ensure continuing focus on critical aspects of the spare parts management reform.

**Observations on
Competition and
Quantity Buys**

One of the initiatives receiving strong emphasis is the increased use of competition. Competition is the preferred method of government procurement, because it establishes price reasonableness through forces in the marketplace. Increasing the quantities procured is another initiative receiving emphasis. Increasing the quantity procured should provide contractors with the opportunity to reduce unit prices by taking advantage of efficiencies inherent in larger production efforts. We analyzed the data developed in our review to determine if the emphasis on competition and increasing quantities had an effect on prices.

Competition

Our analysis is based on data from the Army and Air Force activities visited. As stated on page 31, the reliability of competition data at the Navy and DLA activities was somewhat questionable so it was not used. The results of our analyses are summarized in table IV.1.

Table IV.1: Comparison of the Number of Competitive and Noncompetitive Procurements by Price Change Category

Price change	Competitive		Noncompetitive	
	Number	Percent	Number	Percent
Decreased	8,771	48.3	11,323	30.9
None (same price)	1,436	7.9	4,820	13.2
Less than 25 percent increase	5,794	31.9	15,207	41.6
More than 25 percent increase	2,173	11.9	5,249	14.3
Total	18,174	100.0	36,599	100.0

Our analysis indicates that to some extent the existence of competition reduces the frequency of price growth as well as the severity of such growth. Of the 18,174 competitive procurements, 10,207, or 56.2 percent, decreased in price or remained the same. Conversely, 16,143, or 44.1 percent, of the noncompetitive procurements experienced a

decrease or no change. Further, 11.9 percent of the competitive procurements increased in price by 25 percent or more while 14.3 percent of the noncompetitive procurements did the same.

Competition, therefore, appears to ameliorate price growth, but is not a panacea. While competitive procurements showed a lower frequency rate of price growth, 43.8 percent did increase in price.

Increased Quantities

Larger quantity procurements have obvious advantages. Ordering in economic quantities also permits contractors to offer lower unit prices because of efficiencies inherent in larger production runs. Large buys require less personnel than frequent small quantity buys and large value contracts would require more analysis of proposed prices.

There are some disadvantages as well. Larger buys require higher initial investment and will increase inventory carrying costs with the attendant risk of obsolescence or excess. Larger buys, therefore, increase the need to have accurate data to forecast correct quantities.

The results of our analysis at all four locations are summarized in table IV.2.

Table IV.2: Price Changes by Quantity Variation

Price change	Transactions where quantity decreased from previous buy		Transactions where quantity increased from previous buy	
		Percent		Percent
Decrease	25,468	20.4	108,374	55.0
None (same price)	18,981	15.2	25,749	13.1
Less than 25 percent increase	49,527	39.7	48,296	24.5
More than 25 percent increase	30,756	24.7	14,611	7.4
Total	124,732	100.0	197,030	100.0

Of the 197,030 procurements where quantities were increased, 134,123, or 68.1 percent, decreased in price or remained the same. When quantities decreased, only 35.6 percent decreased in price or stayed the same. The comparison of severe price growth is perhaps more striking. When quantities increased, 7.4 percent of the procurements had price growth of 25 percent or more. When quantities decreased, 24.7 percent of the procurements experienced severe price growth. This data indicates that buying in larger quantities does have a salutary affect on unit prices.

Conclusions

The Secretary's memoranda and the responses from the services and DLA have produced a corrective action plan commonly referred to as spare parts initiatives. The DOD Inspector General has pointed out the need for assessing the initiatives on a cost effective basis and has recognized that the amount of resources to be expended on low dollar value procurements requires continuing attention. A system for monitoring progress has been established with oversight by higher level management. In short, processes have been established to address the problems that have long plagued the pricing of spare parts.

