

Providing  
Energy Solutions  
Worldwide



# **Defense Energy Support Center**

## **Fact Book**

Includes Fiscal 2009 Facts  
and Statistics

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The Defense Energy Support Center Fact Book contains information regarding the Center's business operations.

The Fact Book reflects the Center's operational status at the end of fiscal 2009 unless otherwise indicated. The intent of this publication is for general information purposes only. The Fact Book can also be found online on the DESC website at <http://www.desc.dla.mil>.



# Defense Energy Support Center History

The origin of the DESC dates back to World War II. Originally, it was an entity of the Department of Interior as the Army-Navy Petroleum Board. Its mission was to administer the critical petroleum requirements during World War II. In 1945, it was transferred to the War Department and became the Joint Army-Navy Purchasing Agency.

The Agency underwent several name changes, but its mission remained essentially the same until 1962. At that time, it became a part of the consolidated military supply organization, the Defense Supply Agency, now known as the Defense Logistics Agency. The Center was designated the Defense Fuel Supply Center in 1964 as a single entity to purchase and manage the Department of Defense's petroleum products and coal.

In 1973, DFSC progressed from a wholesale fuel central procurement activity to a more comprehensive logistics mission as the Integrated Material Manager for DoD petroleum requirements. Under Phase I, DFSC added management of the acquisition, storage, distribution and sale of fuel with responsibility ending at the military Services' installation boundary. In 1991, Phase II began, which expanded DLA's ownership of bulk petroleum products to include most bulk storage installations. This effort was divided into two parts, Phase IIA, which capitalized aviation fuel, and Phase IIB, which capitalized ground fuels. As a result of Phase II Capitalization, DLA owns all bulk petroleum products from the point of purchase until its final point of issue to aircraft, ships and ground equipment. In 1990, the mission was expanded to include the supply and management of natural gas, as well as the basic petroleum and coal products. Under this program, natural gas requirements were consolidated and centrally procured with a mission to provide direct supply of natural gas to customers when determined more economical than using gas from a local distribution company.

In Feb. 11, 1998, the Center's name changed to the DESC. With it came a new mission to build an energy program aimed at moving the DoD out of the management of energy infrastructure and into the management of energy products. The energy enterprise mission was added to assist the military Services with the privatization of utility-related infrastructure and energy savings performance contracts to decrease energy usage and energy demand.

The initiative to deregulate electricity in Continental United States added still

another mission to DESC. As states deregulate, DESC pursues and awards contracts for electricity services to CONUS DoD and Federal Civilian Agency installations in the same manner as procurements for natural gas.

On Oct. 1, 2001, DESC assumed a new mission from the U.S. Air Force and now serves as the DoD's IMM for space and space-related products and services and provides world-class support and business solutions to not only DoD, but other Federal Agencies, government contractors and academia. The new mission encompasses 92 national stock numbers with each product supporting at least one DoD major weapon system. The addition of this mission makes DESC a full service provider of all energy and energy-related products.

On Aug. 11, 2004, the Secretary of Defense designated DLA as the Executive Agent for Bulk Petroleum. This authority was delegated to DESC on Nov. 1, 2004, with the responsibility to execute Supply Chain Management for all DoD Bulk Petroleum, with an emphasis on improving efficiency and minimizing duplication and redundancy within the supply chain.

On Oct. 1, 2006, DESC became the DoD IMM for both bulk Aviator's Breathing Oxygen (specification MIL-PRF-27210) and Liquid Nitrogen (specification A-A-59503). Both were previously managed by the Defense Supply Center Richmond.

In 2009, DESC's mission continued to expand, incorporating emerging areas of renewable and alternative methods for satisfying customers' energy needs. Its mission expanded beyond the role of traditional fuel and energy support as it leveraged new technologies. As the nation continued to embrace conservation, the need for energy security and a renewed awareness of the environmental impact, DESC focused on a system of solutions to meet these challenges. Its business units continued to pursue solar power, hydrogen power, synthetic fuels and other alternative/renewable energy sources as new procurement, research and development initiatives materialized.

DESC continues its mission to support the warfighters and manage energy resources of the future.

# Mission & Vision

## ***Mission***

To provide the Department of Defense and other government agencies with comprehensive energy solutions in the most effective and economical manner possible.



## ***Vision***

Our Customers' First Choice for Energy Solutions

# Commander's Update

In fiscal 2009, DESC continued its commitment to support the warfighters as DoD remained steadfast in the Global War on Terrorism, Operation Enduring Freedom, Operation Iraqi Freedom and other contingency operations worldwide, to include natural disasters and humanitarian missions. Our customer base continued to grow around the world to include not only the warfighters but also foreign governments, federal civilian organizations and authorized commercial entities.

DESC continued to actively manage petroleum and aerospace energy supply chains as well as electricity, coal and natural gas commodities to support our customers' fuel and energy requirements. Additionally, in response to the increasing research and interest, DESC began to further expand its energy solutions to include alternative fuels, renewable energy, utilities privatization and other installation energy conservation efforts. These areas represent steps toward energy security, environmental stewardship and efficient energy use – mutual goals shared worldwide.

Sensitive to the continuing and expanding emphasis within DoD on alternative fuels and renewable energy, DESC established the Directorate of Energy Plans and Program. This directorate provides a centralized focus on the AFRE mission, ensuring DESC is best postured to support AFRE requirements for the warfighter. While the Research & Development office and newly created Business Development office are aligned under

Directorate of Energy Plans and Program, the corresponding placement of DESC's Executive Agent Office under this directorate ensures a continuing supply chain focus and integration of these newly emerging fuels. Additionally, this realignment was accomplished with a minimum staff, relying on an efficient "hub & spoke" structure, which enables subject matter experts to remain within their existing directorates to allow the most efficient use of those resources.

Throughout the fiscal year, there was continued success in programs and initiatives designed and developed to support fuel requirements worldwide. One successful program was the Ships' Bunker Easy Acquisition Card® Program, which revolutionized the ships' bunkers fuel ordering process using a secure internet order management system. In fiscal 2009, 1,699 orders were successfully processed with fuel purchases valued at over \$285M for 604 vessels. The final phase of the SEA Card® program, scheduled to pilot late in 2010, will allow small vessels, unable to purchase bunker contract fuel because of minimum lift requirements, an opportunity to purchase bunker fuel at marinas by using a SWIPE SEA Card®.

As a primary level field activity of DLA, our goals and objectives are integrated and aligned with DLA's. DESC initiated and developed new programs and business practices designed to meet the ever-changing challenges ahead.



## Commander's Update (cont'd)



These objectives and programs, which are detailed throughout this book, include our Business Systems Modernization-Energy, information technology and transformation initiatives. DESC also successfully embarked upon a major program to converge with the DLA Enterprise Resource Planning Application – Enterprise Business Systems; implemented Increment 1 of the DLA Real Property effort in EBS to position DESC for replacement of the legacy Sustainment, Restoration and Modernization – Energy Application.

On May 11, 2009, the DESC Guam office was established at Andersen Air Force Base, Guam, to provide enhanced customer support to the warfighters in the Western Pacific. In this transformation, DESC Middle Pacific transferred responsibility for DESC operations in the Pacific area from Guam west-

ward to Diego Garcia, to include DFSPs at Naval Base Guam, Andersen AFB, Subic Bay, Singapore and Diego Garcia. With DESC Middle Pacific's retained area of responsibility centered around the Hawaiian islands, including DFSPs at Wake and Kwajalein, DESC Middle Pacific was renamed DESC Hawaii.

DESC supported nineteen major DoD, NASA and U.S. commercial enterprise launches with a total of eight products: hydrazine dinitrogen tetroxide, Rocket Propellant (RP)-1/RP-2, liquid oxygen, liquid nitrogen, gaseous nitrogen, liquid helium and gaseous helium. DESC also provided bulk helium to support the warfighter in Iraq and Afghanistan for aerostats (tethered balloons) used in ground surveillance and force protection.





# Fiscal 2010 Director's Guidance

DESC is dedicated to providing continuous energy support to the warfighter and will strive to fulfill its mission in every way possible. Along with current business unit's mission requirements, DESC will support and play an integral part in DLA strategies and initiatives. DESC's continued support consists of the following:

- Engaging in direct support of the warfighter through planning, partnering and participating with Soldiers, Sailors, Airmen, Marines and the Coast Guard to increase readiness through numerous exercises.
- Partnering with the Federal Emergency Management Agency to provide emergency supplies of gasoline and diesel to National Logistics Staging Areas in the event of natural disaster.
- Aggressively supporting the Energy Security Integrated Product Team and DoD's basic goal to find ways to achieve energy security through assured energy supply and efficiency.
- Partnering with the Services to explore the viability or advantages of using synthetic fuel in weapons platforms.
- Engaging in research and development efforts to maintain and improve the Class IIIB supply chain; supporting the development, test,

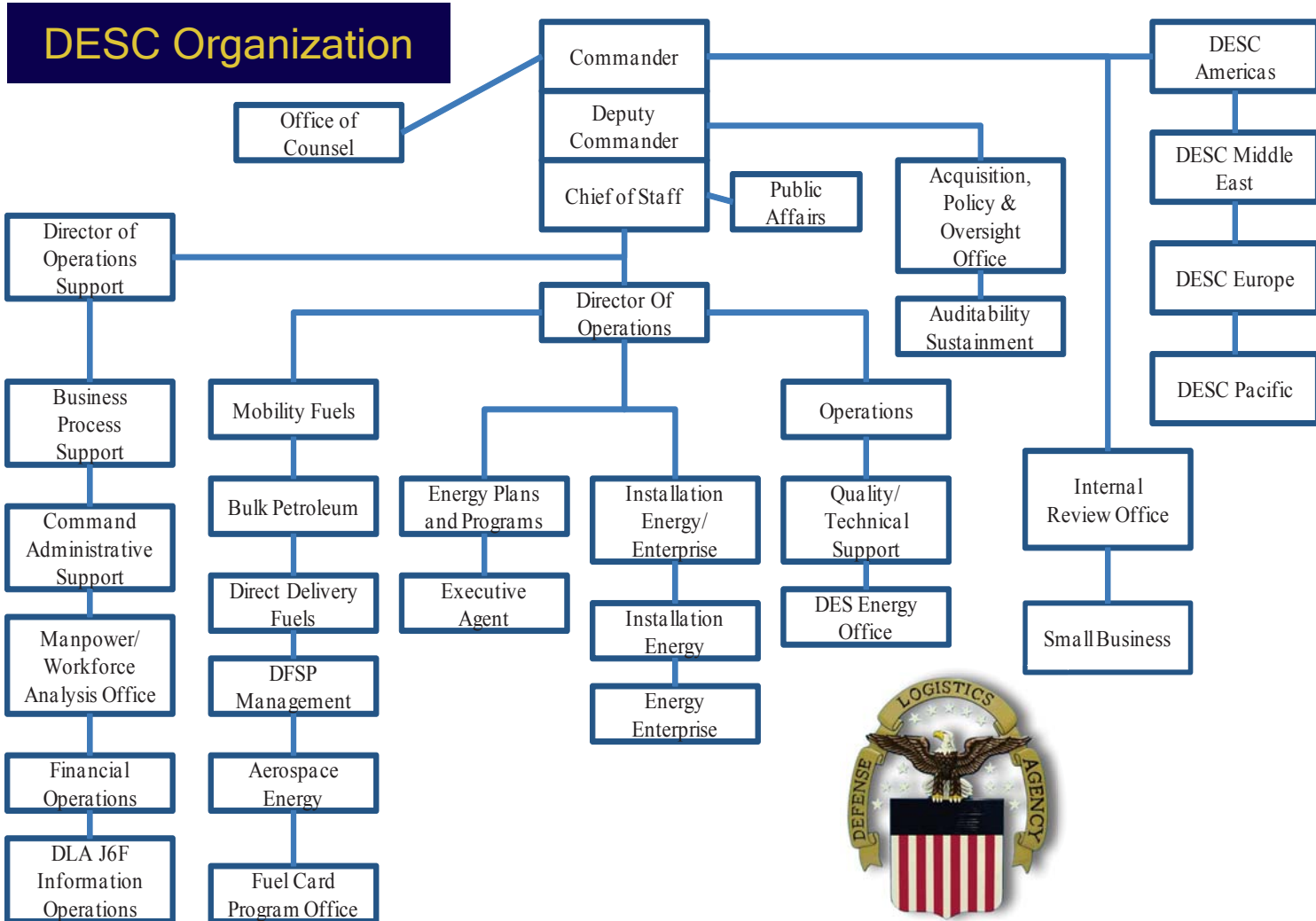
certification and integration of alternative drop-in mobility fuels; and developing alternative/renewable energy solutions.

- Maintaining operational metrics to ensure DESC is making appropriate progress on strategies and initiatives identified in the DLA Strategic Plan for fiscal 2011 through fiscal 2017.
- Merging System Analysis and Program Development Oil and GAS with EBS in fiscal 2010. The full operational capability date for DESC to be fully converged with EBS is fiscal 2014.
- Ensuring DESC's financial statements are measured internally to commercial audit standards and procedures and reflect a true picture of DESC's financial operations.
- Seeking out and continuing to implement strategic supplier/vendor alliances whenever possible.
- Supporting the Office of the Secretary of Defense to achieve its goal of privatizing on-base utility infrastructure and continue providing support, through the use of energy savings performance contracts and utility energy services contracts, the efforts of the military to meet mandated energy reduction and renewable energy usage goals.

## Fiscal 2010 Director's Guidance (cont'd)

- Aggressively pursuing Increment 2 of the Real Property effort, which will enable full termination of the SRM-E Application.
- Working diligently on the DLA Energy Convergence program with the systems integrator, DLA and all of DESC to accomplish business process reengineering as needed to take full advantage of the SAP industry solutions while ensuring continual mission support.
- Organizing for success by decentralizing and shifting responsibilities of the Inventory Accountability mission from headquarters to the regions.
- Exploring emerging alternative energy opportunities. Continuing to improve the efficiencies of DESC's business processes through Lean Six Sigma, various Rapid Improvement Events, Customer Support Management, Voluntary Protection Program, Plant, Property and Equipment Program, and Automatic Identification Technology.





As of January 27, 2010

# Worldwide Locations





## Rear Adm. Kurt L. Kunkel, SC, USN Commander, Defense Energy Support Center

Rear Adm. Kurt Kunkel, a native of Warner Robins, Ga., graduated from the U.S. Naval Academy, Annapolis, Md., in 1982, receiving a Bachelor of Science (with merit) in Oceanography. He earned a Master of Science in Financial Management from the U.S. Naval Postgraduate School, Monterey, Calif., in 1992. Kunkel is a graduate of the U.S. Naval War College, Newport, R.I., the Joint Forces Staff College, Norfolk, Va., and completed Columbia University's Graduate School of Business Senior Executive Program.

Kunkel is the commander of the DESC, a field activity of the DLA, at Fort Belvoir, Va. As commander, he is responsible for providing the DoD and other government agencies with comprehensive energy solutions and ensuring continuous energy support to America's warfighters worldwide. He previously served as the chief of staff, Defense Logistics Agency. Prior to that assignment, he served as the chief, Strategy Division; deputy director for Operational Logistics; director of Logistics on the Joint Staff and deputy for Supply, Ordnance & Logistics Operations in the Office of the Chief of Naval Operations.

