

**Statement of  
Honorable David Oliver  
on the  
Reauthorization of the Defense Production Act  
before the  
Subcommittee on Domestic Monetary Policy, Technology, and Economic Growth  
House Committee on Financial Services  
June 12, 2001**

Good morning, Mr. Chairman and members of the committee. I appreciate the opportunity to share with you the Department of Defense (DoD) views regarding the Defense Production Act (DPA) and the role it plays in helping to obtain the goods and services needed to promote the national defense. Although enacted originally in 1950, the Act provides statutory authorities still relevant and necessary for the national defense in the 21<sup>st</sup> century. I also want to express the Administration's support for reauthorizing the Act through September 30, 2004.

Let me start by saying a few words on why the Defense Production Act is important to the Department of Defense. A strong domestic industrial and technology base is one of the cornerstones of our national security. The Act provides the DoD tools required to maintain a strong base that will be responsive to the needs of our armed forces. It provides the President the authority to (1) establish, expand, or maintain essential domestic industrial capacity; (2) direct priority performance of defense contracts and allocate scarce materials, services, and industrial facilities; and, suspend or prohibit a foreign acquisition of a U.S. firm when that acquisition would present a threat to our national security. The authorities in this Act continue to be of vital importance to our national security.

My testimony today focuses on the three remaining provisions of the original Defense Production Act, namely Title I, Title III, and Title VII.

**Title I**

Title I (Priorities and Allocations) of the DPA provides the President the authority to:

1. require preferential performance on contracts and orders, as necessary, to meet approved national defense and emergency preparedness program requirements; and
2. allocate materials, services, and facilities as necessary to promote the national defense in a major national emergency.

Executive Order 12919 delegates these authorities to the Federal Departments and Agencies. The Department of Commerce (DoC), is delegated responsibility for managing industrial resources. To implement this authority, DoC administers the Defense Priorities and Allocations System (DPAS). The DPAS:

1. establishes priority ratings for contracts;

2. defines industry's responsibilities and sets forth rules to ensure timely delivery of industrial products, materials and services to meet approved national defense program requirements; and
3. sets forth compliance procedures.

The DoC has delegated to DoD authority under the DPAS to:

1. apply priority ratings to contracts and orders supporting approved national defense programs. (However, DoD is precluded from rating orders for end items that are commonly available in commercial markets and for items to be used primarily for administrative purposes, i.e., office computers); and
2. request DoC provide Special Priorities Assistance (SPA) to resolve conflicts for industrial resources among both rated and unrated (i.e., non-defense) contracts and orders; and to authorize priority ratings for allied nation defense orders in the United States when such authorization furthers U.S. national defense interests.

Except as noted above, all DoD contracts are authorized an industrial priority rating. DoD uses two levels of rating priority, identified by the rating symbols "DO" or "DX." All DO rated orders have equal priority with each other and take preference over unrated orders. All DX rated orders have equal priority with each other and take preference over DO rated orders and unrated orders. If a contractor cannot meet the required delivery date because of scheduling conflicts, DO rated orders must be given production preference over unrated orders and DX rated orders must be given preference over DO rated orders and unrated orders. Such preferential performance is necessary even if this requires the diversion of items being processed for delivery against lower rated or unrated orders. Although the DPAS is largely self-executing, if problems occur, the contractor or the DoD can request the DoC provide SPA to resolve the problem.

During peacetime, the DPAS is important in setting priorities among defense programs that are competing for scarce resources and backlogged parts and subassemblies. Delayed deliveries to producers of weapon systems have consequences in terms of system cost and ultimately on the readiness of operational forces. DPAS gives DoD an opportunity to prioritize deliveries and minimize cost and schedule delays among DoD orders and for allied nation defense procurements in the United States. For example:

1. U.S. DoD: Production resource conflicts for canopy transparencies from Sierracin Aerospace impacted program schedules for the F-22, F-18A/B/C/D, and F-18E/F aircraft. Navy and Air Force DPAS and program office personnel met with the contractor, evaluated production resource shortfalls and delivery conflicts, and made delivery modifications that minimized program delays.
2. NATO: The German and Belgian Air Force, on behalf of NATO's Tactical Leadership Program, were unable to obtain global positioning system navigational processors from Rockwell Collins in a timely manner, adversely impacting pilot training. DoD/DoC

authorized ratings authority that enabled the contracts to be filled in advance of lesser priority US DoD orders.