Our analysis indicates that DOD's emphasis on competition and quantity is well placed. Available data suggests that increased competition and quantities tend to reduce the prices paid for spares. Of course there are other issues that have to be considered. These are:

- If price reductions are primarily attributable to excluding overhead or other allocated costs and these costs are transferred to other items then any savings will be substantially less than what a price comparison would indicate.
- If the services and DLA take longer to buy spare parts, the increase in pipeline time is a significant cost that will have to be considered.
- If larger quantities are procured, will inventory carrying costs and the associated risks of obsolescence and excess offset any savings attributable to reductions in unit prices?
- If breakout procedures are used as the primary means of achieving reduced prices, will quality and system integrity go down?
- Once breakout has been achieved, future procurements will be sole source unless other actions are taken, such as acquiring technical data packages, dual sourcing, or licensing.

Follow-Up on DOD Corrective Actions and Legislation on Spare Parts Procurements

DOD and the Congress have initiated a series of actions to resolve problems in spare parts management. We were requested to obtain information on a number of these actions. Primary interest was in the following areas:

Industry—Awareness of DOD's actions, initiatives taken, and seriousness of the problem.

Data base—Accuracy, reliability, and corrective actions, if any.

Personnel—Evaluation, training, new hires, and incentive/penalty procedures.

Local Initiatives—Actions taken by an activity to improve the pricing of spare parts.

We obtained the requested information at the four activities where we performed our review of price growth. We did not attempt to assess the effectiveness of the actions because sufficient time had not elapsed since the actions were initiated. Information on the progress being made is presented below.

Industry's Reaction

A number of actions were taken to communicate to industry the seriousness with which the spare parts pricing problems are viewed and the initiatives undertaken to resolve them. The actions involved publicizing the initiatives and meetings or discussions with corporate officials. We visited or contacted 23 large and small contractors to determine if "the message had been received," whether it was considered serious, and their views on the spare parts issue.

All of the contractors indicated they "had gotten the message" regarding the seriousness with which DOD views the pricing of spare parts. The awareness came from media coverage of instances of apparent spare parts overpricing, direct contact and/or correspondence with departmental and DLA officials, or both. Some contractors indicated they were aware of the seriousness because buyers had tried to negotiate better prices and had required more justification for price quotes. Others stated they were aware because buyers seemed to be requesting price breakouts and best and final offers more frequently.

Many of the contractors indicated they viewed the spare parts pricing problem with concern. These contractors pointed out that although their

companies were already doing a good job of providing spares at reasonable prices, they had taken additional steps. Among these were

- identifying spare parts that can be ordered directly from vendors,
- notifying the activity when the quantity desired is not economical and recommending an economic quantity,
- issuing a statement of corporate policy on spare parts pricing that emphasizes a corporate commitment to fair and reasonable prices, and
- cooperating with DOD to identify parts suitable for competition.

Some companies, to avoid the adverse publicity of an apparently over-priced part, have indicated they will provide selected spare parts at prices lower than the cost of their production, when necessary. Others have indicated they would price a part at zero rather than risk the adverse publicity or DOD reaction.

Industry views of the initiatives varied widely. Some contractors believe competition is already so intense that no additional steps are necessary. Others pointed out that some of the changes may result in DOD paying more for spare parts.

Large contractors indicated the costs reflected in spare parts prices are valid. Thus, while they may be forced to change their method of pricing spare parts, these costs will be reflected in other procurements. They also expressed support for DOD's efforts to increase competition or buy directly from vendors. However, they believe these efforts should consider the following:

- Reducing the business base results in higher indirect costs per unit.
- There are legitimate reasons for buying spare parts through prime contractors, although subcontractors actually manufacture the items. Some of the reasons cited by prime contractors are that they are responsible for systems integrity, safety, configuration control, or various improvement programs. In their view, the value (cost) added reflects a significant contribution.
- Any efforts that require giving up proprietary rights to spare parts that are also used in commercial operations will not be supported.