Sea duty assignments include: supply officer, Fighter Squadron (102) embarked in USS America (CV 66); supply officer, USS McCandless (FF 1084); principal assistant for Services and assistant supply officer, USS George Washington (CVN 73); and supply officer, USS Harry S. Truman (CVN 75).

Ashore assignments include:

Integrated Logistics Support, F-14 assistant program manager for Logistics, Naval Air Systems Command, Washington, D.C.; Industrial Support Branch section head and executive assistant to the commanding officer, Naval Aviation Supply Office, Philadelphia, Pa.; staff positions at the Fleet and Industrial Supply Center, Norfolk, Va., including acting officer in charge, FISC Norfolk Detachment Washington, D.C.; Regionalization and Supply Programs/Policy Branch head, director Fleet Supply/Ordnance, U.S. Fleet Forces Command, Norfolk, Va.; and assistant chief of staff for Logistics and Engineering, commander, U.S. Naval Forces Central Command/U.S. 5th Fleet, Manama, Bahrain.

His military decorations include the Defense Superior Service Medal, Legion of Merit (2 awards), Meritorious Service Medal (3 awards), Navy and Marine Corps Commendation Medal (4 awards), and Navy and Marine Corps Achievement Medal. He is a qualified Naval Aviation Supply Officer, Surface Warfare Supply Corps Officer and Joint Qualified Officer. He is a member of the Department of the Navy Acquisition Corps.





## Patrick J. Dulin Deputy Commander, Defense Energy Support Center

Patrick J. Dulin serves as the deputy commander, Defense Energy Support Center.

Dulin, a native of New York City, was inducted into the Senior Executive Service June 12, 2006. He comes to DESC from his previous duties as the director for Defense Logistics Agency Enterprise Support. Dulin graduated from the U.S. Air Force Academy, Colorado Springs, Colo., June 1973. Following graduation, he entered the Marine Corps.

His initial assignment was with the 2nd Marine Division, Camp Lejeune, N.C., where he served in a variety of infantry billets. Following his transfer from Camp Lejeune in October 1976, Dulin reported to the 3rd Marine Division on Okinawa as an operations officer and as executive officer of Headquarters and Service Company 3rd Battalion, 4th Marines. In January 1978, he reported to Hawaii at Headquarters, Fleet Marine Forces Pacific, where he served as officer in charge of the Command Center and as the force readiness officer.

In December 1980, Dulin transferred to the 1st Marine Brigade, at Kaneohe, Hawaii, serving as a rifle company commander and later as the assistant operations officer in the 3rd Battalion, 3rd Marines. In January 1981, Dulin reported to the Naval Postgraduate School in Monterey, Calif., as a student in Electrical Engineering. Upon graduation, he reported to the Marine Corps Development Center in Quantico, Va., as an acquisition officer in the Command, Control and Communications Division.

In May 1987, Dulin was transferred to the 1st Marine Division in Camp Pendleton, Calif., where he served as the assistant division training officer and as the executive officer. Promoted

to lieutenant colonel in July 1990, Dulin assumed command of the Marine Corps Security Force Company, Kings Bay, Ga.

In May 1993, Dulin was transferred to the Combined Forces Command, Korea, and served in the C/J-3 Operations Section. In June 1995, he reported to the Naval War College, Newport, R.I., as a colonel select. Following graduation in June 1996, Dulin reported to Camp Pendleton, Calif., as the commanding officer of Headquarters and Support Battalion. In June 1998, he reported for duty as operations officer (G-3) of the 1<sup>st</sup> Marine Expeditionary Force, Camp Pendleton, Calif.

In July 1999, Dulin transferred to the Marine Forces Reserve, New Orleans, La., for duty as the chief of staff. In August 2001, he transferred to Marine Corps Systems Command, serving as a program manager. In December 2001, he assumed the duties of the chief of staff at the Marine Corps Systems Command. Dulin retired in July 2003 after serving 30 years in the Marine Corps. He continued his career in the federal government as a civilian employee, initially for the Marine Corps and then with the DLA.





## Capt. Charles T. Race, SC, USN Chief of Staff, Defense Energy Support Center

Capt. Charles T. Race is the chief of staff of the Defense Energy Support Center, a field activity of the Defense Logistics Agency located at Fort Belvoir, Va. As chief of staff, he is responsible for providing DoD and other government agencies with comprehensive energy solutions and ensuring continuous energy support to America's warfighters worldwide.

Race, a native of Cortland, N.Y., graduated from the State University of New York at Cortland in 1985 with a Bachelor of Science in Mathematics. He was commissioned an ensign at Officer Candidate School in February 1986, and then attended the Navy Supply Corps School in Athens, Ga. He holds a Master of Science in Management from the U.S. Naval Postgraduate School. He is also a graduate of the University of North Carolina at Chapel Hill, Kenan-Flagler Business School Executive Development Program.

Sea tours include: disbursing and sales officer, USS McInerney (FFG-8), and supply officer, USS Hawes (FFG-53).

Ashore assignments include: navy plans officer, Naval Weapons Station, Yorktown, Va.; business financial manager - Advanced Tactical Aircraft Protection Systems (PMA 272) Naval Air Systems Command; financial advisor and contracting officer, United States Military Training Mission-Royal Saudi Naval Forces, Riyadh, Saudi Arabia; contracting director, Maritime Weapon Systems Support Department, Naval Inventory Control Point; director, Weapons Systems Support Department, Naval Inventory Control Point; director, Inventory Control Department, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii; executive officer, FISC, Pearl Harbor, Hawaii; deputy chief, DESC Overseas Bulk Fuels Contracting; Naval Sea Systems Command, deputy executive director for Conventional Ammunition.

His military decorations include the Defense Superior Service

Medal, Defense Meritorious Service Medal (2 awards), Meritorious Service Medal (2 awards), Navy and Marine Corps Commendation Medal (3 awards), and Navy and Marine Corps Achievement Medal. He is a qualified Surface Warfare Supply Corps Officer and is Defense Acquisition Workforce Improvement Act Level III qualified in both financial management and contracting. Race is a member of the Department of the Navy Acquisition Corps.







## Col. Frank J. Rechner, USAF Director of Operations, Defense Energy Support Center

Col. Francis J. Rechner is the director of Operations for the Defense Energy Support Center, a field activity of the Defense Logistics Agency, located at Fort Belvoir, Va.

Prior to this assignment, he was commander of the 62nd Mission Support Group, McChord Air Force Base, Wash., and responsible for base activities supporting a population of 11,000, covering 101 units and 26,000 retirees and their dependents.

Rechner was born in Philadelphia, Pa. He earned his commission as a graduate of the Officer Training School, Lackland Air Force Base, Texas, in 1983. As a joint specialty officer, he has commanded at the group, joint and Air Force squadron commander levels, served as a deputy mission support group commander, and joint chief of staff, Petroleum and Water Branch, serving as principal advisor for all bulk fuel and water matters within the Logistics Directorate.





## Col. Karen L. Jennings, USA Director of Operations Support, Defense Energy Support Center

Col. Karen L. Jennings is the director of Operations Support for the Defense Energy Support Center, a field activity of the Defense Logistics Agency, located at Fort Belvoir, Va. She was commissioned as a quartermaster second lieutenant in 1980 after graduating from the University of Rhode Island as a distinguished military graduate. After graduating from the Quartermaster Basic Course at Fort Lee, Va., and Airborne School at Fort Benning, Ga., she was assigned to Giessen, Germany, for her first assignment in the 24th Supply and Services Company as platoon leader. She ran the Class II, IV and VII warehouse, Self Service Supply Center and Central Issue Facility, along with several contingency warehouses on the Fulda Gap. She also served in the 3rd Support Command in Frankfurt, Germany. In 1985, she attended the Quartermaster Advance Course at Fort Lee, Va., and was then assigned to Fort Lewis, Wash., as the battalion human resource officer, then as the Headquarters and Supply Company commander. After commanding, she served as the training officer operations officer, and the 9th Division Support command Operations officer. She then was assigned to the Fort Lewis Readiness Group where she was the quartermaster supply chief. She assisted Reserve and National Guard units in supply and food service operations and Desert Storm deployments. In 1992, she transitioned her career from active duty to the reserves. Her first duty assignment in the reserves was in the 124th Army Reserve Command, later designated as the 70th Regional Support Command, Seattle, Wash., where she served from 1992-2000. She served as the maintenance officer and the assistant logistics operations officer in the 174th Corps Support Group, and then served on the 70th RSC

staff as the headquarters commandant. From there, she commanded the 385th Transportation Battalion (Terminal). Jennings graduated from the Army War College at Carlisle Barracks, Pa. in 2001, and was assigned to the Pentagon, in the Army Operations Office, where she served as the current operations branch chief and special event action officer in the Directorate of Military Support, providing military support to civilian agencies. She supported the aftermath of 9/11 and the Winter Olympics in Salt Lake City. From there, she went to the Joint Forces Command, Joint Experimentation for two years until she was selected for a brigade-level command. In 2004, she moved to Fort Belvoir, Va., and commanded the 55th Theater Material Management Center and later the 55th Sustainment Command. Jennings deployed with the 316th Expeditionary Sustainment Command as the Deputy Commander to Balad, Iraq, where the unit was the responsible headquarters for sustainment operations throughout Iraq, supporting OIF 07-09. Upon her return, she was reassigned to the Pentagon where she served as the Single Army Logistics Enterprise division chief in the Army Logistics Automation Directorate .



# Organizational Points of Contact



Commander.....	(703) 767-9706	Director, Energy Enterprise .....	(703) 767-5168
Deputy Commander.....	(703) 767-9700	Director, Energy Plans and Programs .....	(703) 767-8606
Chief of Staff .....	(703) 767-9706	Director, Executive Agent Office.....	(703) 767-9355
Executive Assistant.....	(703) 767-9676	Director, Financial Operations .....	(703) 767-9484
Director, Operations.....	(703) 767-9301	Director, Fuel Card Program Office .....	(703) 767-2487
Director, Operations Support .....	(703) 767-4917	Director, Information Operations.....	(703) 767-2007
Office of Counsel .....	(703) 767-5020	Director, Installation Energy .....	(703) 767-8572
Director, Acquisition Policy & Oversight Office .....	(703) 767-8505	Director, Manpower & Workforce Analysis .....	(703) 767-9474
Director, Aerospace Energy .....	(210) 925-4456	Director, Mobility Fuels .....	(703) 767-9360
Director, Bulk Petroleum .....	(703) 767-3541	Director, Quality/Technical Support .....	(703) 767-8363
Director, Business Process Support.....	(703) 767-2157	Command Security Officer .....	(703) 767-6717
Director, Command Administrative Support.....	(703) 767-2945	Contingency Plans & Operations .....	(703) 767-8420
Director, Defense Fuel Support Point (DFSP) Management.....	(703) 767-9531	Internal Review Office .....	(703) 767-6133
Director, DES Energy.....	(703) 767-9284	Market Research.....	(703) 767-8353
Director, Direct Delivery Fuels .....	(703) 767-8500	Public Affairs Office.....	(703) 767-5042
		Small Business Office.....	(703) 767-9465
		Safety & Health Office .....	(703) 767-8281

# Regional Offices Points of Contact

## Americas

DESC Americas ..... (713) 718-3770 ext.101

DESC Americas East ..... (713) 718-3883 ext.102

DESC Americas West..... (310) 241-2801

## Pacific

DESC Pacific ..... (808) 473-4312/4292

DESC Guam..... (671) 366-7764/7769

DESC Hawaii..... (808) 473-4291/4311

DESC Japan ..... 011-81-311-755-2671

DESC Korea ..... 011-82-505-764-3202

## Europe

DESC Europe ..... 011-49-631-411-5350

DESC Operations Center..... 011-49-631-411-5354

DESC NATO ..... 011-32-2724-3118

DESC EUCOM..... 011-49-711-680-8263

DESC AFRICOM ..... 011-49-711-729-2536

DESC USAREUR..... 011-49-6221-57-6588

DESC USAFE..... 011-49-6371-405-7962

DESC NAVFAC..... 011-39-335-101-2931

## Middle East

DESC Bahrain ..... 011-973-1785-4661

DESC Germany ..... 011-49-631-3406-4280

DESC Kuwait..... 011-965-2-389-5648

DESC Pakistan ..... 011-92-51-208-2386

DESC Afghanistan..... 011-93-79-902-1990

# Fiscal Year 2009 Facts and Statistics



# Energy Summary

(U.S. Dollars in Millions)



Purchases at Cost .....	\$12,141.1 (1)
Net Sales .....	\$12,116.0 (2)
Ending Inventory .....	\$4,469.6 (3)

(1) Includes Expenses for Petroleum, Natural Gas, Missile Fuel, Federal Excise Tax, Transportation, Facilities, DESC Operations and Headquarters.

(2) Includes Net Sales for Petroleum, Natural Gas and Missile Fuel.

(3) Includes Petroleum and Missile Fuel Inventory.

Source: Financial Operations, DESC

## Civilian & Military End Strength

	<b>Civilian</b>	<b>Military</b>
	<b>Onboard</b>	<b>Onboard</b>
<b>FY09</b>	1033	63
<b>FY08</b>	920	59
<b>FY07</b>	880	60
<b>FY06</b>	760	69
<b>FY05</b>	722	62
<b>FY04</b>	743	61
<b>FY03</b>	731	67
<b>FY02</b>	689	68
<b>FY01</b>	599	61

Source: Manpower/Training Analysis Office, DESC



# Operations Program (Non-Fuel Costs)

*(U.S. Dollars in Millions)*

	<b><u>FY06</u></b>	<b><u>FY07</u></b>	<b><u>FY08</u></b>	<b><u>FY09</u></b>
<b>Civilian Pay</b>	\$82.0	\$87.7	\$99.1	\$111.7
<b>Military Pay</b>	\$9.1	\$9.5	\$8.9	\$10.3
<b>Non-labor</b>	\$136.3	\$140.0	\$184.6	\$206.9
<b>Total</b>	<b>\$227.4</b>	<b>\$237.2</b>	<b>\$292.6</b>	<b>\$328.9</b>
<b><i>Average Annual Salary Rate (\$actual)</i></b>				
	<b>\$97,065</b>	<b>\$102,563</b>	<b>\$103,199</b>	<b>\$109,759</b>

Source: Financial Operations, DESC

# Statement of Financial Conditions

*Petroleum, Natural Gas & Aerospace Energy (U.S. Dollars in Millions)*

## **Assets:**

Accounts Receivable	<b>FY2009</b> \$417.5
Inventories	\$4,469.6
Fund Balance with Treasury	\$1,288.6
Other Assets	<u>\$124.9</u>
<b>Total Assets</b>	<b>\$6,300.6</b>

## **Liabilities:**

Accounts Payable	\$1,452.7
Advances from Others	\$5.6
Custodial Liabilities	\$0.1
Other Liabilities	\$0.1
Estimated Cleanup Cost	<u>\$71.0</u>
<b>Total Liabilities</b>	<b>\$1,529.5</b>

## **Net Position:**

Accumulated Operating Results	\$4,771.1
<b>Total Capital</b>	<b><u>\$4,771.1</u></b>
<b>Total Liabilities &amp; Capital</b>	<b>\$6,300.6</b>

