



Defense Production Act

Sydney Pope, OUSD AT&L (IP)
Mark Roupas, OUSD Policy (USACE)
Mark Buffler OUSD AT&L (DDRE)

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Overview

- Purpose
- Authorities
- Constraint Management
- Security of Supply
- Lessons Learned



Purpose

- Assure the timely availability of industrial resources to meet current national defense and emergency preparedness program requirements





DPA Background

- The DPA provides authorities to expedite supply and expand U.S. production capabilities to promote the “national defense”
- “National defense” includes:
 - Military, energy, stockpiling, and space programs
 - Military and critical infrastructure assistance to foreign nations [foreign critical infrastructure provision is new]
 - Homeland security [new provision]
 - Critical infrastructure protection and restoration



DPA Authorities

- Priorities and allocations (Title I)
- Financial assistance for expansion of industry (Title III)
- Voluntary agreements among private sector entities to support emergency preparedness (Title VII)
 - Allows business competitors to cooperate for disaster planning and response & provides antitrust protection for actions pursuant to voluntary agreements
- National Defense Executive Reserve (Title VII)
 - Provides for employment of persons of outstanding experience and ability to support Federal govt. preparedness planning and disaster response activities
- Committee on Foreign Investment in the US (CFIUS) (Title VII)
- Defense Production Act Committee [new] (Title VII)



The Defense Production Act

(50 U.S.C. App. § 2061 *et seq.*)

Provides President a broad set of authorities to mobilize civilian resources to meet national security needs

President delegated authorities to Federal agencies via E.O. 12919

- **Title I – Priorities & Allocations**

Provides the authority to order priority performance (delivery) on defense contracts and allocate materials to meet national security requirements (DO/DX ratings)

Title III – Expansion of Productive Capacity and Supply

Authorizes appropriate incentives to create, expand or preserve domestic industrial manufacturing capabilities for technologies, items and materials needed to meet national security requirements (includes homeland security)



The Defense Production Act (cont)

(50 U.S.C. App. § 2061 *et seq.*)

Title VII – General Provisions

Exon-Florio (CFIUS) Sec. 721

Authorizes voluntary agreements among business competitors to cooperate for disaster planning and response and provides antitrust protection for actions pursuant to voluntary agreements

Provides for employment of private sector experts to support Federal Gov't preparedness planning and disaster response programs

DPA not permanent law – must be periodically reauthorized

Expires September 30, 2014

Under jurisdiction of Banking Committees



2009 Amendment Highlights

- Reauthorizes DPA for 5 years (Sept. 30, 2014)
- Updates Cold War-era language to conform with broadened DPA definition of “national defense”, i.e., support use of DPA for:
 - Critical infrastructure protection and restoration
 - Emergency preparedness and response
 - Domestic energy production and construction
 - As well as, military and space programs
- Requires development of a “consistent and unified” Federal priorities and allocations system among federal agencies per GAO recommendations
- Streamlines Title III project determination and notification process
- Enables use of Title III to support domestic energy production
- Establishes Defense Production Act Committee (DPAC) to advise the President on use of authorities



DPA Committee (Sec. 722)

- Establishes the DPAC to:
 - Advise the President on effective use of the DPA
 - Report annually to Congress
- Committee members to include heads of DPA delegate agencies and President's chief economic advisor
- President to appoint Committee Chair (from members) and Executive Director (in Chair's department)



How Title 1 Works



Congress

Defense Production Act of 1950



President

Executive Order 12919



Office of Federal Procurement Policy

Federal Acquisition Regulation 11.604



Department of Commerce

DPAS Regulation 15 CFR 700

Contract Clauses 52.211 14&15



Department of Defense

Priority & Allocation Directive and Manual 4400.1

Contracts & Purchase Orders



Executive Order 12919

President delegates Title 1 Defense Production Act Authorities:



Agriculture

*Food Resources and Related Facilities,
Farm Equipment and Fertilizer*



Defense

Water Resources



Energy

All Forms of Energy



Transportation

Civil Transportation



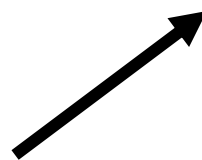
Health and Human Services

Health Resources



Commerce

*All other materials, Services & Facilities
(Including Construction Materials)
Generally called "industrial resources"*