Also, a number of suggestions were made by the contractors regarding improvements DOD could make in the procurement of spare parts. The suggestions included the following:

- Eliminate the over-engineering of weapon systems by the military and contractors. Such efforts drive up the costs of the systems and related spare parts.
- Absorption in spare parts pricing of costs associated with research and development of weapon systems should be avoided. Such absorption by spares distorts the true cost of the system and distorts spares pricing.
- If the services could annualize their requirements, contractors could do a better job of procuring what is needed and passing on savings.
- Procurement of low dollar value spare parts should be in economic order quantities to avoid high unit costs resulting from repetitive small quantities.
- Government assigned acquisition method codes should be validated because many are obsolete or incorrect, leading to requests that prime contractors furnish parts which could and should be procured on a competitive basis.

Reliability of the Data Base

All of the activities visited have automated procurement information systems that provide a record of current activity as well as past procurements. The systems, therefore, can identify how a spare part was previously procured (competitive or sole source), the unit price paid, the supplier, and quantity. Thus, buyers have a basis for comparing the current and previous buys.

We compared selected data elements such as unit prices, award dates, contractor identity, and national stock numbers, as recorded in the automated systems to the same data elements recorded in the physical files of the randomly sampled procurements. Our random sample was designed to project the results of our review over all procurements. However, our data reliability test was limited because we did not determine if every award was recorded in the automated system or verify other recorded data elements. Nevertheless, we believe this limited test provides a good indication of how accurate data is recorded in the automated systems.

At SA-ALC, and TSARCOM, we found an acceptable error rate—3.4 percent at SA-ALC and 0.5 percent at TSARCOM. The data base is, therefore, sufficiently accurate to show trends on the extent of competition and price growth.

The SA-ALC plans to improve its data base accuracy by increasing the number of coding clerks in the Data Systems Branch so a 100-percent verification of data entered into the automated system can be made.

Prior to September 1984, verification was performed on roughly 10 percent of the data entered.

SPCC

Our review disclosed and SPCC personnel confirmed that the system was erroneously programmed to record all automated procurements as competitive without regard to the actual method of procurement. As a result, we could not use the data in our various analyses. SPCC will no longer record this data in the automated procurement system. Buyers at SPCC, therefore, will have to determine how an item was previously procured by other means.

The extent of competition shown in the SPCC automated system, however, was not the basis for reporting competition statistics to a higher naval command. Data on competition is reported under the DOD-wide (DD Form 350) system that provides statistics on each procurement over \$25,000 and summary statistics on those below \$25,000. We sampled a number of reports prepared under the DD Form 350 system and found that data to be accurate. Thus, while the extent of competition previously shown in the SPCC automated system was incorrect, the data on competition reported to a higher naval command via the DD Form 350 system was accurate.

DESC

We found similar conditions—incorrect competitive data in the automated procurement information system—at DESC. Three procurement systems are in use. Two of these, Phase I and Phase II, are automated and the third is manual.

Phase I consists of an automated system where awards up to \$1,000 are made to suppliers at the top of rotating lists. The system automatically codes the awards as noncompetitive.

Phase II consists of a system that selects the low bidders for awards up to \$10,000. The system is designed to identify and solicit three to five suppliers for quotes, evaluate the quotes when received, and select the low bidder. These awards are automatically coded competitive. Procurements of more than \$10,000 are manually awarded.

We reviewed a random sample of 100 Phase II awards and found that 36 percent were automatically coded competitive when the contract files showed these awards to be noncompetitive. Included in the remaining awards that were coded correctly, were 30 awards, or 30 percent, where

multiple quotes were received but a single manufacturer's part was represented. This occurs when a number of distributors are solicited and all represent the same manufacturer. While it is fair to presume there is competition among the distributors, the manufacturer is in a position to control the price of the items made available to the distributors.

We also selected a random sample of 100 manual awards (over \$10,000) for review. The files for one award could not be located so 99 were reviewed. Of the 99, 89 or 90 percent were coded correctly. Included in the 89 awards coded competitive, were 10 awards made on the basis of multiple quotes from distributors representing one manufacturer.

