Easing the Pain of Procurement

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The difficulty in procuring for America an arsenal adequate to ensure national security at the lowest possible price is no more insolvable than dozens of other problems the American people face. Critics of the procurement process too often fail to understand, though, that the business of supplying our nation's defense needs cannot be analyzed in exactly the same terms as, for example, the business of supplying consumer goods — or even most commercial goods and services. The purchase of a hammer from a defense contractor may in fact be a different kind of transaction than the purchase of a hammer from a hardware store. How it is different — and whether it should be different — is at the heart of the defense procurement debate. Understanding the differences will point the way toward potential solutions of very real problems.

There is, it should be noted at the outset, a complication, because there is no monolithic "defense industry." The suppliers that share that nomenclature manufacture ships, rockets, jets, jet engines, can-teens, and literally thousands of other items that make up the national arsenal.

The U.S. government, however, is a one-of-a-kind customer for much of the American defense industry. This customer, in buying major systems, wants high-technology products that perform unique tasks, products that are capable of surviving in a wide range of environments and that can be maintained by a young work force of volunteers with limited training and skills. Many of these products have no other market. Because of the complexity and diversity of these major defense systems, their design requirements, and the limited market for them, only a few industrial enterprises have the skills and capabilities to pursue any segment of that market. The skills and experience of these enterprises are a national resource — the corporate knowledge is of no less value because it is obtained at a price in the marketplace.

What developed in response to this unique relationship between customer and supplier was neither better nor worse than what ex-

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isted in other commercial markets. But it was different. It prompted ways of doing business on both sides that might not have been appropriate in other situations. But in the case of America's national defense, the accommodations produced an arsenal that was — and still is — the envy of the world.

Few industries, perhaps not even the electric utilities, could argue that they are more highly regulated than defense contractors. Both Congress and the Department of Defense (DoD) have a profound influence on every aspect of defense-related transactions, with rights accruing to DoD as a customer that are unique in the American marketplace. There are DoD regulations that control the recovery of costs; prescribe accounting procedures and systems; mandate disclosure of proprietary financial data; provide for on-site inspection quality reviews; require delivery of comprehensive manufacturing data; and provide for oversight of virtually every aspect of management decisionmaking.

Because of the marketing environment for major defense systems — a few suppliers of unique, complex products to one customer — I believe that the business relationship between the U.S. government and its defense contractors will always be different from other commercial relationships. The systems governing DoD purchases can be changed; undoubtedly, they can and will be improved. However, suggestions that the business relationship between Washington and the defense industry will be indistinguishable from the relationship between any customer and supplier do not adequately take account of the economic realities of the market, or the unique needs of DoD.

As with any other emotionally driven public policy issue, fueled in the case of defense procurement by “horror stories” based on the worst kind of misinformation, solutions can overreach the real problems. As a Central Intelligence Agency analyst’s report put it:

Mistrust appears to pervade U.S. weapons procurement like nowhere else in the world. It’s as though the system assumes that the participants in defense programs can’t be trusted, and may even force those participants to live down to that mistrust.¹

What then has prompted the crisis in confidence focused on the defense procurement system?² In part, it comes from the unusual

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². In a January 1986 survey ordered by the President’s Blue Ribbon Commission on Defense Management, 58% of those Americans surveyed, when asked how much waste they thought there was in military spending, said “a lot,” and another 32% said “some.” Public Voices Faith in Military, N.Y. Times, July 29, 1986, at A14, col. 1.
nature of the business of national defense — a concept, indeed a reality, far removed from the experience of most Americans. As Herbert Stein, a member of the President's Blue Ribbon Commission on Defense Management (hereinafter referred to as the Packard Commission), and former chairman of the Council of Economic Advisors, put it: "Defense spending . . . is a peculiarly difficult subject to think about. People trying to figure out whether the country is spending the right amount, or spending in the right ways, quickly learn that many critical details are known only to a few specialists." 3

The American taxpayer finds it difficult to relate to the rebuilding of our national defense in times of relative peace around the world. The method of satisfying needs for most consumer goods and services in the American economy is perceived to be off-the-shelf, and on demand. Concepts of lead-time for development, production, and deployment are difficult to comprehend. In general, the American public does not relate to the products, the process, or the problems of defense procurement.