Defense Priorities Allocations System (DPAS)



Executive Order 12919

National Defense Industrial Resources Preparedness

- EO 12919 delegates Presidential DPA authorities
- Address and ensure national defense industrial resource policies during a National Emergency.
- Part II – Priorities and Allocations, Section 201 empowers the Secretary of Defense to “require acceptance and priority performance of contracts” ...”with respect to water resources.”
- “Water Resources” means all usable water, from all sources, within the jurisdiction of the United States, which can be managed, controlled, and allocated to meet emergency requirements.”
- DoD has not used DPA to prioritize water resources.



Title 1 & Water Resources

- Before DoD can impose its water resource authority under the DPA and EO 12919, it must first address
 - Case law, including Supreme Court rulings that allocate water rights to the States.
 - Homeland Security Presidential Directive -7 tasks Environmental Protection Office with providing water and waste water critical infrastructure guidance.
 - Current legislative effort via American Water Works Association to establish water as a “critical element.”



Delegation of DPA (Title I) for Industrial Resources

- Commerce delegates the authority to place priority ratings on contracts/orders (rated orders) necessary or appropriate to promote the national defense, in accordance with the DPAS regulation (15 CFR Part 700):
 - Department of Defense
 - Department of Energy
 - Department of Homeland Security
 - General Services Administration





Flow Down of Rated Orders

DPAS flow down of rated orders continues throughout the entire procurement chain.

"This is a rated order certified for national defense use, and you are required to follow all provisions of the Defense Priorities and Allocations System regulation (15 CFR 700)."



DPAS Key Elements

- Mandatory Acceptance of Rated Orders
- Preferential Scheduling
- Extension of Priority Ratings
- Protection Against Claims





Mostly Self-Regulating

- DPAS strength realized via flow down to subcontractors and suppliers.
- Requires prime contractors to extend ratings to lower tiers
- Only enforceable inside the U.S.



DoD priority rates ~300,000 contracts annually



Special Priorities Assistance

- Used to Resolve Conflicts Among Orders
 - Resolve at Lowest Level Possible
 - Elevate After Reasonable Effort to Resolve
- Assistance Requested via SPA Form BIS-999
 - When Need is Urgent Need



Critical Infrastructure

- DHS-FEMA approval needed for DoD to support Civil Emergencies (Stafford Act authority)
- DPAS supports rebuilding of key facilities after incidents





Government Facilities

- DPAS supports timely completion of construction projects (design and construction of blast resistant, fire protection, and chem-bio systems)





Energy Infrastructure

- DPAS supported delivery of critical and scarce resources to support Alaska pipeline





Airport Security

- DPAS supported TSA's deployment of equipment to meet the Aviation and Transportation Security Act of 2001 deadline





Transportation Security

- DPAS supported delivery of perimeter surveillance equipment for transportation facilities





Hurricane Recovery

- DPAS expedited delivery of emergency power generators and switches to restore rail service





Flood Recovery

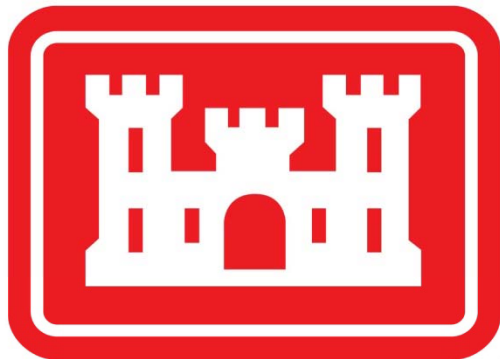
- DPAS supported emergency repairs in Federal building





Dams and Levees

- DPAS supporting Greater New Orleans Hurricane Protection System



SM





Title III of the Defense Production Act

- Title III provides a set of broad economic authorities, found nowhere else in law, to incentivize the creation, expansion or preservation of domestic manufacturing capabilities for technologies, components and materials needed to meet national security requirements.
- Title III actions stimulate private investment in production resources by reducing the risks associated with the capitalization and investments required to establish the needed production capacity.
- Title III is a Government-wide statutory authority. DOD is only federal agency using Title III authorities. Focus is on defense-wide/multi-platform applications.
- Title III establishes viable industrial capabilities for defense and commercial markets.
 - Goal is not the production of materials or items themselves, but the creation or expansion of the industrial capacity to produce these items and materials.