We discussed the errors in DESC's automated system with DESC officials and were told that DLA Headquarters controls the system and DESC is not permitted to initiate changes. A DESC official said they do not plan to suggest any changes and are not aware of any DLA plans to change the system. We then discussed this matter with DLA Headquarters personnel and provided the results of our sample test. DLA personnel stated they would review the matter, particularly costs and benefits of any change and, depending on the outcome, consider a change.

Personnel

A number of the spare parts initiatives required personnel actions. These actions were intended to motivate personnel as well as communicate what was expected. For example, incentives and the threat of penalties are being used as motivators while training and revised standards are used to establish desired performance.

Incentives

Each service and DLA have established monetary and nonmonetary awards to recognize employee contributions to cost avoidance or savings from the spare parts initiatives. Data on these awards for fiscal year 1984 is presented below.

Army

Two hundred and ninety-nine persons received awards averaging \$750 for a total of \$224,250. Numerous nonmonetary forms of recognition such as certificates of achievement and letters of commendation or appreciation were also issued.

Navy

Two hundred and one persons were recognized for their contributions resulting in cost avoidances totaling \$13.6 million. Of these, 116 were given monetary awards totaling \$22,383, and 85 received nonmonetary recognition.

Air Force

Over \$71,000 was awarded to personnel identifying overpricing under the Zero Overpricing Program. Another award to recognize individuals who make significant contributions to increasing competition was established. A civilian and a military employee received these awards.

DLA

Four hundred monetary awards were given. DLA also presents a quarterly nonmonetary award in recognition of employees' outstanding contribution on a DLA-wide basis. Two of these awards were made in fiscal year 1984.

Penalties

No formal disciplinary actions attributed directly to negligence under the spare parts initiatives had been taken through December 1984. Officials at all four locations stated their existing rating systems would identify buyers and/or contracting officers that were not performing adequately. These officials believe that inexperience and a lack of training are the usual reasons identified as the causes for marginal performance and identification of these causes are indications of a need for additional training not punishment.

Additional Personnel or New Hires

DOD told the Congress that it would require increased personnel to carry out the spare parts initiatives and estimated it would take 3 to 5 years before implementation is complete. The Congress approved the 1984 and 1985 requests for additional personnel to work on the initiatives. The congressionally approved personnel increases and the number hired by service are shown in table V.1.

**Appendix V
Follow-Up on DOD Corrective Actions and
Legislation on Spare Parts Procurements**

Table V.1: Congressionally Approved Personnel Increases and Number Hired by Service

Service	Fiscal year 1984		Fiscal year 1985 Cumulative		Fiscal year 1986
	Approved	Hired	Approved	Hired	Cumulative Estimate of Requirement
Air Force	1,000	950	2,849	1,555	2,988
Army	1,063	871	1,146	905	1,205
Navy	664	597	789	•	993
DLA	836	360	1,184	•	1,184
Total	3,563	2,778	5,968	2,460*	6,370

*Excludes Navy and DLA because data was not shown in the Navy and DLA reports of October 1984.

We were asked to determine if these new personnel had been assigned to work on the spare parts initiatives at the four activities. We found that all four activities had been allocated a portion of the increased personnel and planned to assign them to procurement, breakout, and the competition advocacy office. The new hires consist of buyers, price analysts, procurement clerks, contract negotiators, and administrators, as well as engineers to serve as cost estimators and technical data reviewers.

Training of Personnel

The Army stated in its January 3, 1985, report to the Office of the Secretary of Defense, that over 25,000 hours of locally developed training has been given and a formal 40-hour spare parts management course had been established. Over 120 employees completed the formal course and 2,000 were scheduled for fiscal year 1985. At the location we visited, internal training films are used to emphasize to employees the various difficulties in pricing spare parts and to provide information on the sources available for learning about the items they buy.