Source: Financial Operations, DESC

# Statement of Sales

*Petroleum, Natural Gas & Aerospace Energy (U.S. Dollars in Millions)*

<b><u>Customer:</u></b>	<b><u>FY2009</u></b>
U.S. Army	\$2,153.0
U.S. Navy	\$3,155.3
U.S. Air Force	\$5,857.3
U.S. Marine Corps	\$145.9
Other DoD	<u>\$109.3</u>
<b>Total DoD</b>	<b>\$11,420.8</b>
Other Government Agencies	\$332.7
<b>Subtotal</b>	<b>\$11,753.5</b>
Foreign Government	\$424.9
State Government	\$1.0
Local Government	\$2.9
Commercial	\$543.0
MWR Activity	<u>\$8.1</u>
<b>Total Gross Sales</b>	<b>\$12,733.4</b>
<b><u>Less:</u></b>	
Price Reduction on Sales	\$0.0
Material Returns Credits Applied	\$617.4
Allowance for Retail Stock Loss	<u>\$0.0</u>
<b>Total Net Sales</b>	<b>\$12,116.0</b>

Source: Financial Operations, DESC

# Net Sales by Category

*Petroleum, Natural Gas & Aerospace Energy*

	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>
Petroleum (Thousands of Barrels)			
Bulk and PC&S:			
AVGAS	24	29	26
Distillates & Diesel	23,226	24,350	21,003
Gasohol	51	42	90
JP-4, JAB, JAA & JA1	3,557	4,094	4,727
JP-5	11,469	10,906	10,799
JP-8, JPTS	82,055	80,452	78,952
Lube Oils	25	24	25
Mobility Gasoline, Leaded & Unleaded (MOGAS)	1,863	1,955	1,963
Residuals	592	577	428
<b>Subtotal</b>	<b>122,862</b>	<b>122,429</b>	<b>118,013</b>
Into-Plane	4,296	4,504	4,674
Bunkers	3,783	3,352	3,140
Local Purchase	1,543	2,244	3,138
<b>Total Petroleum</b>	<b>132,484</b>	<b>132,529</b>	<b>128,965</b>
Natural Gas (Millions of Dekatherms)	19.7	19.8	22.1
Aerospace Energy (Millions of Dollars)	\$42.9	\$54.0	\$79.6

Source: Financial Operations, DESC

# Product Cost

*Petroleum, Natural Gas & Aerospace Energy*

<b>Petroleum (U.S. Dollars in Millions)</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>
<b>Bulk Category:</b>			
AVGAS	\$5.1	\$7.1	\$7.3
Distillates & Diesel	\$1,916.5	\$3,267.6	\$1,655.6
Gasohol	\$4.8	\$5.6	\$8.8
JP-4, JAB, JAA, & JA1	\$1,322.1	\$2,514.3	\$2,009.9
JP-5	\$1,146.3	\$1,595.7	\$1,005.8
JP-8, JTS	\$5,869.8	\$8,741.3	\$4,395.1
Lube Oil	\$4.7	\$5.6	\$6.5
MOGAS (Leaded and Unleaded)	\$181.7	\$253.4	\$156.3
Residual	\$22.5	\$54.6	\$24.4
<b>Bulk Subtotal</b>	<b>\$10,473.5</b>	<b>\$16,445.2</b>	<b>\$9,269.7</b>
Into-Plane	\$462.0	\$710.1	\$493.6
Bunkers	\$334.5	\$427.2	\$293.1
Local Purchase	\$194.8	\$361.1	\$457.3
<b>Total Petroleum</b>	<b>\$11,464.8</b>	<b>\$17,943.6</b>	<b>\$10,513.7</b>
Natural Gas	\$153.2	\$164.2	\$146.8
Aerospace Energy	\$24.9	\$21.3	\$32.0

Source: Financial Operations, DESC

# Purchases by Category

*Petroleum & Natural Gas*

	FY07	FY08	FY09
<b>Petroleum (Thousands of Barrels)</b>			
<b>Bulk And PC&amp;S:</b>			
AVGAS	26	28	27
Distillates & Diesel	22,786	24,533	21,159
Gasohol	51	41	96
JP-4, JAB, JAA & JA1	19,380	23,105	25,825
JP-5	13,625	12,121	13,615
JP-8, JPTS	68,239	62,469	57,616
Lube Oils	26	23	26
MOGAS (Leaded & Unleaded)	1,904	1,962	1,863
Residuals	411	615	423
<b>Subtotal</b>	<b>126,448</b>	<b>124,897</b>	<b>120,650</b>
Into-Plane	4,296	4,548	4,747
Bunkers	3,773	3,352	3,140
Local Purchase	1,543	2,080	3,014
<b>Total Petroleum</b>	<b>136,060</b>	<b>134,877</b>	<b>131,551</b>
Natural Gas (Millions Of Dekatherms)	19.7	19.8	22.1

Source: Financial Operations, DESC

# Worldwide Bulk Fuel Ending Inventory

(Millions of Barrels & U.S. Dollars)

<b>Product</b>	<b>Barrels</b>	<b>Dollars</b>
AVGAS	0.003	\$0.707
Distillates & Diesel	10.887	\$743.849
JP-4 (JP-4, JAB, JAA & JA1)	5.357	\$419.524
JP-5	14.580	\$1113.054
JP-8, JPTS	28.190	\$2141.001
Lube Oils	0.010	\$2.134
Mobility Gasoline & Gasohol(Leaded & Unleaded)	0.187	\$17.945
Residuals	0.345	\$9.828
Additives	0.032	\$6.447
<b>Total On-Hand &amp; Intransit</b>	<b>59.591</b>	<b>\$4,454.489</b>
<b>Aerospace Energy</b>		<b>\$15.153</b>

Source: Financial Operations, DESC



# Defense Fuel Support Points

*Storing Government-Owned Fuel*

Type Of Operation	Army	Navy	Air Force	DLA	Total
Government - Owned Government - Operated (GOGO)	153	42	116	2	<b>313</b>
Government - Owned Contractor - Operated (GOCO)	24	32	39	61	<b>156</b>
Contractor - Owned Contractor - Operated (COCO)	0	0	0	40	<b>40</b>
North Atlantic Treaty Organization (NATO)	0	0	0	6	<b>6</b>
Commercial Pipeline	0	0	0	37	<b>37</b>
Floating Storage	0	61	0	0	<b>61</b>
Foreign Government	0	0	4	8	<b>12</b>
<b>Total</b>	<b>177</b>	<b>135</b>	<b>159</b>	<b>154</b>	<b>625</b>

NOTE: Defense Fuel Support Points (DFSPs) as of September 30, 2009

Source: Inventory Accountability Office, DESC

# Storage and Distribution Services

GOGO/GOCO/COCO/FG/NATO



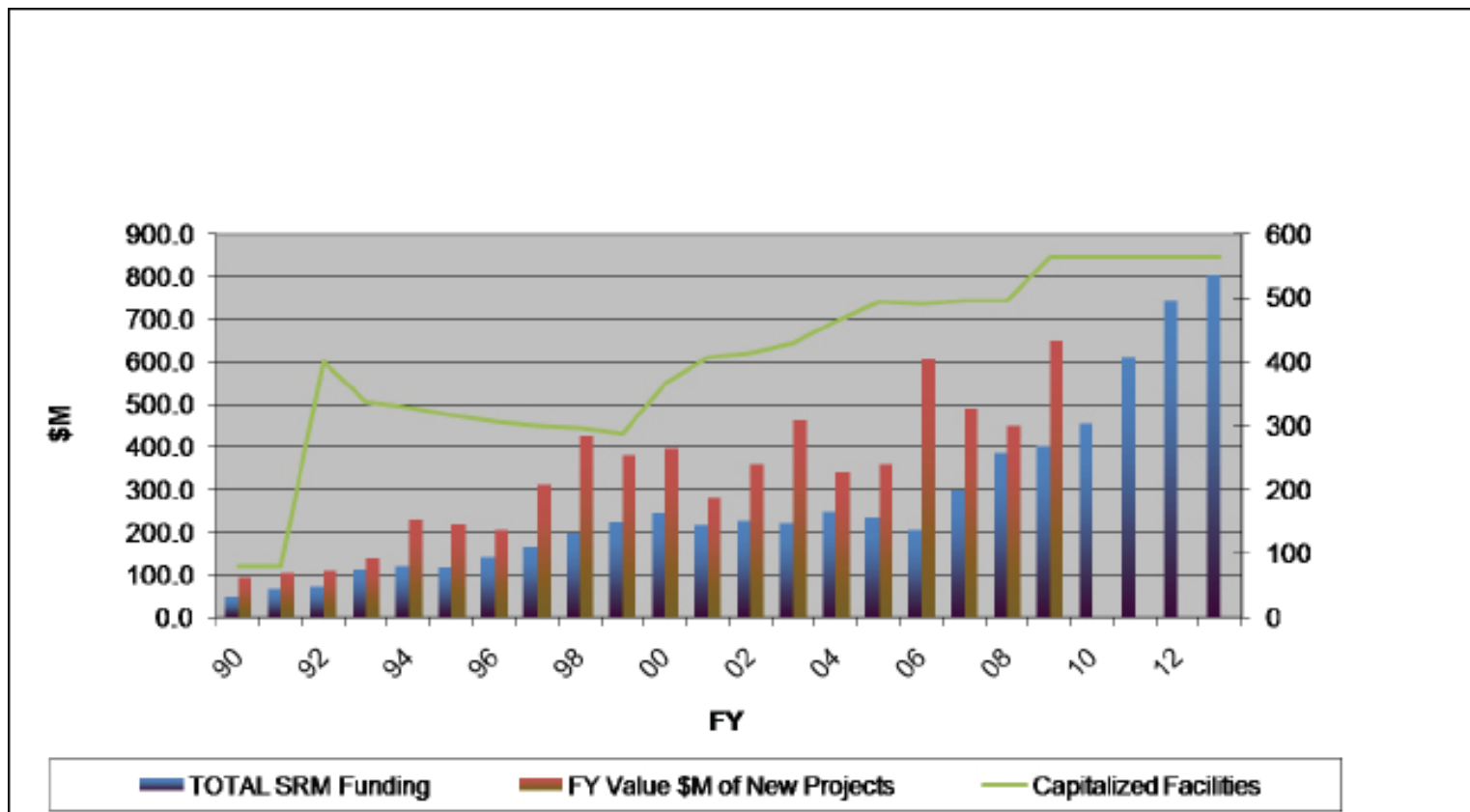
DESC Funded Terminal Operations Worldwide: 179

Expenditures: \$235.3 Million



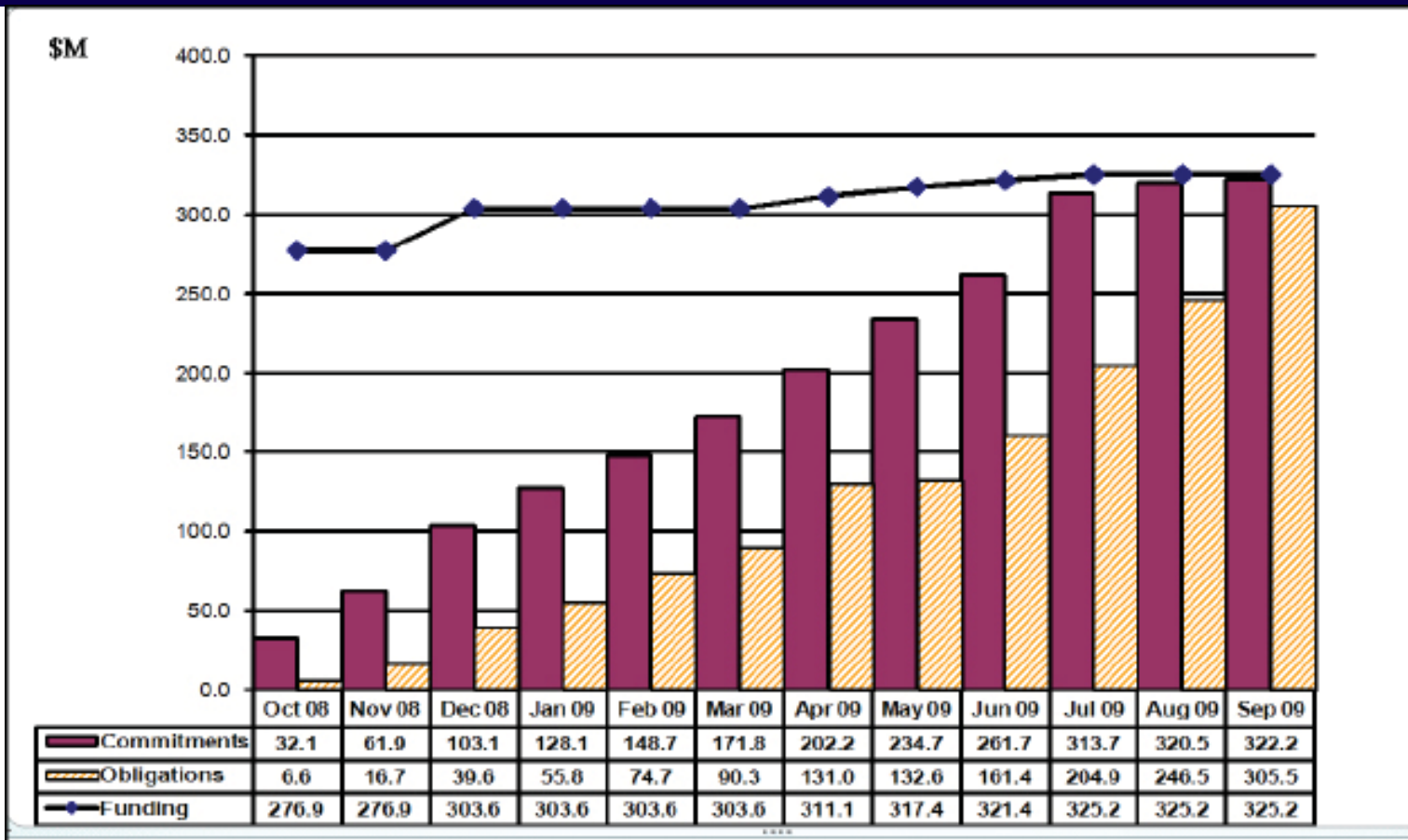
Source: Defense Fuel Support Point Management Business Unit, DESC