To state such a thesis is neither to indict the citizenry nor to suggest that they must better educate themselves about the reality of the situation. The public is not less intelligent in 1986 than it was in 1946, but its trust in the system has been damaged by reckless and often politically motivated charges of fraud and waste. The perception of the defense industry as dishonest or unethical has weakened the basic American trust in the credibility of the system.

Congress must accept some share of blame for encouraging the level of mistrust.

Thanks in great measure to constant interference from Congress, all weapons development and deployment in the U.S. are taking too long and costing too much. An incredible bureaucracy has built up around the U.S. weapons program, attributable in part to the constant drumbeat of politically motivated charges of "waste, fraud and abuse" . . . . 4

While such hyperbole may be secretly satisfying to defense contractors, Congress is, in part, mirroring the real concern of the public it represents. But is the Pentagon staffed by officers so venal and so foolish, that it would purposely waste taxpayer dollars on overpriced, uncompetitive weaponry? Of course not. To look at just one example — pricing of spare parts — will shed some light on the root causes of the distrust.

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When the federal government accepts an aircraft engine delivery from a contractor, the government has generally spent one to one-and-a-half times that initial cost for spare parts and maintenance over the twenty-five to thirty years of engine life. That added business has, for the most part, been directed to the prime contractor, even for parts that the prime contractor subcontracted to other suppliers. For those subcontracted parts, the price paid — through a purchase from the prime contractor — will, of course, include mark-ups, and will thus be higher than it would be if the parts were purchased directly from the original subcontractor.

Why does a customer pay more than he has to for parts or services? Either he is wasteful and foolish, or he perceives some value-added from the supplier with the higher price. The Pentagon and its prime contractors understand the concept of value-added for spare parts, but they have not explained it very well to the outside world. Prime contractors, of course, benefit by retaining that spare parts business; it provides a stable source of income and it assures the continuity of a particular technology development and workforce. But in addition, the contractor’s reputation is strongly influenced by the performance record — good or bad — of the engines sold to the federal government. To enhance that reputation, a supplier is motivated to support its products in use.

What are the benefits to the customer of this relationship? The value-added ranges from quality assurance, through inspection and laboratory analysis, to engineering support and the expertise to diagnose and solve technical problems. It involves continued supervision and control of design, manufacturing and logistical support of complex and sophisticated products. When technical judgment is essential, this coordinated effort cannot be avoided, although it could conceivably be shifted to the government, or to another contractor. Would the associated costs be avoided? No, they would be transferred — transferred with the risk of degrading safety and quality standards. Certainly, no single answer is appropriate, because total cost in some cases can be reduced without unacceptable consequences.

In other words, there are no good guys and bad guys in this scenario. For items that do not require highly specialized design control and product support, good business sense suggests that the prime contractors, and their value-added mark-up, be avoided. A viable contractor will recover its costs in the prices of its products. In government sales, these costs are assigned to products through
regulated cost accounting practices. The costs of a high-technology aerospace concern will not be the same as those of a corner hardware store. When the overhead of a high-technology manufacturer is applied to a low-technology item, the resulting price will appear higher than the intrinsic value of the item. Many of the problems associated with apparent pricing irregularities can be avoided by making purchases from an appropriate source. Buy a claw hammer from a hardware store, and buy an axial flow compressor from a jet engine manufacturer.

Like so much of the defense procurement equation, the spare parts issue involves trade-offs, rather than the conquering of evil by good. The government’s estimated savings from avoiding prime contractor mark-ups must be judged against the value represented by those mark-ups. As the government moves to break out spare parts from the prime contractor, the prime loses quality control and traceability for parts incorporated into systems — some of which are warranted.