The Navy stated in its January 7, 1985, report to the Office of the Secretary of Defense that the Naval Investigative Service held training for contract management review teams and internal control personnel in contract fraud detection techniques. At SPCC, the training division provides six courses for contracting department personnel. The courses cover small purchases, acquisition contracts (basic and advanced), cost and price analysis, negotiation workshops, and contract law. Senior buyers are required to take these courses during their formal training—usually during their first 2 years as a senior buyer.

Fiscal year 1984 reports maintained by the contracting department of SPCC showed 72 percent to 76 percent of the senior buyers were

attending or had completed four of the six required courses. The reasons some employees have not received all required training courses were (1) the contracting department had hired many new employees and they had not yet been scheduled for the required training and (2) many of the higher grade senior buyers were in that position when the training requirement was established and were grandfathered into the position. The contracting department also had plans to initiate product familiarity training for its buyers. The training will consist of an ongoing series of seminars designed to provide buyers with a general overview of the operation, use, and maintenance requirements of items in the Navy inventory.

The Air Force, in its December 20, 1984, report, stated about 600 students were currently enrolled in a training program designated Pacer Produce II. This program provided in-depth training applicable to contracting procedures and policies. Over 450 of these trainees were fiscal year 1985 new hires. The training was being held at Air Logistics Centers. In addition, a major project, Copper Top, has been undertaken to significantly reduce the current training backlog for the existing contracting work force. The Air Force estimated that the backlog would be eliminated by fiscal year 1989.

The new employees assigned to the SA-ALC graduated from an earlier Pacer Produce program. Upon arrival at SA-ALC, the new hires received a two phase training program. The first phase consisted of an orientation to SA-ALC and the second phase was on-the-job training to learn procedures to accurately process purchase requests.

DLA reported on December 17, 1984, that programs had been initiated to provide all contracting personnel with mandatory training by the end of fiscal year 1986. About 570 contracting and contract management personnel were expected to complete training in fiscal year 1985. Intern training programs are being expanded and participation in the Army developed spare parts acquisition courses has been initiated.

At DESC, new buyers are assigned to the training branch for 4 weeks of classroom work. The classroom training provides an overview of the procurement function, policies, and practices. Pricing is one of the subjects included in this 4-week session. The buyers are then assigned to a buying branch to work under the direct supervision of an experienced buyer for about 5 months.

Trainee buyers are required to complete three additional courses during their first 2 years with DESC. They must complete (1) Management of Defense Acquisition Contracts (4 weeks), (2) Defense Contract Negotiation Workshop (1 week), and (3) either Principles of Contract Pricing (3 weeks) or Defense Cost and Price Analysis (2 weeks). These courses have been mandatory for contracting and acquisition personnel since at least December 1982.

Personnel Evaluation

Each of the services and DLA were required, under the initiatives established by the Secretary of Defense, to revise the performance evaluation factors of acquisition and logistics managers to include emphasis on spare parts pricing, breakout, competition, and value engineering accomplishments. The status of the required revisions was reported to the Deputy Assistant Secretary for Spares Program Management by the services and DLA in December 1984 and January 1985. We also reviewed these changes at the four activities included in our review.

DLA reported that contract management activities and purchasing centers had been instructed to incorporate an evaluation factor on the effectiveness of resolving contract audits into the performance appraisal criteria for all contracting managers, including contracting officers.

Performance standards for buyers at DESC were also revised to include the following:

"Complies with all instruction, programs, and basic contracting principles toward quality in pricing, efforts in breaking out sole source, utilization of value engineering techniques, and maintenance of a high level of competition."

The Air Force reported that its Logistics Command and Systems Command had completed the required revisions in time for the rating period July 1, 1983, to June 30, 1984. Further, Air Force and Command Inspector General's teams are to review performance plans during on-site inspections.

At the SA-ALC, we noted two new requirements had been added to the general managers' appraisal. Managers are now required to support the spares breakout and competition programs and maintain surveillance over the quality of spare parts pricing.

The standard for the first requirement states that the manager should actively seek to identify areas of individual spares requirements which may be suitable for breakout or competitive acquisition. The standard for the second requirement states that the manager shall remain current in regulations, policies, and procedures relating to the determination of prices paid for spares and ensure that techniques employed emphasize obtaining prices commensurate with item value.