## Sustainment, Restoration & Modernization Program



Source: Defense Fuel Support Point Management Business Unit, DESC

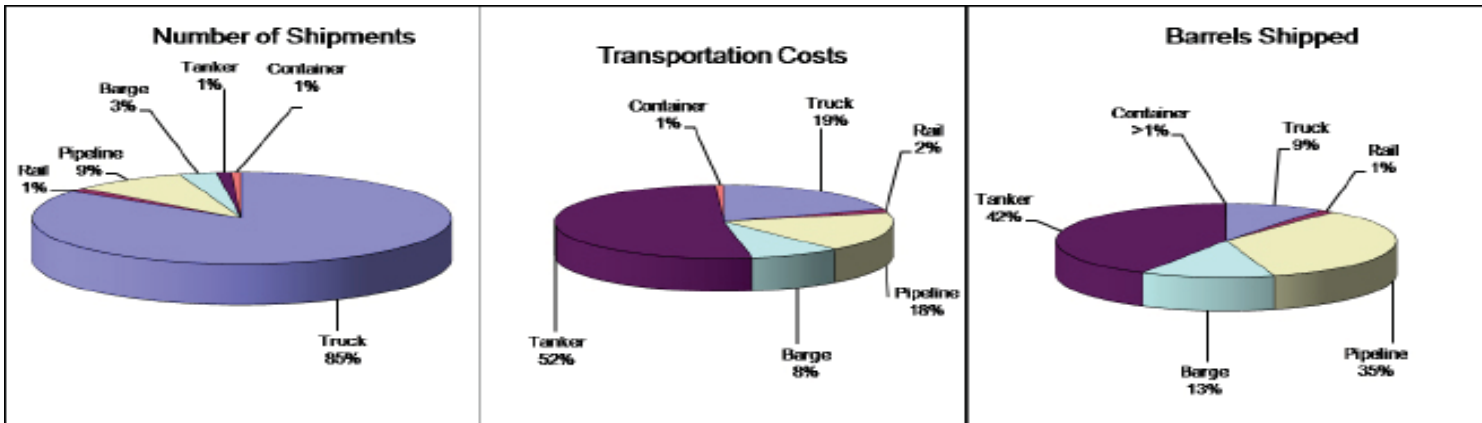
# SRM Commitments & Obligations



Source: Defense Fuel Support Point Management Business Unit, DESC

# Worldwide Bulk Product Transportation

(Frequency - Cost - Volume)



		Truck	Rail	*Pipeline	Barge	**Tanker	Seavan	Total
CONUS	Shipments	17,263	357	2,341	869	139	-	20,969
	Cost (\$ Millions)	38.1	3.6	67.1	31.8	50.0	-	190.6
	Barrels (Millions)	11.5	1.9	46.6	18.2	19.9	-	98.1
OCONUS	Shipments	14,536	138	1,011	203	265	312	16,465
	Cost (\$ Millions)	35.2	3.0	-	1.2	147.2	3.2	189.8
	Barrels (Millions)	2.6	0.4	5.4	1.0	43.0	0.1	52.5
TOTAL	Shipments	31,799	495	3,352	1,072	404	312	37,434
	Cost (\$ Millions)	73.3	6.6	67.1	33.0	197.2	3.2	380.4
	Barrels (Millions)	14.1	2.3	52.0	19.2	62.9	0.1	150.6

\* Costs associated with OCONUS pipeline shipments are funded under International Agreement (DESC-BG) and have been excluded to avoid duplicate information.

\*\* Costs associated with OCONUS tankers include funding provided to MSC for support of OPDS.

# Transportation Expense

(U.S. Dollars in Millions)

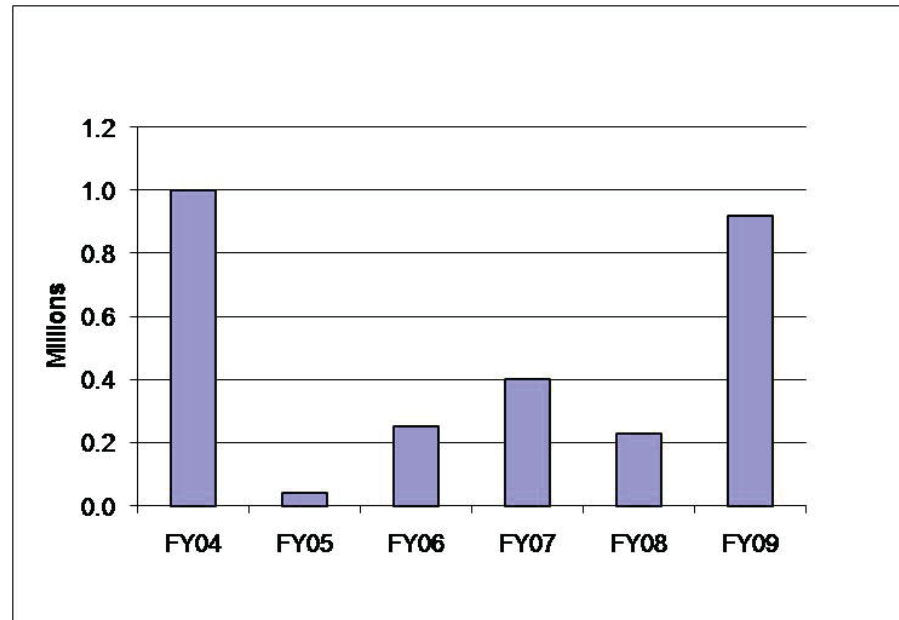
<b>Worldwide Petroleum Fuel:</b>	<b><u>FY07</u></b>	<b><u>FY08</u></b>	<b><u>FY09</u></b>
AVGAS	\$0.1	\$0.1	\$0.1
Distillates & Diesel	\$79.5	\$111.5	\$80.8
JP-4, JAB, JAA & JA1	\$67.6	\$105.0	\$98.6
JP-5	\$47.5	\$55.1	\$52.0
JP-8, JPTS	\$238.1	\$283.8	\$215.9
Lube Oils	\$0.1	\$0.1	\$0.1
MOGAS (Leaded & Unleaded)	\$6.8	\$8.9	\$7.5
Residuals	\$1.4	\$2.8	\$1.6
<b>Total</b>	<b>\$441.1</b>	<b>\$567.3</b>	<b>\$456.6</b>
<b>Worldwide Aerospace Energy</b>	\$5.6	\$6.3	\$4.6

Source: Defense Fuel Support Point Management Business Unit, DESC

# Demurrage Collected

(U.S. Dollars in Millions)

<b>Fiscal Year</b>	<b>Total</b>
2009	\$0.92
2008	\$0.23
2007	\$0.40
2006	\$0.25
2005	\$0.04
2004	\$1.00



Note: Demurrage is a charge assessed for holding a conveyance beyond the "free time" or "allowable laytime."  
Demurrage collected is from ocean tanker and barge modes of supply.



# Optimization Projects

(U.S. Dollars in Millions)

Location	Service	Type	Contract Start Date	Contract End Date	Projected Savings Over Contract Period (NPV, \$M)
Fort Jackson, SC (Retail)	USA	COCO	Jun 99	2019	-.8*
29 Palms, CA (Retail)	USMC	COCO	Jul 99	2019	8.2
Fort Stewart, GA (Retail)	USA	COCO	Jun 01	2021	3.4
Moffett, CA (Bulk/Alongside Refueling)	ANG/NASA	GOCO	May 03	2023	3.9
Simmons/Camp Mackall, NC (Bulk/Alongside Refueling) (2 Facilities)	USA	GOCOs	Sep 03	2023	4.6
Fort Carson, CO (Retail)	USA	COCO	Mar 04	2024	8.9
Fort Campbell, KY (Retail)	USA	COCO	Jul 05	2025	.3*
USAF Bulk Fuels CONUS & OCONUS	USAF	GOCO	Jun - Sep 08	2013	33.7
Camp Lejeune, NC	USMC	GOCO/COCO	Jun 08	2028	7.6
Korea (10 sites)	USA	GOCO	Dec 08	2013	19.2

**Total**

**89**

Note: \*Non-quantified environmental liability added to risk and justified optimization

Source: Defense Fuel Support Point Management Business Unit, DESC

# Energy Savings Performance Contract Awards

Location	Energy Conservation Measures (ECM)	Energy Service Company (ESCO)	Date	Total Award Amounts	Contract Term
Northeast Regional Office	15 ECMs	Pepco Gov't Services LLC	Jun 99	\$214.1M	18 years
Fort Jackson SC	Lighting Upgrades, Ground Source Heating Pump Retrofits, Chiller Plant Upgrades, Demand Limiting System	Ameresco Solutions	Sep 01	\$43.8M	21 years
Aberdeen Proving Ground MD	Ground Source Heating Pump	Constellation Energy Source	Sep 01	\$14.6M	20 years
Fort Hamilton NY	Lighting Retrofits, Energy Management Control System, Water Savings	Consolidated Edison Solutions, Inc.	Nov 01	\$7.3M	16 years
Carlisle Barracks PA	Direct Digital Controls, Heating Ventilating and Air Conditioning	Energy Performance Service	Jul 02	\$16.3M	17 years
Fort Hood TX Delivery Order #1	Utility Management Control System (UMCS) Improvements, Vending Machine Controls, Cooling Tower VFDs, Lighting Retrofit	Johnson Controls	Sep 03	\$11.3M	23 years
Fort Monmouth NJ	Lighting Upgrade, HVAC Renovation, UESC Implementation, GHP, Cogeneration System Site Preparation/Feasibility	Ameresco Solutions	Sep 03	\$51.4M	24 years
Fort Hood TX Delivery Order #2	UMCS Improvements, Vending Machine Controls, Lighting Retrofit	Johnson Controls	May 06	\$38.5M	24 years

Source: Energy Enterprise, DESC

# Energy Enterprise Contract Award Summary

## **FY 2009 – (Total Value - \$1.2 Billion)**

Fort Meade, MD – Water/Wastewater  
Fort Belvoir, VA – Water/Wastewater  
Little Rock AFB, AR – Electric  
Laughlin AFB, TX – Electric  
March AFB, CA – Electric  
Wright-Patterson AFB, OH --Electric

## **FY 2008 – (Total Value - \$706 Million)**

Fort Polk, LA – Water/Wastewater  
Fort Hood, TX – Water/Wastewater  
Westover AFB, MA – Electric  
Goodfellow AFB, TX – Electric

## **FY 2007 – (Total Value - \$5.0 Billion)**

Fort A.P. Hill, VA – Water/Wastewater  
Fort Bragg, NC – Water/Wastewater  
Fort Gordon, GA – Water/Wastewater  
Fort Greely, AK – CHPP/Electric/Water/Wastewater  
Fort Jackson, SC – Water/Wastewater  
Fort Richardson, AK – Natural Gas/Electric/Water/Wastewater  
Fort Wainwright, AK – CHPP/Electric/Water/Wastewater  
Fairchild AFB, WA – Natural Gas  
Grissom ARB, IN – Electric  
Scott AFB, IL - Water

## **FY 2006 – (Total Value - \$613.5M)**

Charleston AFB, SC - Gas  
Fort Belvoir, VA – Electric  
Fort Bragg, NC – Water Plant/Wastewater Plant  
Fort Gordon, GA – Electric  
Fort Myer/McNair, VA - Electric  
Natick Soldier Systems Command, MA – Electric

## **FY 2005 – (Total Value - \$302.3M)**

Andrews AFB, MD – Water/Wastewater  
Fort Eustis, VA – Water/Wastewater  
Fort Leavenworth, KS – Electric  
Fort Lee, VA – Wastewater  
Fort Monroe, VA – Water/Wastewater  
Natick Soldier Systems Command, MA – Electric  
Fort Story, VA – Water/Wastewater

## **FY 2004 – (Total Value - \$530.3M)**

Dobbins ARB, GA – Electric  
Bolling AFB, DC – Water/Wastewater  
Fort Bliss, TX – Water/Wastewater  
Fort Eustis, VA – Electric  
Fort Lee, VA – Electric  
Fort Monroe, VA – Electric  
Fort Story, VA – Electric  
Fort Knox, KY – Wastewater/Stormwater

## **FY 2003 – (Total Value - \$451.6M)**

Picatinny Arsenal, NJ – Electric  
Fort McNair, VA – Gas  
Fort Bliss, TX – Gas  
Fort Rucker, AL – Electric/Gas/Water/Wastewater  
Fort Leavenworth, KS – Water/Wastewater  
Randolph AFB, TX - Wastewater  
Sunny Point, NC - Electric

## **FY 2002 – (Total Value - \$98.1M)**

Fort Bliss, TX - Electric

## **FY 2001 – (Total Value - \$1.3M)**

Fort Detrick – Gas (GSA)  
Bolling AFB – Gas (GSA)  
Minneapolis-St Paul – Gas (GSA)

# Energy Enterprise Contract Awards

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Fort Detrick MD	Gas	Washington Gas and Light	Dec 00	\$0.70M (Construction Project)	N/A
Bolling AFB DC	Gas	Washington Gas and Light	Jul 01	\$0.43M (Construction Project)	N/A
Minneapolis Saint Paul ARS MN	Gas	Minnesota Gas	Sep 01	\$0.17M (Construction Project)	\$0.09M (For 50 Years)
Fort Bliss TX	Electric	Rio Grande Electric Cooperative	Sep 02	\$98.1M (For 50 Years)	\$34.3M** (For 50 Years)
Picatinny Arsenal NJ	Electric	Sussex Rural Electric Cooperative	Oct 02	\$42.2M (For 50 Years)	\$10.4M** (For 50 Years)
Fort McNair VA	Gas	Washington Gas and Light	Feb 03	\$0.40M (Construction Project)	N/A
Fort Bliss TX	Gas	Texas Gas Service	Mar 03	\$47.4M (For 50 Years)	\$2.5M** (For 50 Years)
Fort Rucker AL	Gas	Southeast Alabama Gas District	Apr 03	\$8.6M (For 50 Years)	\$5.5M (For 50 Years)
Fort Rucker AL	Electric	Alabama Power	May 03	\$94.6M (For 20 Years)	\$10.0M (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).

\*\*Excludes Residual Value

# Energy Enterprise Contract Awards (cont'd)

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Fort Leavenworth KS	Water/ Wastewater	American Water Services	Sep 03	\$95.7M (For 50 Years)	\$17.5M** (For 50 Years)
Fort Rucker AL	Water/ Wastewater	American Water Services	Sep 03	\$118.4M (For 50 Years)	\$45.0M (For 50 Years)
Randolph AFB TX	Wastewater	San Antonio River Authority	Sep 03	\$26.9M (For 50 Years)	\$1.5M (For 50 Years)
Sunny Point Military Ocean Terminal NC	Electric	Brunswick Electric Membership	Sep 03	\$17.4M (For 50 Years)	-\$0.2M (For 50 Years)
Dobbins ARB GA	Electric	Georgia Power	Feb 04	\$13.0M (For 50 Years)	\$1.8M (For 50 Years)
Bolling AFB DC	Water/ Wastewater	Washington Suburban Sanitary Commission	Mar 04	\$26.8M (For 50 Years)	\$6.0M (For 50 Years)
Fort Bliss TX	Water/ Wastewater	American States Utility Services	Jun 04	\$197.6M (For 50 Years)	N/A
Fort Eustis VA	Electric	Dominion Virginia Power	Jun 04	\$39.0M (For 50 Years)	\$21.9M** (For 50 Years)
Fort Lee VA	Electric	Dominion Virginia Power	Jun 04	\$68.0M (For 50 Years)	\$4.8M** (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).

\*\*Excludes Residual Value

Source: Energy Enterprise, DESC

# Energy Enterprise Contract Awards (cont'd)

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Fort Monroe VA	Electric	Dominion Virginia Power	Jun 04	\$23.8M (For 50 Years)	\$2.4M** (For 50 Years)
Fort Story VA	Electric	Dominion Virginia Power	Jun 04	\$11.9M (For 50 Years)	\$4.9M** (For 50 Years)
Fort Knox KY	Wastewater/ Stormwater	Hardin County Water District #1	Sep 04	\$150.4M (For 50 Years)	\$40.5M** (For 50 Years)
Andrews AFB MD	Water/ Wastewater	American States Utility Services	Sep 05	\$114.3M (For 50 Years)	\$16.5M (For 50 Years)
Fort Eustis VA	Water/ Wastewater	American States Utility Services	Sep 05	\$58.0M (For 50 Years)	\$3.0M (For 50 Years)
Fort Leavenworth KS	Electric	Leavenworth Jefferson Electric Cooperative	Sep 05	\$65.5M (For 50 Years)	\$8.7M (For 50 Years)
Fort Lee VA	Wastewater	American States Utility Services	Sep 05	\$23.5M (For 50 Years)	\$2.4M** (For 50 Years)
Fort Monroe VA	Water/ Wastewater	American States Utility Services	Sep 05	\$19.4M (For 50 Years)	-\$0.7M (For 50 Years)
Fort Story VA	Water/ Wastewater	American States Utility Services	Sep 05	\$21.5M (For 50 Years)	-\$0.8M (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).