Improvements in spare parts acquisition can, and should, be made. As the peculiarities of the system are identified and responded to, and as DoD seeks out improvements that won’t damage national defense, changes will evolve. As with any enormous endeavor, the defense procurement system has generated inefficiencies that can be eased, if not eliminated. The creation of an unyielding rulebook, however, is not the solution. The role played by the judgment of purchasing officials cannot be overlooked, and flexibility should be preserved to utilize purchasing techniques that are appropriate to the circumstances. Many purchasing techniques, including, of course, competition among qualified suppliers, can be effective, if we avoid creating rigid rules that may make sense in one context but not in another. The present spare parts situation is not a crisis. The present spare parts procurement system, on the whole, is rational, and its evolution has been reasonable. The evolution will continue, as we learn to avoid unnecessary overhead costs while continuing the involvement of prime contractors in appropriate circumstances.

Charges of spare parts overpricing have been the subject of countless investigations, audits, congressional hearings, and media reports in recent years. In all of that, including the $30 machine screws and the $2,000 pair of pliers, there have been relatively few cases of profiteering by defense contractors, given the number and dollar value of the contracts involved. The primary factors contrib-
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uting to the seemingly out-of-line prices have been such things as small, non-economic quantity orders, start-up costs relating to items no longer in production, and legitimate mark-ups for overhead and support. What is often overlooked is that the prices were reflective of costs actually incurred and spread across contract items under accounting treatments developed with the government. That is not to say that some of the more foolish-looking examples of high-priced hammers or screwdrivers are ideal examples of procurement at its best, but it does suggest that, under current procurement regulations, the prices for the overwhelming majority of parts and services are supported by underlying value and, moreover, are deemed “fair and reasonable” according to the regulations. The current procurement environment has sensitized contractors and DoD to out-of-line pricing on commercially available parts. Both parties recognize the value of finding alternative sources for low-cost equipment that is burdened with overhead if purchased from prime contractors as part of a major program.

The history of the procurement system has been marked by flexibility and change. The spare parts contracting and pricing system that generates headlines today was developed during the 1960s and early 1970s, when DoD supported high-technology weapons systems primarily through sole-source contracts from prime contractors. As the systems grew in quality and sophistication in the mid-1960s, the government procured large numbers of current parts from prime contractors, without the need for enormous federal staffing with engineers, quality-control professionals, or procurement experts. Prime contractors comprehensively managed spare parts acquisitions, under DoD supervision.

The new political environment requires changes in that system, and in response to public and political pressure, procurement reform is now in full gear. Competition is now firmly rooted in new legislation and regulations. DoD has more auditors and contract professionals, and a number of the services provided by prime contractors are being assumed by the government. What cannot be forgotten in all this is the enormity of the task. No policy adjustment in, for example, the spare parts arena, will have an immediate, dramatic impact on the cost of defense or the precision with which procurement is conducted. According to the Pentagon’s Defense Spare Parts Initiative office, DoD processes more than 15 million procurement transactions, through approximately 1,000 buying offices, doing business with 300,000 different vendors. DoD manages about
4.3 million separate stock-numbered items, issues over $100 billion in spare parts each year, and buys another $35 billion in secondary items each year.\(^5\)

The "new" system can function; much of what is new has existed in the past, in different circumstances. What remains to be answered is whether the problems that developed in the past — the problems that prompted changes in procurement — have indeed been cured, and whether "solutions" will generate problems of their own.

In addition to flexibility of approach, the procurement system should encourage stability of programs and funding. Multi-year procurement (MYP) is one strategy that seems capable of reducing costs, whether or not other parts of the procurement program are in place. A carefully constructed multi-year system would have the ability to maximize DoD buying power, while also improving productivity through more efficient use of labor and increased corporate capital investment to enhance production capabilities. Multi-year procurement appears to be good policy for both government and industry.