The Army reported that the necessary revisions to the standards had been made. The Army further reported that the revisions identify specific spare parts responsibilities and provide for incentives for good performance as well as corrective action for poor performance.

The Navy also reported that revisions had been made. At the time of our review, SPCC planned to establish a quantitative performance standard (e.g., if over three procurements are made where the price is found not to be fair and reasonable, a lower performance appraisal will result).

Local Initiatives

A number of local initiatives have been taken at the activities visited. We believe the willingness to undertake local initiatives indicates that the widespread publicity has had an effect at the procurement activity level. Some of these local initiatives were

- obtaining specific levels of approval before procuring spare parts where price growth has occurred,
- setting up a hotline to report suspected overpricing and encouraging employees to use it,
- providing video tapes of items so that buyers could become more familiar with the items they are purchasing,
- identifying repetitive sole-source procurements as "targets for competition,"
- developing a method of forecasting buy quantities over longer periods, and
- challenging claims of proprietary rights.

These examples are not all inclusive. Many additional local initiatives deal with the various aspects of the spare parts management program.

Recent Legislation

The Competition in Contracting Act, Public Law 98-39, was enacted on July 15, 1984, and became effective April 1, 1985. The legislation establishes full and open competition as the government's primary method of

acquiring goods and services, including spare parts. Use of noncompetitive procurement is subject to various approvals and may be used only when fully justified. In addition, the head of each executive agency is to report to the Congress by January 31, 1986, 1987, 1988, and 1989, on the following:

(1) All actions the agency intends to take during the current fiscal year to increase competition for contracts on the basis of cost and other significant factors and reduce the number and dollar value of noncompetitive contracts.

(2) The activities and accomplishments of the competition advocate during the preceding fiscal year.

The competition advocate is the official within the Army, Navy, Air Force, and DLA responsible for increasing the use of competition in the award of contracts. The advocates are to publicize the increases desired, monitor performance, and designate specific types of procurements particularly suitable for increased competition. The advocates' responsibilities cover all agency procurements, including spare parts.

Section 1201 of the Defense Authorization Act, 1985, was designated as the "Defense Procurement Reform Act of 1984." Section 1202 of the Reform Act states:

"The Congress finds that recent disclosures of excess payments by the Department of Defense for replenishment parts have undermined confidence by the public and Congress in the defense procurement system. The Secretary of Defense should make every effort to reform procurement practices relating to replenishment parts. Such efforts should, among other matters, be directed to the elimination of excessive pricing of replenishment spare parts and the recovery of unjustified payments."

The act sets forth specific actions that are to be taken by DOD to improve the pricing of spare parts. Among these are