\*\*Excludes Residual Value

# Energy Enterprise Contract Awards (cont'd)

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Charleston AFB SC	Gas	South Carolina Electric & Gas	Sep 06	\$4.6M (For 50 Years)	\$0.2M (For 50 Years)
Fort Belvoir VA	Electric	Dominion Virginia Power	Sep 06	\$214.1M (For 50 Years)	\$21.9M (For 50 Years)
Fort Bragg NC	Water (Plant)	City of Fayetteville	Sep 06	\$135.4M (For 40 Years)	\$12.7M (For 40 Years)
Fort Bragg NC	Wastewater (Plant)	County of Harnett	Sep 06	\$91.1M (For 40 Years)	\$25.9M (For 40 Years)
Fort Gordon GA	Electric	Georgia Power	Sep 06	\$71.4M (For 50 Years)	\$7.8M (For 50 Years)
Fort Myer/McNair VA	Electric	Dominion Virginia Power	Sep 06	\$73.3M (For 50 Years)	\$4.7M (For 50 Years)
Natick Soldier Systems Command MA	Electric	NSTAR	Sep 06	\$23.6M (For 50 Years)	\$2.5M (For 50 Years)
Fort A.P. Hill VA	Water/Wastewater	American Water	Sep 07	\$98.1M (For 50 Years)	\$9.8M (For 50 Years)
Fort Bragg/Pope NC	Water/Wastewater	American States Utility Services	Sep 07	\$575.4M (For 50 Years)	\$60.0M (For 50 Years)
Fort Gordon GA	Water/Wastewater	Augusta Utility Department	Sep 07	\$202.5M (For 50 Years)	\$7.5M (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).

# Energy Enterprise Contract Awards (cont'd)

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Fort Greely AK	CHPP/Electric Water Wastewater	Doyon Utilities	Sep 07	\$553.3M (For 50 Years)	\$104.5M (For 50 Years)
Fort Jackson GA	Water/ Wastewater	American States Utility Services	Sep 07	\$143.8M (For 50 Years)	\$13.3M (For 50 Years)
Fort Richardson AK	Electric Natural Gas Water Wastewater	Doyon Utilities	Sep 07	\$939.6M (For 50 Years)	\$99.8M (For 50 Years)
Fort Wainwright AK	CHPP/Electric Water Wastewater	Doyon Utilities	Sep 07	\$2,422.2M (For 50 Years)	\$636.1M (For 50 Years)
Fairchild AFB WA	Natural Gas	Avista	Sep 07	\$1.9M (For 50 Years)	\$M (For 50 Years)
Grissom ARB IN	Electric	Miami-Cass	Sep 07	\$5.1M (For 50 Years)	\$0.9M (For 50 Years)
Scott AFB IL	Water	American Water	Sep 07	\$67.3M (For 50 Years)	\$6.3M (For 50 Years)
Westover AFB MA	Electric	City of Chicopee	Apr 08	\$19.9M (For 50 Years)	\$1.2M (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).



## Energy Enterprise Contract Awards (cont'd)

Location	System	Contractor	Award Date	Total Award Amount (Award Year Dollars)	Government Should Cost Delta*
Goodfellow AFB Texas	Electric	AEP Texas North Co.	Sep 08	\$8.2M (For 50 Years)	\$6.4M (For 50 Years)
Fort Hood Texas	Water Wastewater	American Water	Sep 08	\$329.7M (For 50 Years)	\$32.1M (For 50 Years)
Fort Polk Louisiana	Water Wastewater	American Water	Sep 08	\$348.6M (For 50 Years)	\$33.4M (For 50 Years)
Fort Meade Maryland	Water Wastewater	American Water	Sep 09	\$650.2M (For 50 Years)	\$39.7M (For 50 Years)
Fort Belvoir Virginia	Water Wastewater	American Water	Sep 09	\$287.8M (For 50 Years)	\$13.5M (For 50 Years)
Little Rock AFB Arkansas	Electric	Entergy Arkansas	Sep 09	\$25.3M (For 50 Years)	\$26.4M (For 50 Years)
Laughlin AFB Texas	Electric	Rio Grande Electric Coop	Sep 09	\$72.9M (For 50 Years)	\$7.0M (For 50 Years)
March AFB California	Electric	City Light and Power	Sep 09	\$20.5M (For 50 Years)	\$7.7M (For 50 Years)
Wright-Patterson AFB Ohio	Electric	Dayton Power and Light	Sep 09	\$175.5M (For 50 Years)	\$20.4M (For 50 Years)

\*Difference between "Government Should Cost Estimate" used in economic analysis and NPV of offerors proposal (includes residual value except where noted).

# Small Business Program Achievements

(In Thousands)

	Fiscal Year 07			Fiscal Year 08			Fiscal Year 09		
Small Business Preference Programs	Targets	Performance	Dollars	Targets	Performance	Dollars	Targets	Performance	Dollars
Small Business Awards	22.9%	18.57%	\$1,506,339	24%	18.14%	\$1,209,868	19%	23.0445%	\$1,943,744
Small Disadvantaged Business Awards	4.0%	0.02%	\$2,017	4.20%	0.2%	\$13,196	1.5%	0.8542%	\$72,048
Section 8 (a)	0.10%	0.0%	\$63	0%	0%	0	0%	.6443%	\$54,263
Women-Owned Small Business Awards	1.10%	0.9%	\$71,230	1.9%	1.15%	\$76,524	1.5%	.6764%	\$57,051
Hubzone Small Business Awards	1.10%	0.14%	\$11,158	1.5%	1.54%	\$102,554	1.5%	8.785%	\$740,999
Service-Disabled Vet-Owned Small Business Awards	.50%	0.02%	\$1,360	3%	0.0168%	\$11,086	3%	0.0635%	\$5,358
Total Domestic Awards			\$1,592,167			\$1,413,228			\$2,873,463

Note: All percentages based on total domestic dollars awarded.

Source: Small Business Office, DESC

# Fuel Support and Fuel Exchange Agreements

*(U.S. Dollars in Millions)*

<b><u>Agreement Type</u></b>	<b><u>Agreements</u></b>	<b><u>Financial</u></b>
Fuel Support Agreements (Product/Service Costs)	15	\$144M
Fuel Exchange Agreements (Exchange/Sales)	25	\$304M



Source: Bulk Petroleum, DESC

# Worldwide Agreement Snapshot

40 Agreements In Place!



Fuel Exchange Agreement (FEA)  
Direct Bill (DB)

Source: Bulk Petroleum. DESC

# Petroleum Contract Introduction

## **Nature Of DESC Petroleum Product Contracts**

- Contracts are indefinite delivery type contracts - requirements-type and quantity-type.
- Minimum/maximum delivery order limitations are defined.
- Fuel is called forward through delivery orders.
- Contracts contain price adjustment clauses.
- Contract prices are indexed to market price indicators.
- Contract prices are adjusted upward or downward as indicators rise or fall.
- DESC pays the contract price in effect on the date of delivery, or as otherwise adjusted in the contract price.



Source: Direct Delivery Fuels, DESC

# Contract Award Data

Business Unit	Award Dollars	Total BU Award Dollars	Contract Actions
<b>Bulk Fuel Division</b>		16.3 (B)	177
Domestic	8.1 (B)		
Overseas	5.6 (B)		
Lubes/Additives	29.8 (M)		
Synthetic Fuels	16.1 (M)		
Foreign Military Sales	279.0 (M)		
Operations Iraqi Freedom/Enduring Freedom	2.2 (B)		
<b>Bulk Facilities &amp; Distribution Management Division</b>		249.7 (M)	709
Storage	136.2 (M)		
Alongside Aircraft Refueling	77.5 (M)		
Environmental	28.0 (M)		
Testing/Services	107.0 (M)		
Miscellaneous	1.1 (M)		
<b>Ground Fuels Division</b>		2.5 (B)	1,318
Domestic	674.7 (M)		
Overseas	896.5 (M)		
Afghanistan	974.6 (M)		
<b>Mobility Fuels</b>		808.4 (M)	382
Into-Plane	583.2 (M)		
Bunkers	225.1 (M)		
<b>Installation Energy</b>		1.0 (B)	132
Natural Gas	39.9 (M)		
Electricity	939.5 (M)		
Coal	41.2 (M)		
Base Support Contracts	532.4 (K)		
<b>Energy Enterprise</b>		1.4 (B)	248
Energy Enterprise Contracts	1.4 (B)		
Energy Savings Performance Contracts	3.4 (M)		
<b>Aerospace Energy</b>	112.4 (M)	112.3 (M)	2,086
<b>Total</b>	<b>22.5 (B)</b>	<b>22.5 (B)</b>	<b>5,052</b>

Source: Procurement Process and Support Division (FPDS-NG) and input from the Business Units Note: Dollars are shown in Billions (B), Millions (M), and Thousands (T).

# Top Ten Petroleum Suppliers

*(U.S. Dollars in Billions)*

<b><u>Contractor</u></b>	<b><u>Award Amount</u></b>	<b><u>Percent of Total Contract \$</u></b>
BP	\$2.201	11.70%
Shell	\$1.893	10.06%
The Bahrain Petroleum Company	\$1.757	9.34%
Kuwait Petroleum Corporaton	\$1.210	6.43%
International Oil Trading Company LTD	\$1.179	6.26%
Valero Marketing and Supply Company	\$1.049	5.58%
SK Corporation	\$0.761	4.04%
Petromax Refining Co. LLC	\$0.540	2.87%
S-Oil Corporation	\$0.482	2.56%
Exxon Mobil Corporation	\$0.473	2.52%
<b>Total</b>	<b>\$11.545</b>	<b>61.36%</b>

# Environmental Contracts

					<b>Approximate*</b>
<b>Location</b>	<b>Contract SP0600-</b>	<b>Contractor</b>	<b>Performance Period</b>	<b>Task Orders To Date **</b>	<b>Annual Value To Date **</b>
Anchorage, AK	05-D-5505	Michael L. Foster & Assoc	1 Mar 05 - 28 Feb 10	\$147,427.02	\$29,485.40
Charleston, SC	09-D-5917	Shaw Environmental Inc	1 Jul 09 - 30 Jun 14	\$6,750,000.00	\$1,073,765.00
Eielson, AK	05-D-5507	Michael L. Foster & Assoc	1 Mar 05 - 28 Feb 10	\$775,711.71	\$155,142.34
Fort Hood, TX	09-D-5913	Shaw Environmental Inc	1 Jul 09 - 30 Jun 14	\$34,203.00	\$34,203.00
Grand Forks, ND	04-D-5430	Shaw Environmental Inc	1 Jul 04 - 30 Jun 09	\$71,741.57	\$0.00
Hunter Army Air Field, GA	09-D-5916	Shaw Environmental Inc	1 Jul 09 - 30 Jun 14	\$0.00	\$0.00
Indian, AK	05-D-5506	Michael L. Foster & Assoc	1 Mar 05 - 28 Feb 10	\$83,627.20	\$16,725.44
Jacksonville, FL	09-D-5915	Shaw Environmental Inc	1 Jul 09 - 30 Jun 14	\$0.00	\$0.00
Melville, RI	09-D-5909	Shaw Environmental Inc	1 Jun 09 - 31 May 14	\$0.00	\$0.00
Newington, NH	04-D-5404	Bhat Environmental	1 Dec 03 - 30 Nov 08	\$1,129,183.40	\$225,836.68
Norfolk, VA	09-D-5911	Shaw Environmental Inc	1 Jun 09 - 31 May 14	\$3,989,445.05	\$171,825.00
San Diego, CA (PT LOMA) ***	03-D-5315	Shaw	1 Jul 03 - 30 Jun 10	\$12,397,024.30	\$643,397.74
Tampa, FL	09-D-5914	Shaw Environmental Inc	1 Jul 09 - 30 Jun 14	\$64,007.00	\$12,801.40
Verona, NY	09-D-5910	Shaw Environmental Inc	1 Jun 09 - 31 May 14	\$0.00	\$0.00
Whittier, AK	05-D-5508	Michael L. Foster & Assoc	1 Mar 05 - 28 Feb 10	\$6,230,048.66	\$1,246,009.73
Norwalk, CA	08-D-5810	Parsons	1 Jul 08 - 30 Jun 13	\$1,798,134.86	\$149,845.57
San Pedro, CA	08-D-5811	The Source Group	1 Jul 08 - 30 Jun 13	\$1,666,879.18	\$765,000.00
Ozol, CA	08-D-5812	Shaw	1 Jul 08 - 30 Jun 13	\$3,621,890.98	\$301,824.25

## Multiple Locations

Environmental Document Updates	06-D-5608	SAIC	1 Oct 06 - 30 Sep 11	\$2,846,687.70	\$110,701.28
OPA-90 Training	07-D-5704	Spectra Tech Ensafe JV	1 Jan 07 - 31 Dec 11	\$1,179,416.17	\$422,717.97
ESOH	06-A-5069	Potomac Hudson Engineering	1 Aug 06 - 31 Jul 11	\$181,679.00	\$36,335.80

\* Annual figure derived by dividing FY by award amount.

\*\* As of 30 Sep 09.