These authorities enable Title III to
CHANGE the domestic industrial base.



Title III Authorities

- **Purchases/Purchase Commitments (Sec. 303a)**
 - **Purchases provide direct subsidy to company to assist in establishing production capacity**
 - Purchase and installation of production equipment
 - Engineering support to improve quality and yield of production facility
 - Sample quantities for process validation and customer qualification testing
 - Costs to develop business and marketing plans
 - **Purchase Commitments**
 - Guaranteed market to incentivize companies to establish, expand or maintain production capability
 - Company may use internal funding or obtain external funding i.e., loan
 - Government is buyer of last resort. Some or all of funds may not be expended
- **Installation of Production Equipment in Gov't or Privately Owned Facilities (Sec. 303e)**
- **Development of Substitutes (Sec. 303g)**
- **Loans/Loan Guarantees (Sec. 301; Sec. 302)**



Title III

Statutory Requirements

DETERMINATION UNDER SECTION 303 (a)(5) OF
THE DEFENSE PRODUCTION ACT
FOR
HIGH HOMOGENEITY OPTICAL GLASS

In accordance with section 303(a)(5) of the Defense Production Act, 50 U.S.C. 2093(a)(5), which authority was delegated to the Secretary of Defense by Executive Order 12919, and further delegated to me by Secretary of Defense memorandum, Subject: Delegation of Authorities and Assignment of Duties of the Secretary of Defense Under Executive Order 12919, National Defense Industrial Resources Preparedness, Implementing the Defense Production Act (DPA), dated September 28, 1994, I hereby determine that:

1. *The industrial resource or critical technology item is essential to the national defense.*

High Homogeneity Optical Glass (HHOG) blanks characterized as possessing a maximum refractive index variation across the entire optic of $\pm 1.0 \times 10^{-6}$ (industry equivalent of grade H4) or better, are critical elements of high precision optical lens systems. These lens systems are key technology enablers for defense and national security related systems and applications and are employed by a broad mix of governmental agencies including: the Department of Defense (DoD), the Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA).

Of particular concern to the DoD are lens products made from large format (diameters greater than 30cm), H4 grade HHOG blanks required in optical designs for aerial, satellite and other space surveillance systems. Other HHOG-dependent DoD and national security applications include, but are not limited to: ground and airborne directed energy systems (target acquisition, missile defense, laser weapons), precision interferometric positioning (precision measuring), microlithography (semiconductor production) and fusion energy development (National Ignition Facility and other laser utilities). In support of these applications, the Production Process Technology for High Homogeneity Optical and Technical Glasses is listed within the Military Critical Technology List (MCTL) under Lasers, Optics and Sensors Technology (11.2-5, page MCTL-11-49, July 2007).

2. *Without action under DPA authority, US industry cannot reasonably be expected to provide the capability for the needed industrial resource or critical technology item in a timely manner.*

The existing domestic market for HHOG blanks is characterized by a limited number of suppliers, high start-up cost barriers for new market entrants, extremely long production cycle/lead times, low manufacturing yields and higher per-unit cost. Current

1

from the current cost prohibitive levels of less than 20% to yields approaching 70%. This approach, focusing on dramatically improved manufacturing efficiencies, will result in increased supply of HHOG blanks to better meet anticipated demand.

Approved by: Ashton B. Carter Date: JUN 30 2009
Ashton B. Carter
Under Secretary of Defense
Acquisition, Technology and Logistics

1. Obtain “Presidential Determination”
 - Essential for national defense
 - Industry cannot/will not provide needed capacity in a reasonable time without Title III assistance ...
and domestic capacity is insufficient to meet Defense and non-defense demand.
2. Notify Congress
3. Wait 30 days to allow for Congressional comment