3. United Kingdom (U.K.): GKN Westland Helicopters experienced delays in receiving identification friend or foe transponders from Raytheon Systems Company that were needed for U.K. WAH-64 Apache helicopters. DoD/DoC authorized GKN Westland to use a DO rating priority that permitted Raytheon to ship the transponders sooner than would have been possible without the rating authority, which allowed and permit GKN Westland to meet its production delivery requirements to the U.K. Ministry of Defence.

In the event of conflict or contingency, however, the DPAS becomes indispensable. While DoD has used Title I since the 1950s, recent history, including that associated with Operation Desert Shield/Storm, Bosnia, and Kosovo, illustrates its continued importance. Title I authorities proved invaluable during Operation Desert Shield/Storm and ensured that industry provided priority production and shipment of essential items urgently needed by the coalition forces. At the request of DoD, DoC formally took action to provide SPA in 135 cases during Operation Desert Shield/Desert Storm. For example:

1. Global Positioning System Receivers: When demand for these receivers outstripped the capacity of suppliers, DoD/DoC used DPAS to expedite shipments and to provide available systems to units in the coalition force that had the most urgent requirement.
2. Activated Charcoal for Gas Masks: When the demand for activated charcoal filters for gas masks outstripped the production capacity of Calgon Corporation (the sole producer of activated charcoal filters for military use gas masks), DoD/DoC used DPAS to direct Calgon to ship all charcoal filters produced to meet military requirements.
3. Search and Rescue Radios: Motorola, the producer of these radios, had closed its production line and anticipated it would take several months to restart production; vendor supply of component parts was the pacing item. Using its DPAS authority, DoC worked with Motorola's supplier base and reduced the time to restart production of the radios by more than half.

Even more recently, since 1995, DoD/DoC has used SPA on more than 100 occasions to resolve industrial conflicts among competing U.S. defense orders and to permit NATO and specific allied nations to obtain priority contract performance from U.S. suppliers. These SPA cases can be categorized in two ways:

1. Wartime vs. Peacetime Support: Sixty-eight percent of the cases supported "wartime" needs (fifty percent Bosnia and eighteen percent Kosovo) for items such as Satellite Communication (SATCOM) and walkie-talkie radios, secure facsimile machines, Joint Direct Attack Munitions (JDAMs), and computer equipment for NATO command and control infrastructure. Thirty-two percent of the cases supported "peacetime" requirements.
2. U.S. vs. non-U.S. Support: thirty-seven percent of the cases supported U.S. defense requirements (thirty-two percent for DoD and five percent for defense-related activities of

NASA, NSA, and the FBI), forty-seven percent for NATO (NATO monies used), nine percent for the United Kingdom, three percent for Canada. In addition, there were two cases for Israel, and one case each for Japan and Germany.

The authorities contained in Title I that permit DoD to provide preferential treatment for foreign defense orders in the United States when such treatment furthers U.S. national defense interests are increasingly important. Among the consequences of globalization and industrial restructuring are the creation of multinational defense companies and an increasing degree of mutual defense interdependence. Reciprocal industrial priorities systems agreements with our allies encourage them to acquire defense goods from U.S. suppliers, promote interoperability, and simultaneously provide increased assurance that the DoD's non-U.S. defense suppliers will be in a position to provide timely supplies to DoD during both conflict/contingency situations and peacetime.

Such reciprocity considerations have been a topic of discussion within NATO for some time. The DoC has the U.S. lead to develop and negotiate a NATO-wide agreement to provide reciprocal priorities support within the alliance.

In addition to a NATO-wide agreement we are exploring formal *bilateral* agreements with key allies of the United States. These provide an opportunity to establish stronger government-to-government agreements for reciprocal priority support, more quickly. The United States has a longstanding bilateral priorities support agreement with Canada. Within the past year, DoD representatives have had discussions about such bilateral agreements with United Kingdom, German, French, Italian, Dutch, Norwegian, and Swedish government representatives. As a matter of fact, DoD and United Kingdom Ministry of Defence representatives now are negotiating a formal bilateral agreement that would commit each nation to establish and maintain a reciprocal priorities system; and provide the other nation reciprocal access to that system.