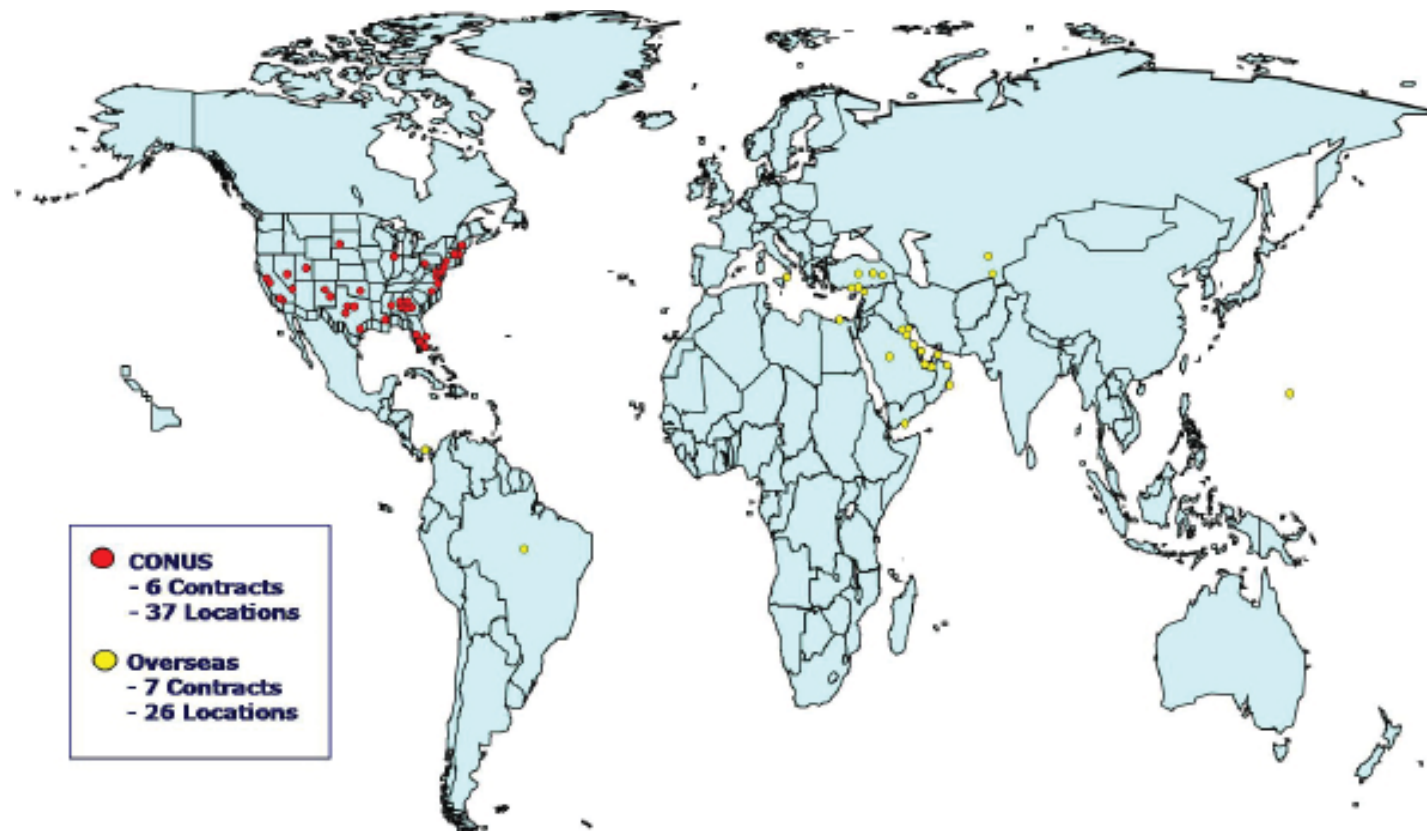
\*\*\* Contract in two year sole source extension.

Source: Bulk Petroleum, DESC



# Testing Contracts

(For Petroleum Products)



Source: Bulk Petroleum, DESC

Note: These are service contracts for testing of petroleum products.

# Into-Plane Contracts



## Domestic

- 345 Locations Supported
- 343 Contracts
- \$1.1B Contract Value
- 9.6M Barrels

## Overseas

- 149 Locations Supported in 96 Countries
- 35 Contracts
- \$732.6M Contract Value
- 9.1M Barrels

Active multi-year contract data as of September 30, 2009

Source: Direct Delivery Fuels, DESC

# Ships' Bunkers Contracts



## Domestic

- 129 Ports Supported
- 42 Contracts
- \$499.3M Contract Value
- 5.8M Barrels

## Overseas

- 87 Ports Supported in 61 Countries
- 24 Contracts
- \$1B Contract Value
- 9.6M Barrels

Active multi-year contract data as of September 30, 2009

Source: Direct Delivery Fuels, DESC

# Alongside Aircraft Refueling

Location	Notes	Performance Period	Award Amount	Approximate Annual \$ Value
Brunswick, ME (Navy)		1 Jul 05-31 Jan 10	\$2,596,128	\$697,297
Camp Pendleton, CA (Marine)		1 Nov 08-31 Oct 12	\$4,450,992	\$571,188
China Lake, CA (Navy)		1 Mar 09-28 Feb 14	\$12,196,935	\$1,202,544
Corpus Christi, TX (Navy)		1 Oct 08- 30 Sep 12	\$6,880,896	\$1,733,182
Dallas Ft Worth, TX (Navy)		1 Apr 07-31 Mar 11	\$4,176,000	\$1,044,000
El Centro, CA (Navy)	2	1 Jul 05-30 Apr 10	\$5,880,000	\$1,824,111
Fallon, NY (Navy)	1, 3	1 Oct 06-30 Sep 11	\$11,071,637	\$2,016,000
Fort Hood, TX (Army)	1, 3	1 Feb 07-31 Jan 12	\$7,786,080	\$1,177,440
Ft. Lewis, WA (Army)		1 Oct 08-30 Sep 13	\$5,298,720	\$1,182,000
Hunter AAF (Army)		1 Aug 05-31 Jul 10	\$7,427,901	\$1,135,380
Jacksonville, FL (Navy)		1 Dec 06-30 Nov 14	\$10,952,668	\$1,655,626
Key West, FL (Navy)		1 Oct 07-30 Sep 11	\$6,654,384	\$1,040,790
Kings Bay, GA (Navy)		1 Oct 08 -30 Sep 12	\$463,620	\$463,620
Kingsville, TX (Navy)		1 Oct 08-30 Sep 12	\$10,003,632	\$1,089,215
Lakehurst, NJ (Navy)		1 Jun 05-31 Jan 10	\$788,880	\$225,318
Meridian, MS (Navy)		1 Apr 06-31 Mar 10	\$3,251,721	\$1,398,209
Moffett Field, CA (NASA)		1 Dec 08-30 Nov 13	\$9,132,890	\$537,086
North Island (Navy)		1 Jan 09-31 Dec 12	\$18,755,150	\$2,549,199
Okinawa (Marine)		1 Apr 08-31 Mar 12	\$1,410,516	\$542,520
Patuxent River, MD (Navy)		1 Dec 09-30 Nov 13	\$6,664,656	\$1,666,164
Pensacola Region (Navy)		1 Dec 08-30 Nov 12	\$21,518,284	\$2,810,000
Souda Bay, Crete (Navy)		1 Jun 05-31 May 09	\$2,083,574	\$646,812
Ventura (Navy)		1 Nov 09-31 Oct 13	\$1,271,533	\$1,414,380
Whidbey Island, WA (Navy)	1	1 Jan 09-31 Dec 12	\$12,426,948	\$1,710,000
Willow Grove, PA (Navy)		1 Oct 07-30 Sep 10	\$1,850,903	\$616,968
Yuma, AZ (Marine)	1	1 Oct 09-30 Sep 13	\$5,267,904	\$1,316,976
		<b>Total</b>	<b>\$180,262,552</b>	<b>\$32,266,025</b>

Source: Bulk Petroleum, DESC

Total Number Of Contracts: 26 Notes: (1) Includes Storage; (2) Extension; (3) One 5-year Option

# Posts, Camps & Stations Contracts

## Domestic (CONUS)

- 224 Contracts
- 1786 Activities Supported
- \$2.7B Contract Value
- 30.4 Million Barrels

## Overseas (OCONUS)

- 71 Contracts, 38 Countries
- 287 Activities Supported
- \$3.8 Billion Contract Value
- 31.3 Million Barrels



Active multi-year contract data as of September 30, 2009

# Coal Program

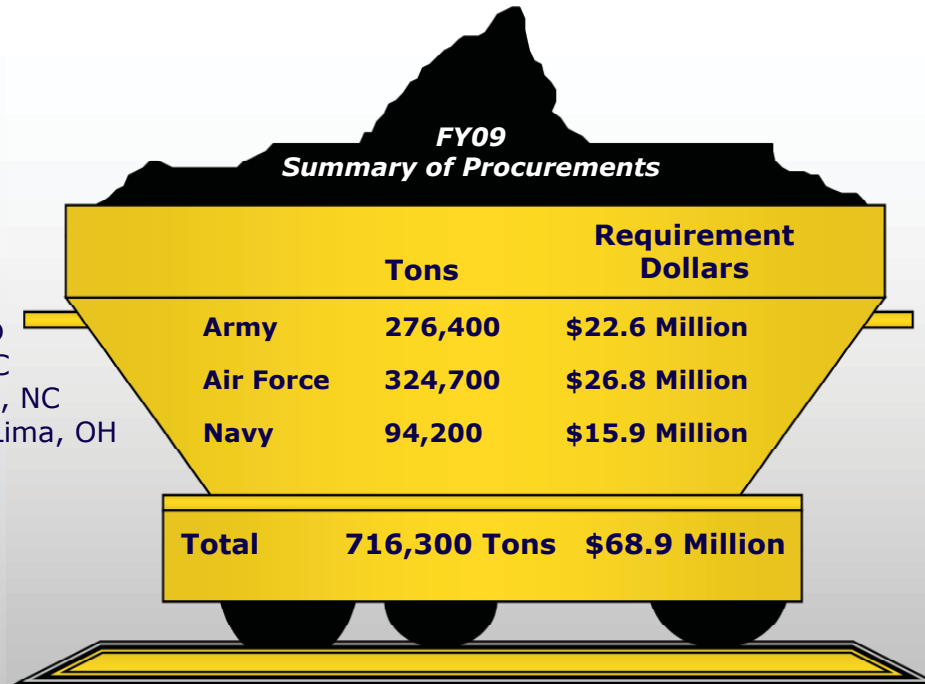
**Customers:** 11 DoD  
1 Fed Civ

## **Bituminous Coal:**

Capitol Power Plant, Washington, D.C.  
NAVFAC Washington, Indian Head, MD  
Marine Corps Base, Camp LeJeune, NC  
Marine Corps Air Station, Cherry Point, NC  
Joint Systems Manufacturing Center, Lima, OH  
Wright Patterson Air Force Base, OH  
Rock Island Arsenal, IL  
Red River Army Depot, Texarkana, TX  
Malmstrom Air Force Base, MT

## **Sub-Bituminous Coal:**

Ft. Wainwright, AK  
Eielson Air Force Base, AK  
Clear Air Force Station, AK



## **Dollars And Percent Of Total Dollars:**

Large Business - \$1,814,100 / 2.6%

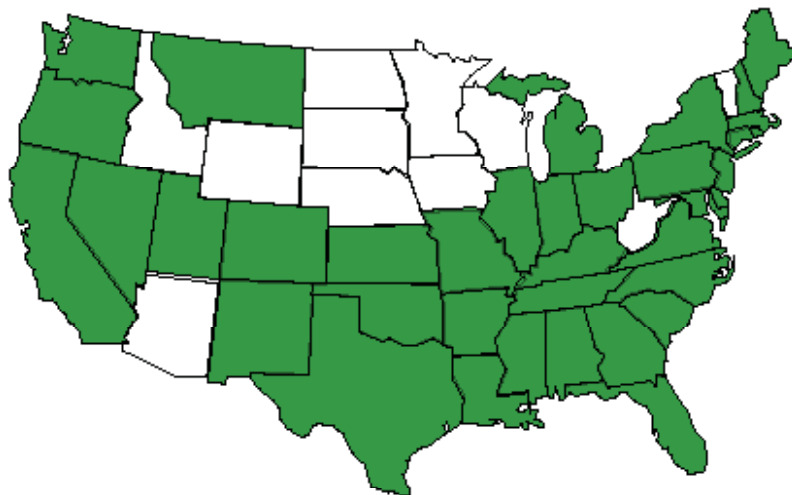
Small Business - \$67,126,760 / 97.4%

**Total Dollars - \$68,940,860**

# Natural Gas Program

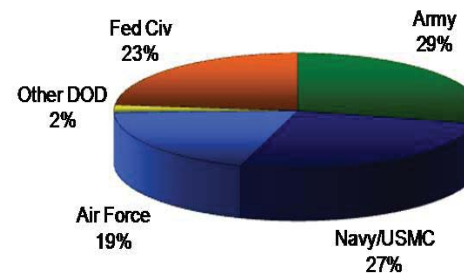


DESC is actively managing over 129M dekatherms of natural gas valued at over \$1.19B under multi-year contracts



Contract Coverage is 38 States (including Alaska) plus District of Columbia

## Customer Segmentation



## Natural Gas Program Summary

- 200+ DoD & Fed Civ Customers
- 50M+ Dekatherms delivered, annually
- \$30M+ Cost savings, annually

# Natural Gas Program

## Cost Avoidance Summary

Component	Customers per Component	FY09 Dths Delivered (Million)	FY09 Expenditures* (Million)	FY09 Cost Avoid- ance** (Million)	FY91 - 09 Cost Avoid- ance (Million)
Army	48	15.0	\$91.2	\$36.8	\$217.9
Navy/MC	50	13.9	\$81.1	\$34.4	\$190.5
Air Force	35	10.2	\$53.4	\$13.5	\$122.7
Other DoD	15	1.1	\$6.4	\$3.0	\$26.4
Fed Civ	67	12.3	\$66.3	\$24.3	\$170.2
<b>TOTAL</b>	<b>215</b>	<b>52.5</b>	<b>\$298.4</b>	<b>\$112.1</b>	<b>\$727.8</b>

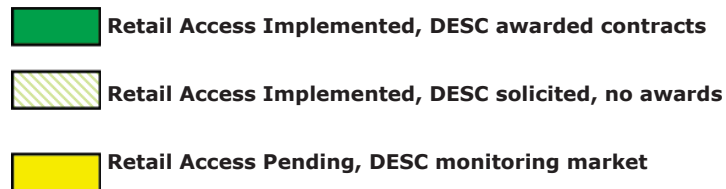
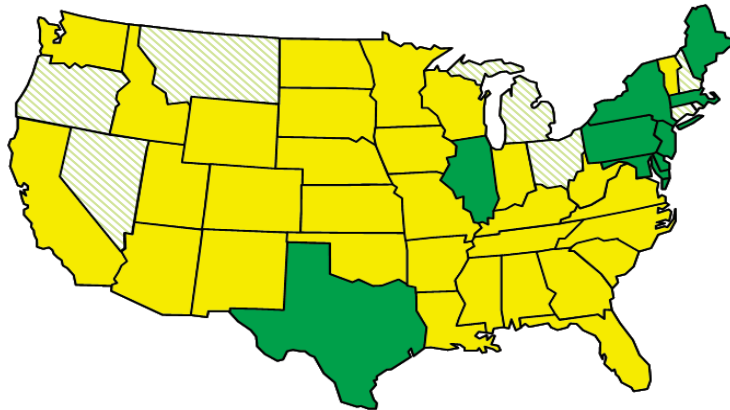
\*Includes Commodity & Distribution Costs to the Burnertip

\*\*Represents Cost Avoidance at DESC Indexed Contract Rates

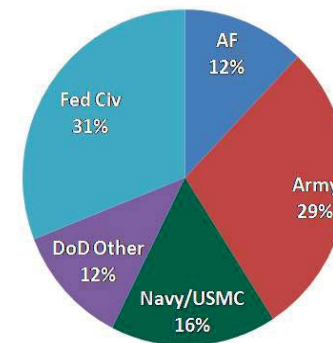


# Electricity Program

DESC is actively managing over 15.7M megawatt hours of electricity valued at over \$1.2B under multi-year contracts