In President Reagan's April 24, 1986 message to Congress, "Defense Establishment: Message to the Congress Outlining Proposals for Improvement," he noted:

> For many years, there has been chronic instability in both top-line funding and individual programs. This has eliminated key economies of scale, stretched out programs, and discouraged defense contractors from making long-term investments required to improve productivity. To end this costly cycle, we must find ways to provide the stability that will allow the genius of American ingenuity and productivity to flourish.\(^6\)

Indeed, the President might have added that the United States is the only nation in the world that operates with a one-year defense budget; most countries have a three-to-five-year commitment.\(^7\)

The problem faced by MYP advocates is the reluctance of Congress to commit to long-term planning that might reduce its flexibility. Multi-year procurement requires up-front planning and a prompt coming together of industry, DoD, and congressional interests. Under the traditional annual DoD budget cycle, Congress en-

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6. 22 WEEKLY COMP. PRES. DOC. 539, 544 (Apr. 28, 1986); see also Aerospace Daily, May 1, 1986, at 183.

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joins the freedom to make sweeping program changes in response to public and political pressures of the moment. Congress takes comfort in being able to adjust each element of the defense budget on an annual basis — and that instinct is not without its justification. Internal and domestic economic and political conditions do change over periods far shorter than three to five years.

The blame, moreover, does not lie with Congress alone. The defense industry and DoD have also not been geared towards the long-term planning necessary to make MYP work. Industry must take the initiative to identify, early in a program, the proposed benefits of multi-year procurement. DoD must commit to MYP early in the program life of a system in order to give Congress ample time for review and analysis. In the end, Congress must accept that the benefits of three-to-five-year MYP are worth the risk of commitment and the loss of annual budget flexibility.

Multi-year procurement has generated considerable support among defense planners for a number of years. In December of 1980, the Defense Industrial Base Panel of the Committee on Armed Services of the U.S. House of Representatives concluded a study of the condition of the U.S. defense industrial base. One of the major findings of the panel was:

Present policies and procedures for the procurement of property and services by the Department of Defense are excessively inflexible and discourage the use of contract types that would promote the best interests of the United States; as a result, many procurement contracts cannot be written [in such a way] that would promote stability, encourage capital formation, and lead to efficiencies that would result in savings to the government.8

As a result of this finding, the panel made the following recommendations:

[E]stablish a policy for defense procurement that will promote flexibility and permit the use of contract types, including multiyear contract types, that will result in the acquisition of weapon systems and other items in the most timely, economic and efficient manner; and provide that contracting, where practicable, should provide incentives to defense contractors to make economic purchases of material and to improve productivity by investment in technology, capital facilities and equipment.9

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9. Id. at 2 (emphasis added).
Since its inception in 1963, MYP has been periodically maligned and praised as a method of improving defense procurement efficiency. Every program is not appropriate for MYP, but many in DoD, Congress, and the defense industry believe it offers efficiencies that do not require major adjustments to the existing procurement systems. MYP has, in fact, saved $6.2 billion since DoD began a major initiative in 1982. The 1987 DoD Authorization Act includes incentives for increased use of MYP, establishing a goal of MYP use for 10 percent of procurement programs for fiscal year 1988. This signal from Congress is encouraging.

Options such as MYP require a renewed sense of cooperation among Congress, DoD, and defense contractors. Legislative and administrative bludgeoning of the relationship between DoD and its contractors has the potential to damage the very cooperation necessary to produce appropriate results.

The authority of the government's contracting officers has eroded and has been supplanted by a swarm of auditors and investigators. The result is a relationship that is legalistic and adversarial — the criminalization of the procurement process. The recently enacted False Claims Amendments Act, a revision of a Civil War-era piece of legislation, creates contractor liability for false statements, liability independent of knowledge, culpability, or intent. This legislation would seem to strip individuals and companies of the most elementary protection of law. Defendants could be fined $10,000 for each false statement made to a federal agency, regardless of whether the defendant knew the statement was false, or whether the government suffered a loss as a consequence. The National Association of Manufacturers and a number of other business-related groups have indicated that such legislation would "have an especially negative impact upon small and medium-sized businesses . . . with a lessening of their normal procedural and substantive rights . . . ." Defenders of this legislation envision defense-industry em-

ployees "forced into a conspiracy of silence out of fear that they will lose their jobs if they speak up"\textsuperscript{10} when they uncover wrong-doing related to defense work. This over-wrought description has some legitimacy, which is to the shame of the companies that create such fear. But the industry has already responded, with a major effort by contractors to establish a comprehensive ombudsman program to deal with alleged illegal or unethical acts within their companies.