The DPA Fund

- Separate Fund “DPA Fund” established in Treasury for Title III activities
 - Title III appropriations credited to Fund – (Procurement Funds)
 - Usually made in DoD appropriations but can be included in other appropriations bills
 - By law may only be used for Title III purposes
- Title III appropriations are valid until expended (No-Year)
- Funds not expended on project are returned to Fund for reuse
- DPA contains its own authorization of appropriations
 - Funds appropriated for Title III are automatically authorized. Title III initiatives are not normally included in authorization bills for this reason.
- Stand-alone budget line titled DEFENSE PRODUCTION ACT PURCHASES under PROCUREMENT, DEFENSE-WIDE



Industrial Modernization



- Army lead-times were growing 65-70 weeks for Fe-based VIM-VAR steels
 - Aircraft Grounded Due to Lack of Raw Material
 - Sponsored DPA Title III Expansion Project

DPAS Used To Accelerate
Construction of New Furnace From
27 to 9 Months





Summary

The DPA contains powerful authorities that allow the Govt to ensure industry provides priority support as needed.

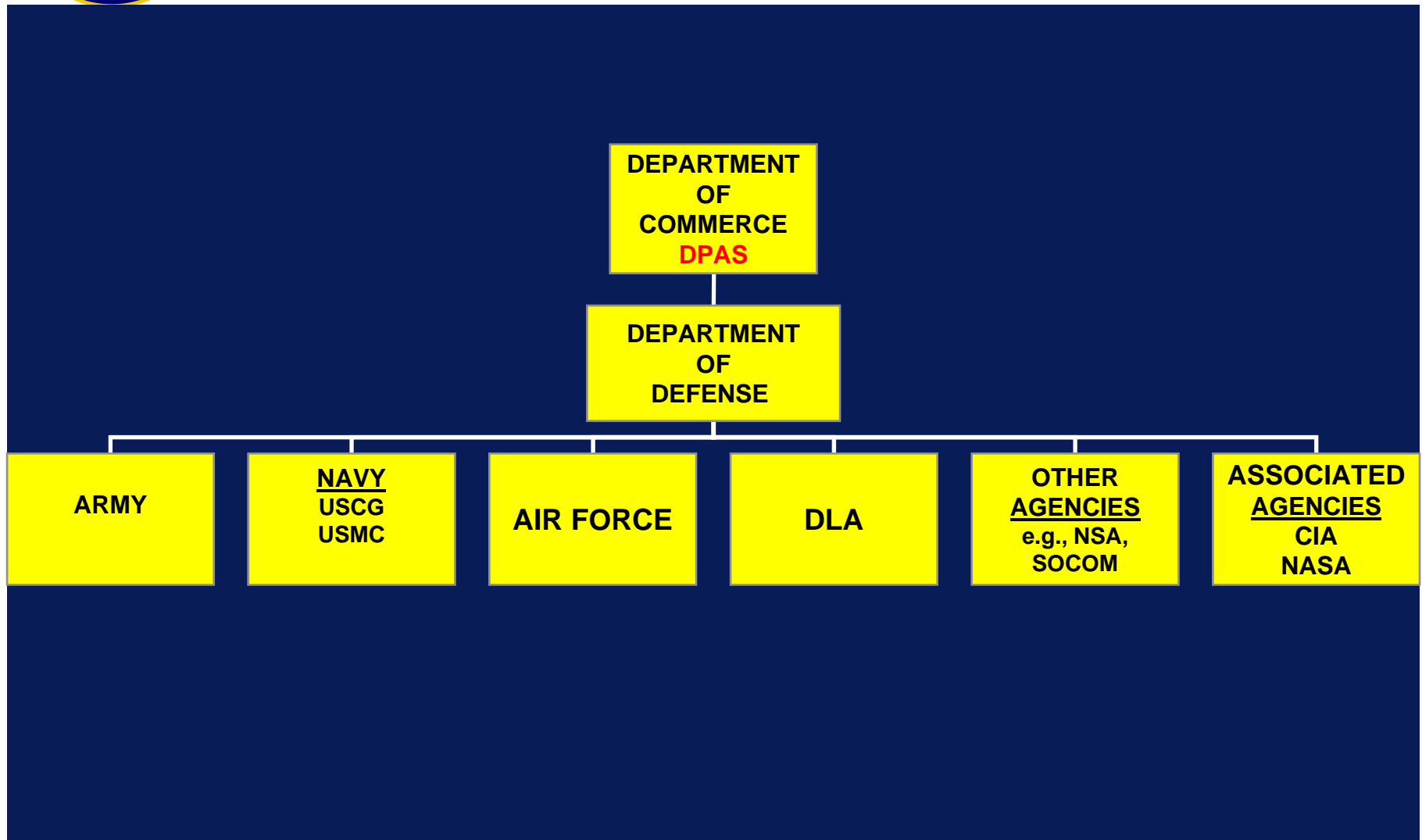




BACKUP Slides



DPAS Delegation of Authority





Assigning a “Priority Rating” Program Manager

- Levels of Priority -Rating Symbols