**Customer Segmentation**  
(Based on \$ under contract)

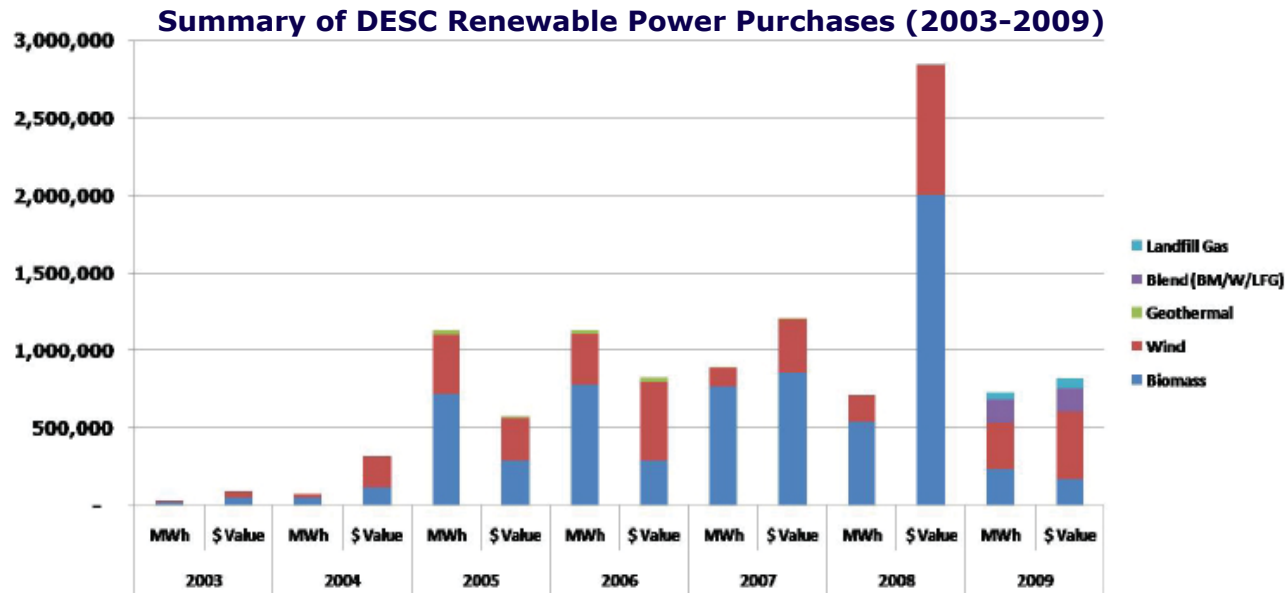


Source: Installation Energy, DESC

# Renewable Energy Program

**Renewable Power:** Any source of energy that is continually available or that can be renewed or replaced.

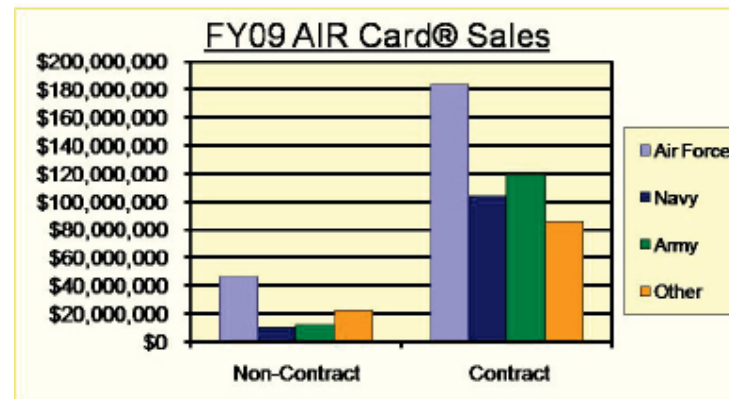
**Renewable Energy Certificates (REC):** A REC is a tradable, non-tangible energy commodity in the United States that represents proof that 1 MWh of electricity was generated from an eligible renewable energy (solar, wind, biomass, ocean, geothermal, municipal solid waste, "new" hydroelectric generation) resource.



Energy Policy Act 2005 Renewable Energy Goals increase from 3% to 5% in FY10.

# U.S. Government Air Card®

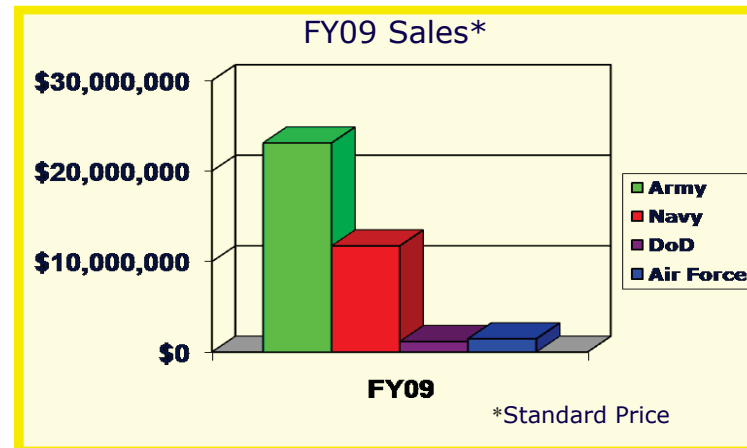
- Warfighter Benefits
  - Supports DESC into-plane contract refueling at over 500 locations
  - Accepted at over 7,000 non-contract locations worldwide in 190 countries
- Fiscal Stewardship
  - Non-contract discount: \$14 million in savings from posted airport price in FY09
- FY09 Sales Data
  - \$494 million contract fuel
    - 204 million gallons
    - 257K transactions
  - \$91 million non-contract fuel
    - 29.5 million gallons
    - 50K transactions



Note: U.S. Government Air Card® and AIR Card® are registered trademarks of the DESC AIR Card® Program.

# DoD Fleet Card

- Warfighter Benefits
  - Supports over 587,000 vehicle fueling transactions annually
  - Provides minor maintenance and road-side assistance support
  - Accepted at over 200,000 commercial locations
  - Not a credit card – enables standard unit pricing
  - \$1.92 million direct tax rebates in FY09

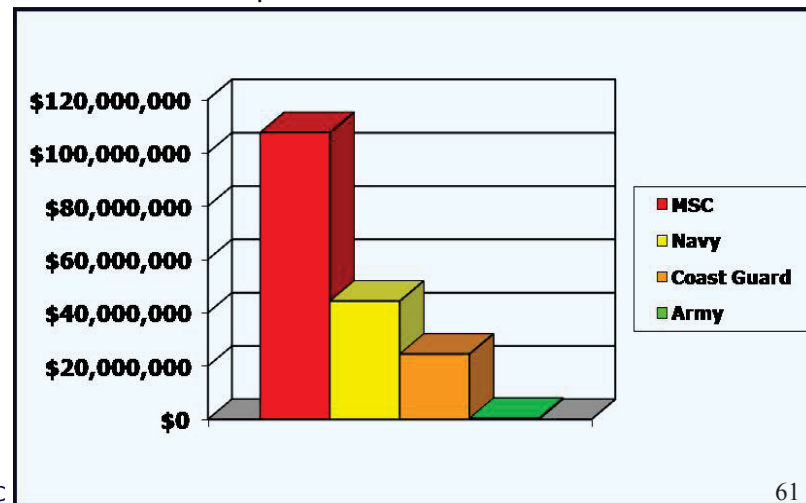


# DoD SEA Card®

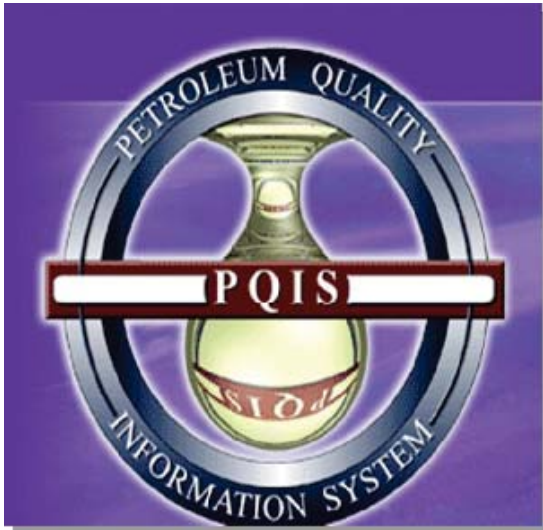
- Warfighter Benefits
  - Total on-line order management system supporting ships' bunker refueling
  - Electronically connects DESC bunkers merchant to vessel ordering officers
    - Eliminates inefficient manual paper process
- Global Support
  - 400+ DoD vessels registered
  - 24/7 fuel ordering/customer service support
  - Contract support at 260+ bunker contract ports
  - Open Market support at 2,000+ non-contract ports



Source: Government Fuel Card Program Management Office, DESC



# Petroleum Quality Information System



- Purpose: Implemented OSD 1989 directive to facilitate the collection and dissemination of standardized fuel quality data
- Allows for a proactive approach in identifying and monitoring product quality trends across a wide spectrum
- Largest publication of fuel quality information worldwide
- Used by customers and commercial industry (TWA 800, GE engine development, trends, etc.)
- Publication includes data from UK MOD Jet A-1 purchases

PQIS Publication includes quality data for Aviation Fuel (JP-4, JP-5, JP-8, JA1, JPTS, TS1) and Marine Fuel (F-76, Marine Gas Oil, (MGO)).

Source: Quality/Tech Support Office, DESC

# Research & Development Product Support

- Program Manager for DESC funded projects
- Establishes and implements long-term projects and studies to resolve petroleum-product and additive related issues
- Partner with commercial industry, Military Services & Federal Agencies
- Projects include:
  - JP-8 +100 additive study
  - Biodiesel additive study
  - Congressional Study Section 334 of National Defense Authorization Act
  - Fatty Acid Methyl contamination of jet fuel



Source: Quality/Tech Support Office, DESC

# Alternative Energy Programs

- Synthetic Fuels
  - Supporting the Air Force Fischer-Tropsch synthetic fuels certification program
- Waste Energy
  - Evaluating technologies to convert waste to fuel at forward operating bases to reduce the strain on the logistical chain
- Algae Oil to Fuel
  - Partnering with the Navy to certify platforms on JP-5 and F-76 fuel derived from algae
- Hydrogen
  - Partnering with Army on Hydrogen demonstration programs
- Biofuel
  - Procurement of HRJ-5 and HRJ-8, which are biofuel drop in replacements for JP-5 and JP-8 to support the Military Services' certification programs



Source: Quality/Tech Support Office, DESC



# Cataloging & Standardization

- Lead Standardization Activity for Federal Supply Group for Fuels, Lubricants, Oils & Waxes
- LSA for Liquid Propellant Fuels
- Market research & specification analysis
- Work with DLA Standardization Executive Agency
- Responsible for the creation, deletion and maintenance of National Stock Numbers
- Manages and maintains the Reference List of Commodities, Specifications and Standards, DESCH 4120.1



Source: Quality/Tech Support Office, DESC

# Quality Assurance/Surveillance Program

- Provides direction and control to Bulk, Direct Delivery, Aerospace Energy, Facility & Alternative Fuels business unit QA/QS Programs
  - Evaluates & recommends acceptability of contractor exceptions to quality requirements
  - Evaluates & recommends acceptability of contractor deviations & waivers to QA/QS requirements
- Develops and implements quality policy for DESC Headquarters & Regions
- Investigates and resolves customer/depot complaints and product quality deficiency reports
- Provides disposition instructions for off-specification fuel in concert with DFSP Management & Financial Operations
- Maintains quality metrics
- Manages the commercial laboratory program

Source: Quality/Tech Support Office, DESC

## DoD Standard Practice (MIL-STD-3004B)

- DESC's Quality/Technical directorate develops and assures implementation of MIL-STD-3004B "DoD Standard Practice – Quality Assurance/Surveillance for Fuels, Lubricants and related products."
- The Standard provides DoD Policy, general instructions and minimum procedures to be used by the Military Services and DLA in performing quality assurance/surveillance functions of U.S. Government owned fuels, lubricants and related products worldwide.
- This Standard includes policy and responsibilities derived from Executive Agency, Directive 5101.8, DoD Executive Agent for Bulk Petroleum, Aug. 11, 2004, which designated the Director of DLA as the DoD Executive Agent for Bulk Petroleum for the DoD, with authority to re-delegate to DESC.
- The information is appropriate to quality assurance, where applicable (e.g. direct delivery to customers, destination acceptance, etc.).
- This Standard also contains intra-governmental receipt limits for U.S. Government-owned fuels.

Source: Quality/Tech Support Office, DESC

## Quality Assurance Specialist and QAS Supervisor's Training Certification Program

- DESC's Quality/Technical directorate develops and implements the Quality Assurance Specialist and QAS Supervisor's Training and Certification Program for DESC.
- This Regulation outlines the DESC QAS and QAS Supervisor's Training and Certification Program as required per DLAM 8220.4, DLAD/DLAI 4155.7 and DoD 5000.52-M. DESC is responsible for DESC Center Quality Assurance and oversight of the Quality Surveillance program.
- Program includes the development, implementation and teaching by DESC staff of specific petroleum-related commodity certification courses including:
  - J07: Quality Assurance of Into-Plane Servicing Contracts
  - J08: Quality Assurance of Coal
  - XX: Coal Sampler
  - J20: Petroleum In-Plant Quality Assurance
- Basis for the DESC QAS DLA Corporate Intern Program - Two-year training program based in Houston, TX, to develop career QAS personnel.

Source: Quality/Tech Support Office, DESC

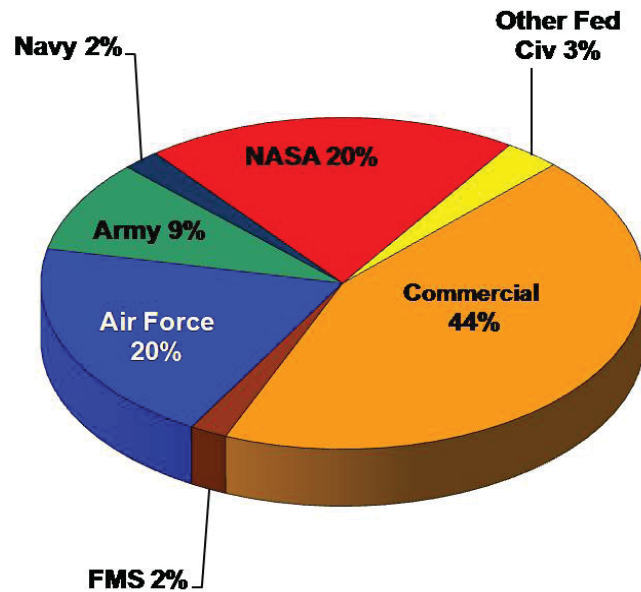
# Green Product Team

- DESC liaison to DLA Green Product Team
- Promote the procurement and use of “green” products as classified below:
  - Recovered or recycled content
  - Environmentally preferable
  - Energy efficient
  - Biobased
  - Alternative fuels/alternative fueled vehicles
- DESC strives to go “green” in the procurement of E85, Biodiesel, Hydrotreated Renewable jet fuel from various feedstocks (camelina, algae, tallow) and synthetic fuels
- Educate users on environmentally preferable alternative fuels