DPA Title I provisions are an important tool in DoD's arsenal. It would be very difficult for DoD to meet its national security responsibilities without that tool.

Now, I will turn my attention to Title III of the Defense Production Act.

### **Title III Program**

The primary objective of the Title III Program is to work with U.S. industry to strengthen our national defense posture by creating or maintaining affordable, and economically viable production capabilities for items essential to our national security. The Title III Program meets this objective through the use of financial incentives to stimulate private investment in key production resources. These incentives include sharing in the costs of capital investments, process improvements and material qualification, and providing when necessary, a purchase commitment that will ensure a market for their product. Through these incentives, domestic industry is encouraged to take on the business and technical risks associated with establishing a commercially viable production capacity.

The focus of the Title III Program is on the transition of emerging technologies that will

provide technological superiority on the battlefield and support defense wide programs. The Title III partnership with industry ensures DoD access to critical technologies, usually much sooner than would otherwise occur.

In addition to establishing production capacity, Title III helps to improve the quality, and reduce the acquisition and life cycle cost of defense systems and improves defense system readiness and performance by promoting the use of higher quality, lower cost, technologically superior parts and components.

By law, Title III projects cannot be initiated until a presidential determination has been made and Congress has been notified. The presidential determination verifies that

1. the material shortfall being addressed by the Title III project is essential for national defense;
2. domestic industry can not or will not on their own establish the needed capacity in a timely manner
3. Title III is the most cost effective or expedient method for meeting the need; and
4. defense and commercial demand exceed current domestic supply.

Our recent report to Congress entitled “Annual Industrial Capabilities Report to Congress” (January 2001) affirmed Title III’s unique importance as one of the programs we execute to maintain our industrial readiness. Title III is a key element in our Industrial Capabilities Improvement Activities.

### **Title III Projects**

Title III projects transition new materials and technologies from research and development to production. In other words, these projects reduce the costs and facilitate the insertion of advanced technologies by improving the capabilities of our defense industrial base.

Without a program like Title III, the insertion of these technologies would be delayed for many years. Title III reduces this time by first, eliminating market uncertainties and reducing risks that discourage potential producers from creating new capacity and potential users from incorporating new materials in their products. Second, Title III financial incentives create more efficient, lower cost production capabilities which reduces prices and increases demand. Third, Title III projects generate information about the performance characteristics of new materials and promote dissemination of this information to the design community, which would otherwise lack sufficient knowledge to incorporate these materials into defense systems. Fourth, Title III projects support testing and qualification of new materials in defense applications, reducing the delay and cost that might otherwise discourage consideration of new materials by defense programs.

### **Current Program**

There are currently eight active Title III projects and DoD is initiating a new thrust into radiation hardened electronics. This initiative will establish a domestic production capacity for

radiation hardened, high-performance electronics materials and components to support the National Missile Defense Program and other strategic space systems.

These projects, plus recently completed projects, address a variety of advanced materials and technologies. These include:

1. electronic materials and devices, such as gallium arsenide, indium phosphide, high-purity silicon, silicon carbide, silicon on insulator, and power semiconductor switching devices;
2. structural materials, including discontinuous reinforced aluminum, aluminum metal matrix, and titanium metal matrix composites.

The advanced electronic materials supported by Title III are enabling technologies, without which potential advances in microelectronics would be far more limited. These materials offer advantages in terms of faster device performance, greater resistance to radiation and temperature, reduced power requirements, reduced circuit size, increased circuit density, and the capability to operate at higher frequency levels. Advances in electronic materials enable new capabilities for defense systems and improvements in old capabilities.

The new structural materials supported by Title III generally offer significant improvements in terms of strength, weight, durability, and resistance to extreme temperatures. These benefits are particularly important in aerospace applications. Lighter-weight components in aircraft and missiles reduce fuel consumption and increase range, payload, and maneuverability. Increased durability and reliability of aircraft structures reduce inspection, maintenance, repair, and replacement requirements, improve force readiness, and extend system life. Increased strength and enhanced resistance to extreme temperatures enable more powerful engines that increase speed and payload. Continued advances in aerospace technologies would be severely constrained without improved materials to enable these advances.