These programs generally take one of two forms. Either in a fairly narrow program, a "contract compliance" officer will be available to solicit complaints, or, as is the case in my own corporation, United Technologies, a broad, two-way communications program that solicits and responds to employee queries about any business-related subject may be established. In either system, the intent is to guarantee confidentiality. Basically, if in the opinion of an employee an issue is of sufficient importance or sensitivity that it should be known to executives, the ombudsman vehicle is available.

The ombudsman programs are long overdue. The effort is a good business practice, and it serves as an early-warning system for violations of the complex government regulations under which defense workers operate. A firm commitment to complete honesty and compliance, with protection for "whistleblowers," is a much-needed and firmly stated element of the various defense industry ombudsman programs.

It is essential to recognize that the vast majority of "false statements" made in the course of defense work involve inadvertent error, in the face of strict regulation of dynamic, high-technology processes. I do not intend to suggest that inadvertence, or even good faith, are sufficient to absolve contractors of all responsibility. But on important matters of national defense and security, we must look to contract remedies and move away from criminal sanctions for much of what falls under the rubric of "waste, fraud and abuse." Most defense-related auditing decisions involve judgments on technical engineering issues, or costing techniques that are "obscure even to a trained expert."\textsuperscript{17} Moreover, "defense firms typically face an array of 44,000 specifications; the instruction book on procurement runs thirty-two volumes and takes up six feet of shelf space."\textsuperscript{18}

\textsuperscript{18} \textit{Id.}
This complexity obscures responsibility rather than assigning it. As the judge in a criminal “false statements” prosecution against defense contractor General Dynamics Corporation put it: “Faced with such an infrangible mass, even if a Court were able to read and understand the words in a contract like the one involved here, it would have made little headway toward reasoned analysis.”

As the Packard Commission pointed out, very few of the problems with defense procurement are related to greed or unethical activities on the part of contractors. The Pentagon and its contractors have proven to be quite capable of resolving such problems, while maintaining an adequate national defense. It is reasonable to assert that “[i]f the Pentagon is to be performance oriented instead of looking constantly over its shoulder, Congress will have to stop treating it as a gold mine of scandals to publicize and exploit.”

Congressional oversight has become unnecessarily burdensome not only to the contractors engaged in defense business, but also to the DoD regulators most directly involved in the day-to-day decisionmaking. Today, more than ninety-six congressional committees and subcommittees summon witnesses to testify on defense programs: this number represents a 357 percent increase in the last thirteen years. DoD, in connection with 1984 budget requests, furnished 1,306 witnesses, who provided 2,160 hours of testimony. In addition, the department responded to 85,000 written congressional inquiries and submitted 21,753 pages of supporting documents related to the budget.

If the nation’s defense procurement system was truly in shambles, rife with dishonesty and fraud, the wave of indignation would be justifiably strong. But such is not the case. Lost in the rhetoric are

19. United States v. General Dynamics Corp., 644 F. Supp. 1497, 1504 (C.D. Cal. 1986). Judge Fernandez’ comments are incisive: The defense industry in this country is highly regulated. . . . [T]hrough its power over the purse, the Government has acquired detailed control over the actions of its contractors. It has done so through webs of laws, regulations, and directives, that can almost defy understanding as they descend to the smallest details, and ascend to the most grandiose plans. . . . Government regulation of the defense industry proceeds through contracts laced with specialized provisions and jargon, sets of military specifications, regulations, on the spot inspections, management systems, review committees, contracting officers, and a myriad of other devices, all of which are designed to assure the ultimate protection of the national interests, both technologically and economically. . . . Only an extreme case of hubris could convince a district judge that all of this was simply within his conventional experience, and only a gross form of pertinacity would cause him to cling to that opinion once he had been given the opportunity for enlightenment.