 - DX is highest national priority (DOD SecDef Approves)
 - DO – Vital to national defense (DOD, DOE, DHS)
- Program Identification (14 DOD Programs)
 - Approved programs (examples)
 - A4 Tank – Automotive
 - A7 Electronic and communications equipment
 - C1 Food Resources (Combat Rations)
 - C9 Miscellaneous (Clothing & Textiles)
- Priority Rating (Rating symbol + Program ID)



DX Programs

- Space-Based Infrared System High Program
- Mine Protected Vehicles/Route Clearance Vehicles
- Presidential Helicopter
- Fleet Ballistic Missile Weapons System, Trident System
- Program 341
- Mine Resistant Ambush Protected Vehicles
- Counter Improvised Explosive Devices
- Integrated Ballistic Missile Defense Systems
- National Reconnaissance Program (# 390)





Supporting Operations in Iraq & Afghanistan

- Body Armor
- Mine Resistant Ambush Protected vehicles
- Counter-Improvised Explosive Devices
- Intelligence, Reconnaissance & Surveillance Systems





PAIR Task Force

- DoD Priorities and Allocations of Industrial Resources (PAIR) Task Force ensures industrial resources are allocated in accordance with operational priorities
- The Office of the Deputy Under Secretary of Defense for Industrial Policy convenes and chairs
- Joint Staff & AT&L Charter, 4 Feb 02