### **Title III Success Stories**

Two recent Title III projects highlight the benefits of the program.

#### **Gallium Arsenide Wafers**

The first was for gallium arsenide semi-insulating wafers. Gallium arsenide is a semiconducting material used in the fabrication of advanced electronic devices. It provides advantages in terms of speed, power consumption, cost, and reliability over more commonly used semiconductor materials, such as silicon. It is also resistant to radiation and is routinely used in "hardened" electronic devices. Electronic devices built on gallium arsenide semiconductors are enabling technologies for a wide variety of defense weapon systems, including radars, smart weapons, electronic warfare systems, and communications. These semiconductors can be found in such systems as the Airborne Early Warning/Ground Integration System (AEGIS), the B-2 Bomber, the Longbow Apache helicopter, fighter aircraft (including F-15, F-16, F-18, and F-22), missiles (including Patriot, Sparrow, and Standard), and various radar systems.

At the outset of this Title III project, the long-term viability of U.S. gallium arsenide wafer supplier base was in doubt. Foreign firms dominated the industry with a seventy-five percent world market share. U.S. firms were discouraged from competing more vigorously by the relatively small market for these wafers, by the dominant market position of the foreign suppliers, and by the high capital investment required to remain competitive in this market. Foreign firms controlled pricing, availability, and the pace of technological advancement.

With the help of Title III, the U.S. producers made a dramatic turnabout. By 2000 these contractors accounted for sixty-five percent of wafer sales worldwide. Their combined sales of gallium arsenide wafers grew by nearly four hundred percent. In addition, wafer prices dropped by approximately thirty five percent. This reduction in wafer prices and improvement in wafer quality resulted in significant reductions in defense costs for critical electronics. More importantly, the performance of dozens of major defense systems was enhanced through the use of gallium arsenide semiconductors.

Gallium arsenide components can also be found in a variety of commercial wireless applications such as cellular phones, direct broadcast television and collision avoidance radar.

### **Discontinuous Reinforced Aluminum Project**

The second Title III project involved Discontinuous Reinforced Aluminum (DRA). This project was also successful, in terms of reduced defense costs, accelerated use of a superior material in defense applications, and improved domestic production capabilities for a high-tech material. DRA is a metal matrix composite that is significantly stiffer, stronger, lighter weight, more wear-resistant and more dimensionally stable than aluminum alloys and many other composite materials. This material has potential applications in virtually every type of aircraft, missile, and armored vehicle.

Prior to the Title III initiative, DRA was produced only in small quantities at high cost. When this Title III project was completed, domestic production capacity was increased by more than one hundred fifty percent and the price was reduced by sixty percent from \$40 per pound to less than \$16 per pound. The reduced price and improved qualities stimulated a substantial increase in demand for this material. DRA is currently being used for F-16 Fighter airframe and engine parts. Use of DRA for the F-16 ventral fin has increased the mean time between failure rate for this structure from 1,450 hours to over 6,000, and will save \$60 million in maintenance and repair costs for the F-16 fleet. The savings for this one defense system alone are triple the Title III investment. Pratt & Whitney has forecasted savings of \$100 million over the next ten years from the use of DRA in aircraft engine parts. DRA also flies on the Boeing 777, forming the Fan Exit Guide Vanes in its Pratt & Whitney 4000 engines.

### **New Projects**

During the last year, we began three new projects involving silicon on insulator wafers, laser eye protection, and microwave power tubes.

**Silicon-on-Insulator (SOI) Wafer** technology, like other semiconductor materials targeted by Title III, offers enhanced performance capabilities, including greater resistance to radiation, reduced power consumption, and faster device performance. The goals of this project are to create a domestic, source for SOI wafers, to improve wafer quality and reduce wafer cost. This will promote insertion of SOI devices into defense systems and expand potential applications to include telecommunications, laptop computers, and automotive and medical diagnostic and control equipment.