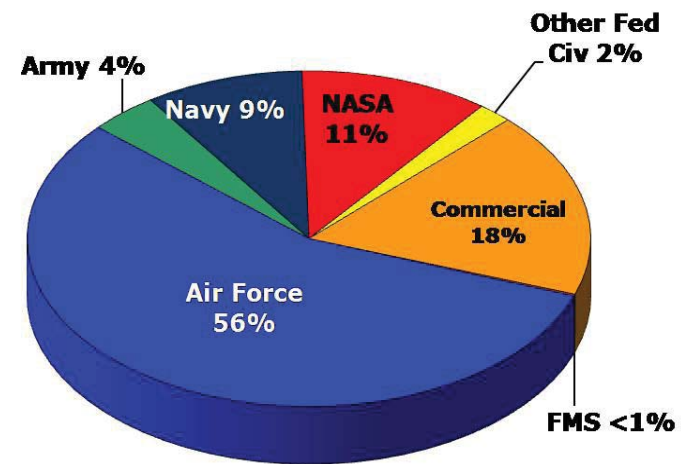


Source: Quality/Tech Support Office, DESC

# Aerospace Energy Customer Profile



**By Total Sales**  
**\$79,558,000**



**By Number of Customers**  
**559**

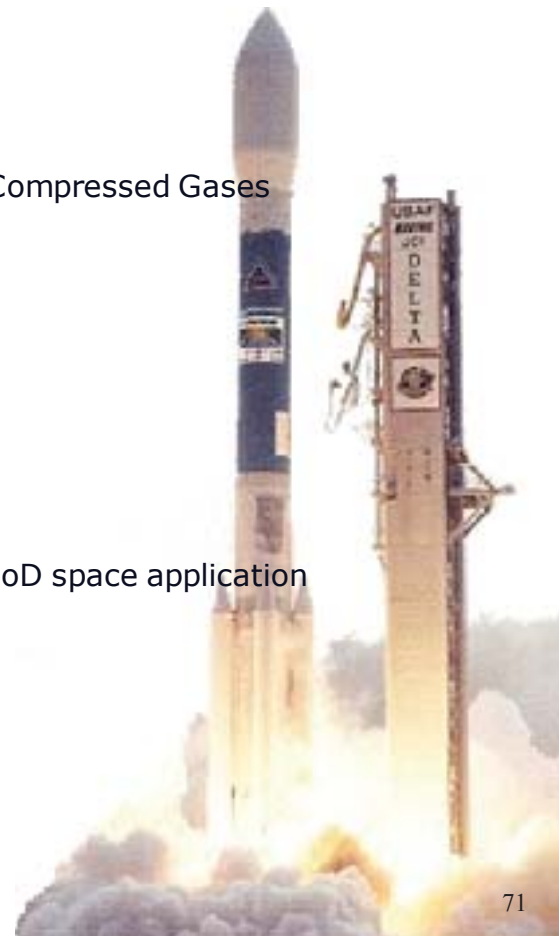
Source: Aerospace Energy, DESC

# Contracting Overview

- 92 NSN's
  - 29 Different products
  - 3 Product Classes – Liquid Propellants, Cryogenics and Compressed Gases
- 149 Active contracts
  - 95% requirements-type contracts
  - Normally multi-year - 3 to 5 years
  - Both Free on Board (FOB) Origin and Destination
- "Cradle to Grave" – Pre-award to contract closeout
- Every product supports a DoD major weapon system or DoD space application

Artist's Conceptual Design of ARES 1 Rocket (Shuttle Replacement)

Source: Aerospace Energy, DESC



# Product Line Overview

## Compressed Gases

Helium  
Nitrogen  
Argon  
Hydrogen  
Deuterium  
Nitrogen Trifluoride  
Fluorine  
Xenon  
Krypton  
Neon



## Propellants

### Hypergolic

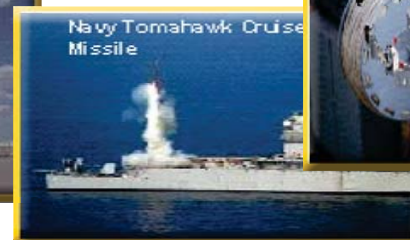
Hydrazine Fuels - 7 grades  
Dinitrogen Tetroxide - 5 grades  
Inhibited Red Fuming Nitric Acid

### Non-Hypergolic

Rocket Propellant - Grades 1 and 2  
Isopropyl Alcohol  
Hydrogen Peroxide  
JP-10  
Priming Fluid  
Methanol

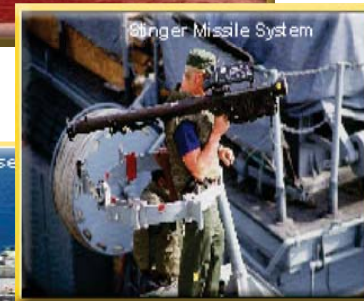
### Cryogenic

Liquid Oxygen  
Liquid Hydrogen  
Liquid Methane



## Non-Propellant Cryogenics

Aviator's Breathing Oxygen  
Liquid Nitrogen  
Liquid Air  
Liquid Argon  
Liquid Helium  
Liquid Carbon Dioxide





# Major Programs Supported

- USAF Delta and Atlas
- Commercial Evolved Expendable Launch Vehicle - Lockheed Martin Atlas V and Boeing Delta IV
- F-16 Emergency Power Unit
- F-15/F-16 Air Intercept Missile, Avenger, Sidewinder
- Cruise Missiles - Navy Tomahawk, Harpoon, & USAF ALCM/ACM
- AIM-9 and Stinger Missiles
- Research and Development Programs

Source: Aerospace Energy, DESC



## Major Programs Supported (cont'd)

- Army Terminal High Altitude Area Defense (THAAD)
- DoD Aircraft Life Support & Maintenance
- USAF and Army Aerostat Programs
- Military and Commercial Satellites
- International Space Station
- Drug Enforcement Agency Drug Interdiction
- DoD Laser Programs
- NASA Space Shuttle
- National Oceanic and Atmospheric Administration
- National Weather Service
- U.S. Department of Energy



Source: Aerospace Energy, DESC

# Hazardous Material Shipments

Product	Cylinders/Drums	Bulk
Helium	1451	428
Argon	1088	
Hydrazine	211	9
JP-10/PF-1	145	25
Dinitrogen Tetroxide (N <sub>2</sub> O <sub>4</sub> )	180	9
RP-1		58
Inhibited Red Fuming Nitric Acid (IRFNA)	259	
<b>Total</b>	<b>3334</b>	<b>529</b>



**Transportation Safety Is Priority #1**

Source: Aerospace Energy, DESC

# Aerospace Energy Solutions for Today's Energy Challenges

Customer	Challenge	DESC Solutions
US Army OIF/OEF Aerostat Program (bulk helium)	Sustain the bulk helium supply chain in support of OIF/OEF warfighters while assuring competitive acquisition and fair and reasonable pricing.	Worked closely with industry to assess capabilities of the OCONUS helium industrial base. Modified acquisition strategy for the follow-on support contract to separate helium product requirements from the maintenance and service of associated equipment, which resulted in greater competition and reduced cost.
30th Space Wing (USAF) Vanderberg AFB	Human safety protection for personnel at the Gaseous Nitrogen plant within the Flight Hazard Zone of the Delta IV EELV.	Installed a remote monitoring system to enable plant personnel to continue operations during evacuation of the Flight Hazard Zone during EELV "Heavy Lift" launches.
Tobyhanna Army Depot	Develop a total energy support solution for new laser cutter technology being installed at the depot.	Worked with industry to install a turn-key system which included facility preparation, cryotank installation and continuous product support.

Source: Aerospace Energy, DESC

# Alternative Fuel

- Awarded two contracts using camelina and tallow derived for up to 200,000 gallons of hydrotreated renewable jet (HRJ-8) per contract
  - Supports Air Force testing & certification efforts
- Awarded contract for up to 190,000 gallons of camelina derived HRJ-5
  - Supports Navy testing & certification efforts
- Awarded contract for 1,500 gallons of algae derived HRJ-5
  - Supports Navy testing & certification efforts
- Awarded contract for 20,055 of algae derived HRJ-76
  - Supports Navy testing & certification efforts



Source: Energy Plans and Programs, DESC

# Research & Development

- Broad Spectrum of AFRE R&D
- Forward Operating Base Support
  - Congressionally mandated FY09 NDAA Section 333 study, Potential for Solar and Wind Energy Use by Expeditionary Forces
  - Electronic Power Control and Conditioning System
- Mobile 500kW containerized system
- Integrates conventional and renewable power sources; load management
  - On-Site Alternative Fuel Manufacturing
- Carbon Capture Sequestration
  - Review alternatives for carbon capture, sequestrations and reuse for coal-derived jet fuels and electricity
- Biofuels
  - Economic feasibility study for the regional production of cellulosic biomass-derived JP-8
  - Develop fermentation and recovery technologies to produce biomass-derived JP-8



Source: Energy Plans and Programs, DESC

# Renewable Energy

- A key enabler supporting the Renewable Energy needs of the Federal Government
- Implementing a variety of Renewable Energy installation support projects
  - Power Purchase Agreements for electricity generated from solar
  - Geothermal
- Driving standardization – developing Government-wide model solicitation for renewable energy projects
- Supports energy conservation via Energy Savings Performance Contracts
- Promotes renewable energy via Renewable Energy Credit Program



Source: Energy Plans and Programs, DESC

## Acronyms

ACM .....	Air Cruise Missile
ACSA .....	Acquisition and Cross Servicing Agreement
AFRE .....	Alternate Fuel Renewable Energy
AIM .....	Air-to-Air Missile (Sidewinder)
AIT .....	Automatic Identification Technology
ALCM .....	Air-Launched Cruise Missile
ANG .....	Air National Guard
AOR .....	Area of Responsibility
AVGAS .....	Aviation Gasoline
B.....	Billion
BCS3-NM .....	Battle Command Sustainment Support System-Node Management
BPCOP .....	Bulk Petroleum Common Operating Picture
BSM-E .....	Business Systems Modernization-Energy
BU.....	Business Unit
CDC .....	Customer/Depot Complaint
CES .....	Constellation Energy Source
CHPP .....	Central Heat and Power
COCO .....	Contractor-Owned Contractor-Operated
COCOM .....	Combatant Command
CONUS .....	Continental United States
CSM .....	Customer Support Management



## Acronyms

DESC .....	Defense Energy Support Center
DES .....	DLA Enterprise Support
DFSC .....	Defense Fuel Supply Center
DFSP .....	Defense Fuel Support Point
DLA .....	Defense Logistics Agency
DoD .....	Department of Defense
DoD-SCOMS .....	DoD-SEA Card Order Management System
DPK .....	Dual Purpose Kerosene
DSCR .....	Defense Supply Center Richmond
Dths .....	Dekatherms
DWCF .....	Defense Working Capital Fund
DWT .....	Dead Weight Ton
EA.....	Executive Agent
EBS .....	Enterprise Business Systems
ECM.....	Energy Conservation Measures
EELV .....	Evolved Expandable Launch Vehicle
EPS .....	Energy Performance Services
ESC .....	Expeditionary Sustainment Command
ESCO .....	Energy Service Company
ESOH.....	Environmental Safety and Occupational Health
FAME .....	Fatty Acid Methyl Ester
FEA .....	Fuel Exchange Agreement
FEMA .....	Federal Emergency Management Agency

# Acronyms

FES .....	Fuels Enterprise System
FG .....	Foreign Government
FISC .....	Fleet and Industrial Supply Center
FMS .....	Foreign Military Sales
FOB .....	Free on Board
FPDS-NG .....	Federal Procurement Data System-Next Generation
FY .....	Fiscal Year
GHP .....	Geothermal Heat Pump
GIA .....	Guam International Airport
GOCO .....	Government-Owned Contractor-Operated
GOGO .....	Government-Owned Government-Operated
GSHP .....	Ground Source Heat Pump
HRJ .....	Hydrotreated Renewable Jet
HVAC .....	Heating, Ventilating and Air Conditioning
IA .....	Inventory Accountability
IMM .....	Integrated Material Management
IRFNA .....	Inhibited Red Fuming Nitric Acid
ISR/SSR .....	Individual Contracts/Summary Subcontract Report
IT .....	Information Technology
JIATF-S .....	Joint Interagency Task Force - South
JP .....	Jet Petroleum (JP4, JP5, JP8, JP10, Jet A1, Jet B, etc.)
JPO .....	Joint Petroleum Office
JQO .....	Joint Qualified Officer

# Acronyms

K.....	Thousands
LNO.....	Liaison Officer
LSA .....	Lead Standardization Activity
LSS.....	Lean Six Sigma
M.....	Million
MGO.....	Marine Gas Oil
MND .....	Ministry of National Defense
MOA .....	Memorandum of Agreement
MOGAS.....	Motor Gasoline
MOU .....	Memorandum of Understanding
MSC .....	Military Sealift Command
MSCA.....	Military Support to Civilian Agencies
MWh.....	Megawatt Hour
NASA.....	National Aeronautics and Space Administration
NATO .....	North Atlantic Treaty Organization
NAVAIR.....	Naval Air Systems Command
NAVEUR .....	Naval Command Europe
NAVFAC .....	Naval Facilities Engineering Command
NDAA.....	National Defense Authorization Act
NLSA .....	National Logistics Staging Area
NPV .....	Net Present Value
NSN.....	National Stock Number

# Acronyms

OCONUS .....	Outside Continental United States
OEF .....	Operation Enduring Freedom
OIF .....	Operation Iraqi Freedom
OPA-90 .....	Oil Pollution Act of 1990
OPDS.....	Offshore Petroleum Discharge System
OPLAN .....	Operational Plans
OSD .....	Office of the Secretary of Defense
P/L.....	Pipeline
PATSA.....	Petro America Terminal, SA
PC&S .....	Posts, Camps and Stations Contract
POL .....	Petroleum, Oil and Lubricants
POM .....	Program Objective Memorandum
POTUS .....	President of the United States
PP&E .....	Plant, Property and Equipment
PQDR.....	Product Quality Deficiency Report
PQIS.....	Petroleum Quality Information System
QA .....	Quality Assurance
QAR.....	Quality Assurance Representative
QAS.....	Quality Assurance Specialist
QLLEX.....	Quartermaster Liquid Logistics Exercise
QS .....	Quality Surveillance
R&D .....	Research and Development
REC .....	Renewable Energy Certificate

# Acronyms

RIE.....	Rapid Improvement Event
ROK.....	Republic of Korea
RP .....	Rocket Propellant
RSC.....	Regional Support Command
SAP .....	System Analysis and Program Development
SBS.....	Small Business Specialist
SEA .....	Ships' Bunkers' Easy Acquisition
SK.....	South Korean
SOAR.....	Subcontracting Orientation and Assistant Review
SRM .....	Sustainment, Restoration and Modernization
SRM-E .....	Sustainment, Restoration and Modernization Energy
STS.....	Ship-to-Ship
TACM .....	Temperature and API Correcting Meter
U.S. ....	United States
UESC.....	Utility Energy Service Contracts
UFG.....	Ulchi Freedom Guardian
UK MOD .....	United Kingdom Ministry of Defense
UMCS .....	Utility Management and Control System
USA.....	United States Army
USAF .....	United States Air Force
USAFE .....	United States Air Force Europe
USAR.....	United States Army Reserve
USCENTCOM .....	U.S. Central Command

# Acronyms

USEUCOM .....	U.S. Europe Command
USFK .....	U.S. Forces Korea
USMC .....	United States Marine Corps
USPACOM .....	U.S. Pacific Command
USSOCOM .....	U.S. Special Operations Command
USSOUTHCOM .....	U.S. Southern Command
USTRANSCOM .....	U.S. Transportation Command
VFD .....	Variable Frequency Drives
VPP .....	Voluntary Protection Program



NOTES:







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