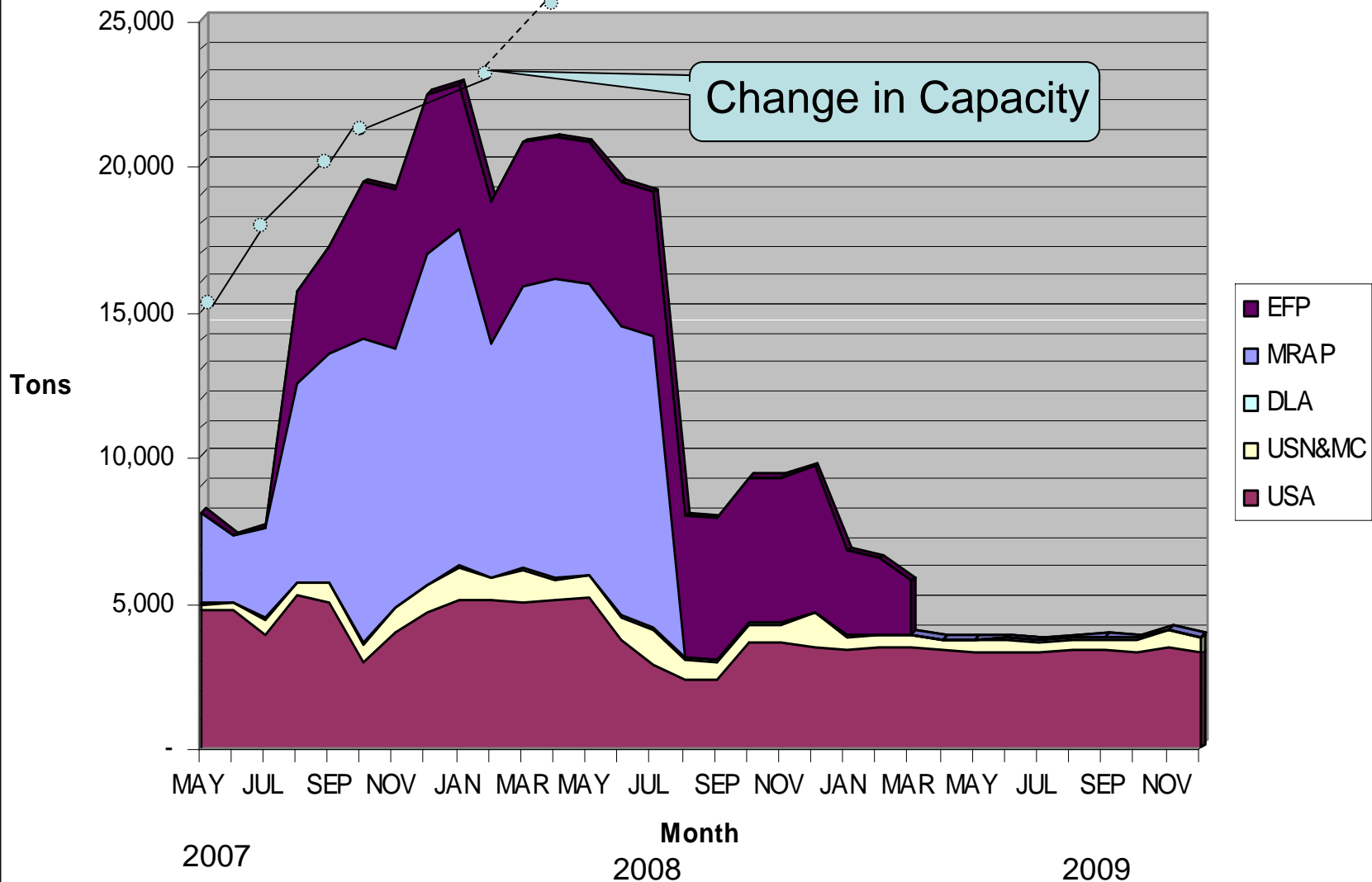
PAIR Task Force

- From Apr 02 to Sep 06, the PAIR allocated ballistic backing material used in Body Armor to DoD prime contractors, constituting the largest government allocation in 30 years
- DoD contractors were allocated 75% of domestic supply to field body armor to the force on an expedited basis
- During 2007, the PAIR forecasted Department-wide armor plate requirements
- Worked with steel industry to match DoD requirements and grow available capacity

Thin Gage Q&T Steel Requirement

MRAP Max Rate @ 1,200 vehicles / month

EFP Max Rate @ 1,000 kits / month





Critical Manufacturing

- DPAS Helps Expedite Emergency Repairs at Critical Defense-related Manufacturing Facilities





Security of Supply

- “*Security of Supply*” is a non-binding arrangement concluded by the U.S. Government with a foreign partner to provide reciprocal priorities support
- Formal Arrangements with:
 - Sweden
 - United Kingdom
 - Netherlands
 - Finland
 - Italy (MOA)
 - Canada (MOA)



Security of Supply Examples

- DPAS assistance provided
 - Night vision/thermal imaging equipment
 - Ammunition
 - Aircraft platforms, components, and spares
 - Armored vehicles
 - Satellite phones and radios
 - GPS navigation equipment



Security of Supply Examples

- Assistance Received From Outside U.S.
 - Ammunition
 - Antennas
 - Tires
 - Armor Plate
 - Bearings