The **Laser Eye Protection (LEP)** project is establishing a large volume, domestic production capacity for near-infrared filters on laser eye protection spectacles and goggles. The modern battlefield is seeing increased use of lasers for target designators, range finders, and target illuminators by both friendly and unfriendly forces. Exposure of the eye to these lasers can cause harm ranging from temporary disorientation to permanent blindness. Over ninety-nine percent of the lasers currently fielded operate in the near-infrared spectrum. Spectacles and goggles with thin-film dielectric near-infrared filters are the best way to protect personnel from the accidental or purposeful exposure to these lasers. Without this project this protection will not be available in a timely manner to our forces in the field.

The **Microwave Power Tubes** Supplier Base Initiative addresses critical components and materials used in the manufacture of microwave power tubes (MPT). MPTs are vital to the operations of military radar, electronic counter measures, communication systems and satellites. The project goal is to maintain a supplier base for critical components used in the manufacture of MPTs. This project will drive down the production and life cycle costs of MPTs to the DOD, while ensuring continued long-term supply of these critical components. The future effectiveness of U.S. military forces is dependent on access to affordable high power microwave power tubes.

## **Title VII**

Title VII contains general provisions including authorization of appropriations, termination of authorities, definitions, and enforcement, as well as a number of other authorities relating to the defense industrial base and emergency preparedness. Section 721 is of particular importance to DoD.

Section 721 allows the President to suspend or prohibit a foreign acquisition of a U.S. firm when that transaction would present a credible threat to the national security of the U.S. and remedies to eliminate that threat are not available under other statutes. Administration of this section has been delegated to the Committee on Foreign Investment in the U.S. (CFIUS) which is chaired by the Department of the Treasury and includes the departments of Defense, Commerce, State, and Justice as well as several organizations in the Executive Office of the President.

The DoD considers the CFIUS review to be an essential and effective process for analyzing the national security implications of foreign acquisitions of U.S. companies and resolving issues related to these transactions. While the DoD has its own Industrial Security regulations which are used to review foreign acquisitions and provide a regulatory basis for

imposing measures to reduce the risk of unauthorized disclosure of classified information and controlled technology, CFIUS is important in several ways:

First, the DoD Industrial Security regulations which control the granting of facility clearances generally apply only to firms with classified contracts. Therefore, they do not normally cover transactions in which dual use firms with export controlled but unclassified technology are acquired by a foreign firm.

Second, the initial CFIUS review has a 30-day deadline which facilitates an efficient DoD review under its Industrial Security regulations because the Department does not want to approve a transaction under CFIUS unless adequate risk mitigation measures have been agreed to under the Industrial Security regulations.

Third, the CFIUS process is structured to require explicit determinations which are not part of the Industrial Security review. These include whether the acquired firm possesses critical defense technology under development or is “otherwise important to the defense industrial and technology base” as well as development and distribution of a Risk of Technology Diversion Assessment by the intelligence community.

Fourth, the CFIUS review is an interagency process which allows all Federal departments to coordinate their analyses of the national security implications of a review and balance risks of disclosure against the benefits of foreign investment.

The DoD believes the CFIUS review process is working well. The effectiveness of the CFIUS process should be judged on the quality of the risk mitigation measures which the various CFIUS members, including DoD, negotiated during the review process. The threat of a Presidential Investigation prohibiting the transaction is a major incentive for the firms to agree to the risk mitigation measures in a timely fashion. These mitigation measures can include a Special Security Agreement which imposes DoD-approved outside directors, visitation requirements, export licensing compliance procedures and Technology Control Plans as well as National Interest Determinations where the acquired firm holds contracts with Proscribed Information. Other mitigation measures are available under the DoD’s Industrial Security regulations as well as the export licensing regulations of the Departments of Commerce and State. CFIUS has provided a timely review of the national security implications of 1,358 foreign acquisitions of U.S. firms since the enactment of section 721 in 1988.

### **Extension of the DPA**

As you know, most provisions of the Defense Production Act are not permanent law and must be renewed periodically by Congress. The Act has been renewed many times since it was first enacted. The current law will expire September 30, 2001. We fully support reauthorizing the Defense Production Act through September 30, 2004.

## **Conclusion**

In summary, the DoD needs the Defense Production Act. It contains authorities that exist no where else and I hope that I have conveyed to you the significant role those authorities play in ensuring our nation's defense.

Thank you for the opportunity to discuss the DPA with you today. We look forward to working with you to ensure a timely reauthorization of the DPA.