
SECURITY ASSISTANCE PERSPECTIVES

Assessing the Defense Industrial Base

By

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[The following is a reprint of the remarks of Deputy Secretary Atwood at a meeting of the National Security Industrial Association, Ellicott City, Maryland, on July 17, 1989 and which were published in *Defense News*, Vol. 4, No. 25.]

It is a pleasure for me to be here this morning to address a topic of paramount importance to all of us. But let me first say that from my experience in the automobile industry, I appreciate the importance of industrial associations like the NSIA (National Security Industrial Association). You define common problems of national importance and help find workable solutions. And you play a valuable role in maintaining our national security and sustaining the strength of our military forces.

As you might imagine, in my first few months at the Pentagon I have already come into my share of problems. The erosion of America's defense industrial base is certainly one of the most pressing. If we are to reverse this trend, it is going to take a concerted effort by DOD and organizations like the NSIA.

This is hardly a new problem. In 1980, in a report on industrial responsiveness, the Defense Science Board first raised the red flag. Just last fall, the board published another study on the defense industrial base. The principal conclusions reached by the study were dramatic:

- First, the continued deterioration of the industrial and technology base diminishes the credibility of our deterrent and requires a coordinated response by government and industry.
- Second, globalization of U.S. defense markets has made our nation partially and irreversibly dependent upon foreign resources and products used in our weapon systems.
- Third, there is inadequate long-term investment by contractors at all levels of the procurement process, resulting from the increasing uncertainties surrounding the defense budget and acquisition process and a perceived imbalance between the risk and return in the defense industry.
- Finally, subcontractors, ranging from very large manufacturers down to small high-technology companies, either refuse defense business or segregate their older technology and other production lines and apply them to defense business.

Now there is often confusion over what is meant by the phrase "the defense industrial base." Usually it is interpreted as meaning only the large prime contractors for our weapon systems. The fact is that the defense industrial base generally comprises the same manufactures that produce goods for the general public. Although a number of companies rely primarily on the Department of

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1989		2. REPORT TYPE		3. DATES COVERED 00-00-1989 to 00-00-1989	
4. TITLE AND SUBTITLE Assessing the Defense Industrial Base				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Defense Institute of Security Assistance Management (DISAM),DISAM/DR,2475 K Street,Wright-Patterson AFB,OH,45433-7641				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES The DISAM Journal, Fall 1989, Volume 12, Number 1, p.46-50					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 5	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Defense as their principal market, few industries do. However, the department depends on virtually every sector of manufacturing for support.

A 1987 analysis by the Logistics Management Institute revealed that DOD acquires manufactured goods from a broad spectrum of more than 215 industries, encompassing more than a quarter of a million firms. The Department's legitimate interest in the defense industrial base is inseparable from its interest in the U.S. industrial base as a whole. They are one and the same.

SIGNS OF EROSION

There are many indications of the widespread decline in the U.S. industrial base. In absolute terms, we see an erosion in the competitiveness of many industries. The U.S. share of the world machine-tool market, for example, is now less than half its 1980 level. During the past 17 years, U.S. firms have lost two-thirds of the domestic market for machining centers and nearly three-quarters of the American market for telephones.

From 1970 to 1987, foreign firms . . . captured almost all of the market for stereo equipment, 90 percent of the color TV market, more than a third of the market for semiconductors, and more than a quarter of the market for ball bearings. This is a disturbing trend with important implications for our nation's security.

A look at aggregated economic indicators also shows that the U.S. is losing ground when compared to other industrialized countries. For example, the rate of growth in U.S. manufacturing productivity has been lower than much of the rest of the industrialized world. During the first five years of this decade the U.S. rate of growth in productivity was 3.5 percent compared to almost 6.5 percent for Japan.

In addition, it is no secret that the U.S. share of worldwide trade in manufactured goods has been declining. From 1979 to 1985, Japan averaged a 9 percent rate of growth in selling manufactured goods overseas, while the U.S. averaged under 3.5 percent.

Similarly, the sale of foreign goods in the U.S. has increased. From 1980 to 1987, the amount of imported consumer goods purchased in the U.S. almost doubled, while the amount of imported capital goods purchased more than doubled. Viewed in total, it's clear that American manufacturing is being beaten by foreign competition.

These trends are of obvious concern to DOD. Our national security is based on a strategy of deterrence. We can't match our adversaries soldier for soldier and bullet for bullet. Instead, we must maintain a degree of technological superiority sufficient to overcome our numerical disadvantage. The effectiveness of our deterrent depends on our ability to maintain this technological superiority. A strong, international competitive manufacturing capability is absolutely necessary if we want to sustain our technological advantage.

ATMOSPHERE OF MISTRUST

In addition to foreign competition, there is another factor that has contributed to the erosion of the defense industrial base. This is the adversarial relationship that exists among Congress, DOD, and the defense contractors. This cannot be blamed on foreign companies, because it is a problem of our own making.

The extent of the mistrust that exists in the Pentagon, in industry, and in Congress is shocking. I have never seen anything like it. I will be candid and tell you that if a major corporation—whether it be a General Motors, or a Ford, or a General Electric, or an AT&T—ever

had the relationship with its suppliers that DOD has with its contractors, that company would soon be out of business.

The existing confrontational atmosphere is completely unnecessary, and, more importantly, it wastes scarce resources that could be used in other, more productive endeavors.