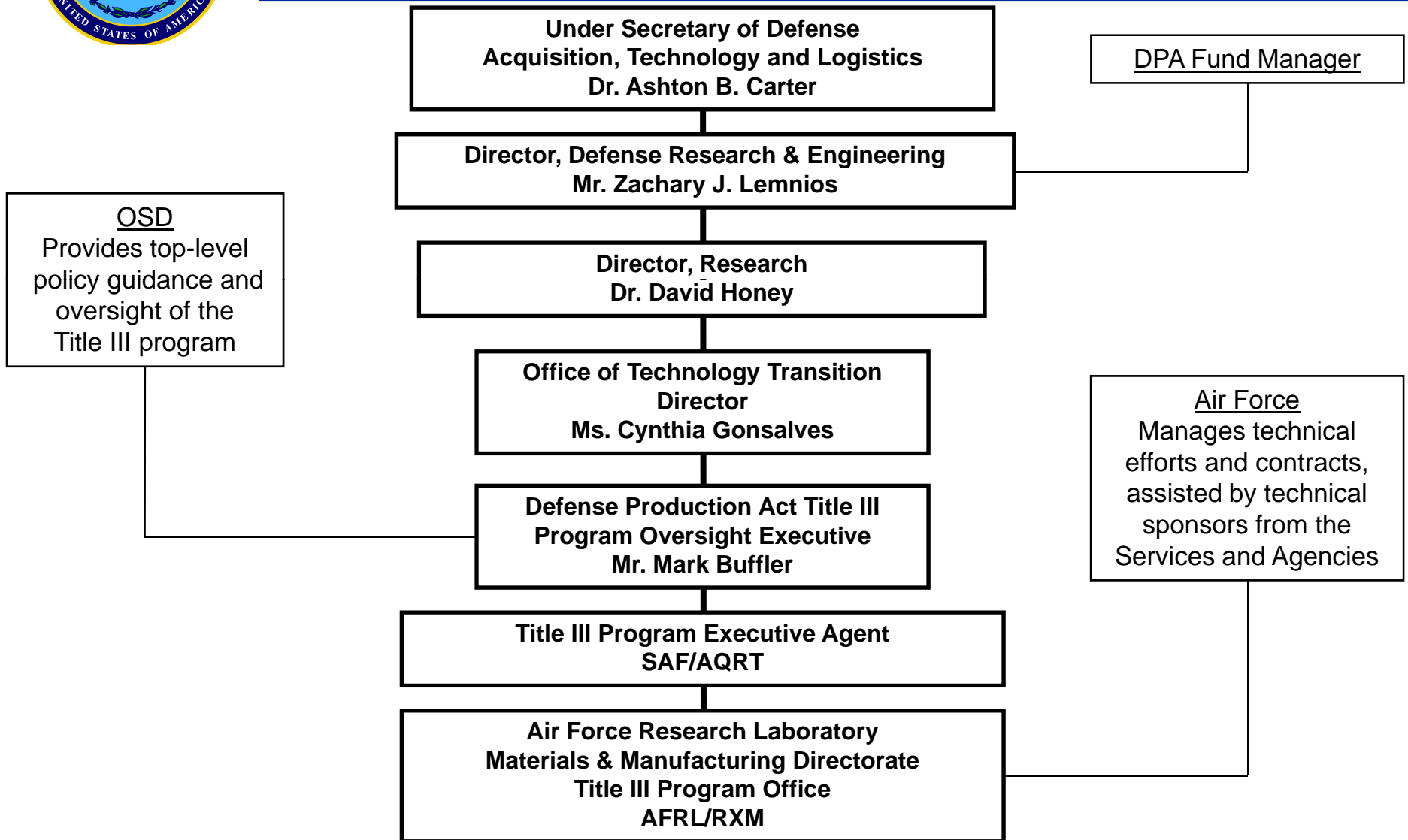


Where To Learn More

- Defense Acquisition University
Continuous Learning Module **(CLC043)**
 - Takes ~3 hours to complete
 - <https://learn.dau.mil/html/clc/Clc.jsp>



Title III Organization





Current Title III Initiatives

<ul style="list-style-type: none">■ Radiation Hardened Microelectronics Capital Expansion Project<ul style="list-style-type: none">■ Honeywell, Plymouth, MN■ BAE Systems, Manassas, VA	\$164.9M
<ul style="list-style-type: none">■ Beryllium Industrial Base Production Initiative<ul style="list-style-type: none">■ Brush Wellman, Inc., Cleveland, OH	\$84.1M
<ul style="list-style-type: none">■ High Temperature Flexible Aerogel Material Supplier Initiative<ul style="list-style-type: none">■ Aspen Aerogels Inc., Northborough, MA	\$52.0M
<ul style="list-style-type: none">■ Vacuum Induction Melting/Vacuum Arc Re-melting Furnace Capacity<ul style="list-style-type: none">■ Latrobe Specialty Steel Company, Latrobe, PA	\$44.1M
<ul style="list-style-type: none">■ YBCO Superconductors<ul style="list-style-type: none">■ American Superconductor Corp., Westborough, MA■ SuperPower Corporation, Schenectady, NY	\$31.3M
<ul style="list-style-type: none">■ Lithium Ion (Li Ion) Batteries<ul style="list-style-type: none">■ Quallion LLC, Sylmar, CA	\$31.0M
<ul style="list-style-type: none">■ Hydrogen Ion Implantation Equipment/Thin Silicon-On-Insulator Wafers<ul style="list-style-type: none">■ MEMC Electronic Materials Inc., St. Peters, MO	\$30.3M
<ul style="list-style-type: none">■ Silicon Carbide MMIC Devices<ul style="list-style-type: none">■ Cree, Inc., Durham, NC	\$30.2M
<ul style="list-style-type: none">■ Automated Composite Manufacturing Technologies<ul style="list-style-type: none">■ ATK Space Systems Clearfield, UT	\$22.2M
<ul style="list-style-type: none">■ Rigid Rod Polymeric Materials Initiative<ul style="list-style-type: none">■ Solvay Advanced Polymers, LLC, Bay St. Louis, MS	\$21.4M