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the more realistic characterizations — dull, but true. The government “is buying much-needed military improvements for less than expected and getting maximum payoff from taxpayers’ dollars through sound management.”

We face an additional problem in trying to minimize costs, because as suspicion has become more intense, as weaponry has become more complex, and as costs have risen, the procurement process has become increasingly slow and unresponsive. In the mid- to late 1970s, the Defense Advanced Research Projects Agency needed about ninety days to launch a new project. It now takes DARPA more than 180 days to start a new program, from the decision to fund the program until the contractor can begin work. With the fullest, most formal paperwork, about 260 days are required. DARPA officials concede the problem and are working to resolve it, given the environment in which they must operate.

Throughout this analysis of defense procurement, I have been rather kind to the contractors themselves, my company included. The defense contractors, despite much rhetoric to the contrary, have become as comfortable with the present system as have Congress and the Department of Defense. We have been reluctant to reform the system, just as we have been reluctant to criticize the changes that have been proposed — in part, because the changes are being initiated by our customer, the U.S. government.

Murray L. Weidenbaum, the first chairman of President Reagan’s Council of Economic Advisors, has contributed wise analysis of defense procurement — and how to revise the process:

The key to making defense contracting more efficient is an increased reliance on private enterprise. Actually, we have not given it much of a chance. Defense contracts are awarded to private companies. But the contracts require the companies to behave like arsenals. Rather than concentrating on performance, contractors spend their time studying the government’s rule books. Thus, the nation does not now get the full benefit of the innovation and efficiency that we expect from the private sector.

According to a 1980 Electronic Engineering Times estimate, “50 percent of small, high-technology defense contractors were either going bankrupt or dropping out of competition for government

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contracts, largely due to government regulation. The number of aerospace suppliers fell to 3,000 in 1980 from 6,000 in 1967. 25

My faith in the defense procurement system is a faith based on the commitment and expertise of the private-sector defense contractors, in concert with DoD and Congress. It is a system unique to the products being offered, but it is a system that utilizes the same basic honesty and success that has marked the American economy for so many decades. Men and women of good will throughout the system are committed to improving it, but “reform” moves slowly through the inherent complexities of the nation’s procurement process. The speed at which change is occurring may seem painfully slow, but this is due in part to the lack of precision available to evaluate what effect reform has had thus far.

A General Accounting Office report from November of 1986 reflects the frustration of all concerned parties. The conclusion, based on surveys of 156 top procurement officers in DoD and private industry, asserts that “[o]verall, most program managers in both the government and private industry reported that the acquisition improvement program [the so-called ‘Carlucci Initiatives,’ drafted in 1981 by former Deputy Secretary of Defense Frank Carlucci] has made little or no difference in the acquisition process.” 26

While that survey may be an accurate reflection of what GAO was told, I think the conclusion is too harsh. The financial impact of the procurement changes may be slow in coming, for reasons discussed above, but the attitude among the participants has changed considerably — in many cases, changed for the better. We in industry are less complacent, more responsive, and able to move more quickly to solve problems.

From a senior government auditor, who is more sensitive to the warts in the system than most, come words of confidence:

Restoring public confidence in government contracting cannot be done at the expense of driving private enterprise out of the market. Profit must be encouraged, when it is based upon productivity and successful contract performance. Working successfully and profitably with the federal government is not an easy task, but it can be done. The results can be rewarding not only monetarily, but also emotionally — i.e, the satisfaction of having done something worthwhile for your country. 27

25. Fossedal, supra note 18, at col. 5.
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The alternative to those rewards and satisfaction is to turn away from doing business with the government. In an environment of mistrust, of regulation that stifles innovation and cripples profitability, the competition that is desired may be diminished, as prudent managers turn to more attractive sources of revenue. To evaluate the proper course, to balance the best interests of all concerned, is a goal within our reach, when we recognize the unique aspects of the defense business and respond with fairness and equity.