There are certain steps DOD can take to reverse the fortunes of American manufacturers, but we have neither the mandate nor the resources to attempt to resolve all the problems of the U.S. industrial base. We are concerned and have begun to take greater responsibility for finding solutions to some of the problems that exist in the private sector.

A strategy to help defense manufacturers regain the competitive edge was outlined in the 1988 report *Bolstering Defense Industrial Competitiveness*. Some elements of this strategy have been implemented, others are in the midst of being implemented, while still others are targeted for implementation as time and resources become available.

Two of the significant actions taken to date are:

- The establishment of the Office of the Deputy Under Secretary of Defense for Industrial and International Programs to serve as the advocate for defense production base issues.
- The creation of the Defense Manufacturing Board to serve as an advisory board to the Under Secretary of Defense for Acquisition on matters relating to manufacturing technology, productivity, quality, and the industrial base. At the present time, the board is working on a variety of products, including formulation of DOD policy on foreign ownership and control of U.S. manufacturing firms.

IMPROVING RELATIONSHIPS

The Defense Management Review . . . outlines several other actions we will take to revitalize the defense industrial base. They are designed to reinstate the proper risk-return balance in defense business and to restore the proper working relationship between DOD and Industry.

One of our first actions will be to fund fully the development of new weapons systems. If sufficient money is put into the design phase of a weapons program, we will get a simpler, more producible, more reliable, more maintainable, and an all-around better quality system that will actually cost less during production.

We need to establish the kind of contractual relations with our supplies that encourage innovation and technical exploration. It is essential that we provide incentives to foster investments in new high-technology equipment and facilities. These actions will yield weapon systems that meet performance specification and quality standards with lower life-cycle costs.

DOD is moving ahead to put in place a contractor performance review system to expand source-selection criteria beyond cost alone and to promote contracting relationships with our best performing suppliers.

In addition, we must reduce the oversight at contractor facilities. For example, the Air Force has more than 200 people at General Electric auditing, inspecting, and checking as the company makes Air Force gas turbine engines. But Boeing and McDonnell-Douglas, who also buy many jet engines from GE, do not have anyone there watching. There are, of course, legitimate situations where DOD personnel need to be on hand at contractor facilities, but we should be more selective in our use of people.

As part of this effort, we will consolidate all of our contract administrations under a single new defense agency. In addition, we will continue to encourage companies to participate in the Contractor Risk Assessment Guide program, which promises more efficient use of DOD audit capabilities through greater reliance on effective contractor systems of internal control.

Finally, another solution to the industrial base problems is to increase our cooperation with our allies. By sharing research and development costs with our allies, we can free vital national resources for other pressing defense programs. Besides, in the increasingly globalized defense industry, we can no longer afford to "go-it-alone" industrially. Joint programs, like the FX fighter program, can provide technology inflows with enormous benefits to U.S. firms. We need to stimulate more cooperation, not less.

Let me also state one non-solution to the ills of American industry. There has been a lot of discussion about the need for DOD to fund supposedly "key" emerging technologies. I disagree with this view. We cannot retain our manufacturing, technological, and scientific leadership by selectively supporting particular sectors of industry. The obvious question becomes which sectors do we target—electronics, communications, steel, computers? Because almost every manufacturing industry contributes to our national defense, to subsidize one over another demands an arbitrary judgement regarding their relative importance. Government is simply incapable of making such judgements. This is merely another way of talking about "industrial policy."

DOD'S ROLE

The proper role for DOD is to develop policies that encourage competition among different technologies as well as among companies. If we treat all contractors fairly and offer the proper incentives, those technologies and those companies that generate the most value for the investment will naturally emerge. Protection from competition produces only outdated and inefficient industries.

As I said before, DOD can only do so much to improve the performance of American industry. Many U.S. manufacturers have directly contributed to their own competitive problems. Too many have created inflexible manufacturing processes, established poor quality control systems, paid insufficient attention to customer service, failed to design their products for producibility and quality, and have, in general, adopted a short-term horizon.

The results of this failure are in evidence today. Companies need to re-emphasize the basics of good practices in their daily operations.

Fortunately, there is a model for competitiveness. It is embodied in the criteria for the Malcolm Baldrige National Quality Award. According to the standards of the award, first and foremost, companies must pay greater attention to customer satisfaction. Of the seven major categories in the Baldrige Award evaluation, customer satisfaction receives twice as much weight as any other category. Second, attention to quality must become the cornerstone of all company actions. There are three separate categories devoted to quality, which together account for almost 40 percent of the evaluation. Finally, companies must expand employee involvement in the firm. Every person at every level of the company from the CEO (chief executive officer) right down to the people on the production lines, must be personally committed to improving their contributions to the overall goals of the firm. I know from my experience that better quality cannot be achieved by adding more inspectors to the production process. Quality is not just a manufacturing problem, nor is it a procurement problem. It's not alone the design engineer's problem, and it's not the purchasing manager's problem. Quality must be everyone's problem if the company is to succeed.

The department has undertaken a variety of initiatives which are focusing greater attention on improving quality and productivity. We want to work with our contractors to build a productive

partnership that will maintain the strength of our nation's military forces. The erosion of the U.S. industrial base is a serious problem that demands the immediate attention of both DOD and industry.

The bottom line is that our men and women in uniform depend on us for the equipment they need. Both government and industry have a responsibility to make sure that, if the time should come and our military forces are put to the test, we will have the manufacturing capability to back them up. We cannot and we will not let them down.