Current Title III Initiatives

▪ Titanium Metal Matrix Composites for Aircraft	\$20.4M
▪ FMW Composite Systems Inc., Bridgeport, WV	
▪ Radiation Hardened Cryogenic Read Out Integrated Circuits (ROICs)	\$15.4M
▪ AMI Semiconductor, Pocatello, ID	
▪ Next Generation Radiation Hardened Microprocessors	\$15.0M
▪ BAE Systems, Manassas, VA	
▪ Polyhedral Oligomeric Silsesquioxane (POSS) Nanotechnology Scale-up Initiative	\$13.9M
▪ Hybrid Plastics, Inc., Hattiesburg, MS	
▪ High Performance Thermal Battery Production Initiative	\$13.4M
▪ The Enser Corp., Pinellas Park, FL	
▪ Reactive Plastic CO2 Absorbent Production Initiative	\$12.3M
▪ Micropore, Inc., Newark, DE	
▪ TWT Amplifiers for Space	\$10.6M
▪ L-3 Communications, Torrance, CA	
▪ Gallium Nitride (GaN) MMICs	\$10.1M
▪ TBD	
▪ Coal Based Carbon Foam	\$10.1M
▪ Touchstone Research Laboratory, Inc., Triadelphia, WV	
▪ Miniature Compressors for Electronics & Personal Computing	\$8.4M
▪ Aspen Compressor, LLC, Marlborough, MA	



Current Title III Initiatives

- **Solar Cell Encapsulant** **\$7.8M**
 - Specialized Technology Resources Inc., Triadelphia, WV
- **ALON & Spinel Optical Ceramics** **\$7.6M**
 - Surmet Corp., Burlington, MA
- **Extremely Large, Expendable and Reusable Structures Manufacturing (ELDERS)** **\$7.2M**
 - ATK Space Systems Iuka, MS
- **Silicon Powder & Ceramic Armor Manufacturing** **\$6.1M**
 - Superior Graphite Chicago, IL
- **ALD Hermetic Coatings** **\$5.6M**
 - Raytheon IDS, Andover, MA
- **Military Lens System Fabrication & Assembly** **\$5.5M**
 - Optical Systems Technology, Inc., Freeport, PA
- **Armstrong Titanium Production** **\$5.0M**
 - International Titanium Powder, LLC, Lockport, IL
- **Methanol Fuel Cell Components** **\$4.9M**
 - DuPont Fuel Cells, Wilmington, DE
- **Transparent Polycrystalline Laser Gain Material** **\$4.7M**
 - TBD
- **Low-Cost Military GPS** **\$4.5M**
 - Rockwell Collins, Cedar Rapids, IA



Current Title III Initiatives

▪ Light-weight Ammunition and Armor Initiative	\$3.7M
▪ MAC, LLC, Bay Saint Louis, MS	
▪ Thin Silicon-on-Insulator (SOI) Wafers	\$3.2M
▪ TBD	
▪ Steel to Titanium Transformation	\$3.0M
▪ Gautier Steel LTD, Johnstown, PA	
▪ High Homogeneity Optical Glass	\$2.9M
▪ TBD	
▪ Boron Fiber Production	\$1.3M
▪ Specialty Materials, Lowell, MA	
▪ Amplifying Fluorescent Polymer Based IED Detection Devices	\$1.2M
▪ Nomadics, Inc., Stillwater, OK	
TOTAL	\$669.8M