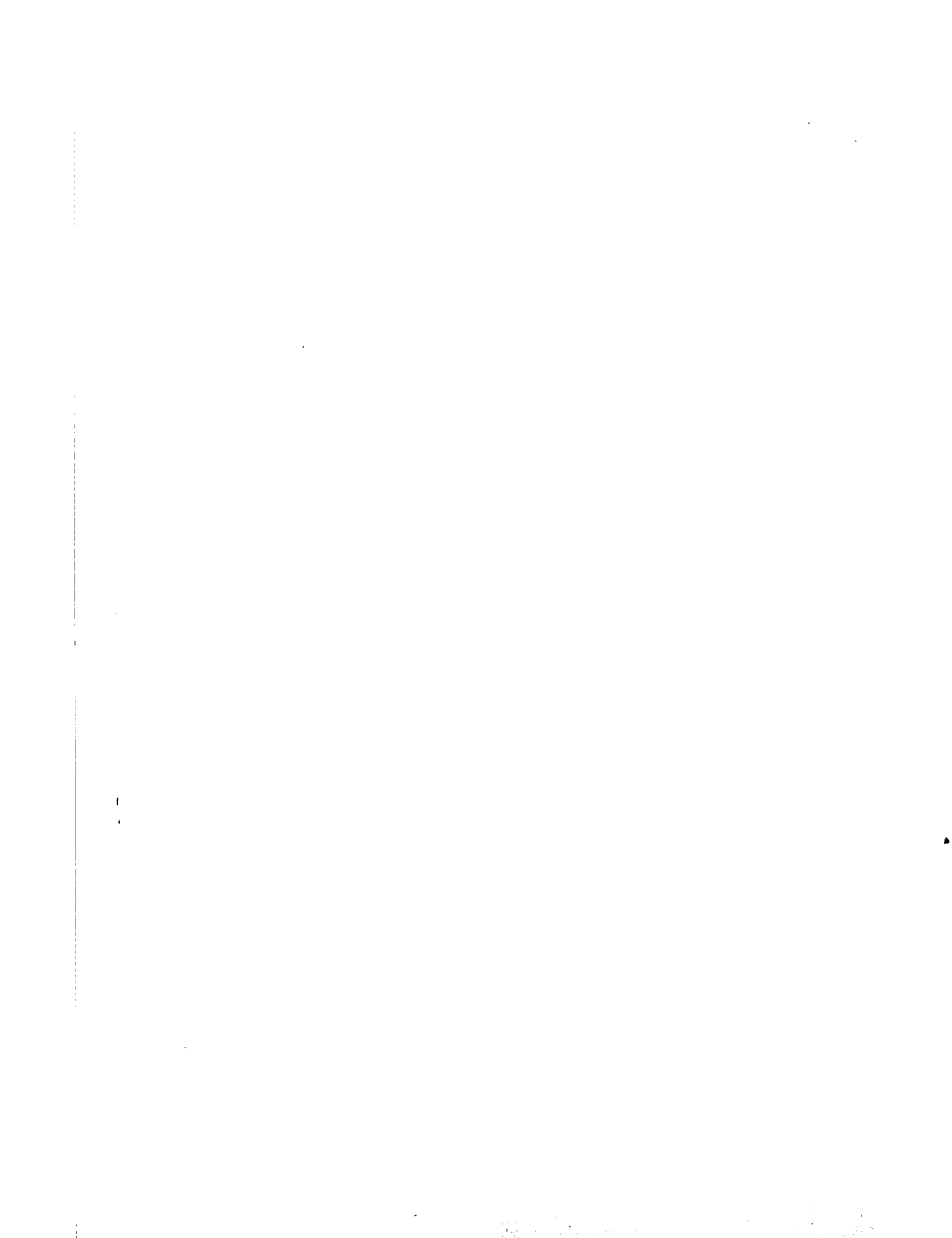
- refusing to enter into contracts unless the proposed prices are fair and reasonable;
- continuing, and accelerating ongoing efforts to improve defense contracting procedures to encourage effective competition and ensure fair and reasonable prices;
- using standard or commercial parts whenever such use is technically acceptable and cost effective;
- acquiring replenishment parts in economic order quantities and on a multiyear basis whenever feasible, practicable, and cost effective; and

- reexamining the policies relating to acquisition, pricing, and management of replenishment spare parts and technical data related to such parts.

Many of the actions required by the Reform Act and much of what is required by the Competition in Contracting Act is included in the initiatives. For example, the initiatives require procurement activities to increase the use of competition and follow breakout procedures. In addition, the initiatives call for procurement of spare parts in economic order quantities and use of parts control to ensure unique parts are not procured unless necessary.

Conclusions

Given the magnitude of the spare parts procurement system, it is likely that there will always be a number of procurements that are inadequately priced. When attention is drawn to such cases, it is important to keep them in proper perspective. So long as these cases do not represent systemic weaknesses, corrective action can be initiated without changing the spare parts acquisition system. Unless systemic weaknesses are disclosed, DOD's current initiatives should be given a chance to work. Indications are that DOD is making progress although it will take time to fully implement these actions.



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