



# *Defense Energy Support Center*

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# *First Choice for Energy Support*

*Fact Book FY 2004  
Twenty-Seventh Edition*

# Report Documentation Page

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## **FOREWORD**

The Defense Energy Support Center Fact Book contains statistical information regarding the Center's business operations. The Fact Book reflects the Center's operational status at the end of fiscal year 2004 unless otherwise indicated. The intent is for the use of this publication as a source for general information purposes only. The Fact Book is not to be considered a source for official communications. We hope you will find it useful.

The Fact Book can also be found on-line at [www.desc.dla.mil](http://www.desc.dla.mil) in the Publications section of the web page.

# DESC CORPORATE POSTURE

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# DEFENSE ENERGY SUPPORT CENTER

## HISTORY:

The origin of the Defense Energy Support Center 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 (DLA). The Center was designated the Defense Fuel Supply Center (DFSC) 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 Materiel Manager (IMM) for the Department of Defense petroleum requirements. Under Phase I, DFSC added management of the acquisition, storage, distribution and sale of fuel with responsibility ending at the Service 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 will capitalize all ground fuels.

Once Phase II is completed, DLA will own all bulk petroleum products from the point of purchase until its final point of issue to power aircraft, ships, and ground equipment.

In 1990, the DFSC 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 natural gas to customers when determined more economical than using gas from a local distribution company.

February 11, 1998 marked the beginning of a new chapter in the Center's history with a name change to Defense Energy Support Center. With it came a new mission to build an energy program aimed at moving the Department of Defense out of the management of energy infrastructure and into the management of energy products.

The initiative to deregulate electricity in CONUS 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.

DESC, despite changes in organization structure and expanded mission, continues its basic mission to support the warfighter and manage the energy sources of the future.



Defense Energy Support Center's  
Mission



To Provide The Department Of Defense,  
And Other Government Agencies,  
With Comprehensive Energy Solutions In  
The  
Most Effective And Efficient Manner  
Possible.

# DESC's Vision



**Our Customer's First Choice  
For Energy Solutions**

# **DEFENSE ENERGY SUPPORT CENTER DIRECTOR'S UPDATE FOR FISCAL YEAR 2004**

In Fiscal Year (FY) 2004, the Defense Energy Support Center continued its goal of providing the Department of Defense and other customers comprehensive energy solutions in the most effective and economic manner possible. These solutions include contracting support and management of all petroleum-based fuels, additives and other energy products and services including jet fuels, distillates, missile fuels, chemicals, gases, gasolines, diesel fuels, heating fuels, natural gas, coal and electricity. DESC also continues to manage utilities, privatization and other installation energy conservation efforts. DESC prides itself in continuing partnerships with its customers and the energy industry by fostering and maintaining business alliances around the world.

In addition, DESC continues to support the Department of Defense in the Global War on Terrorism by providing fuel to the warfighter in support of Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom in Iraq, as well as other contingency and peacetime operations around the world. Fuel usage: As of September 24, 2003, DESC has issued 1,807,497,139 gallons of fuel in support of Operation Enduring Freedom (since October 2001; war on terrorism in Afghanistan). DESC has issued 594,527,730 gallons of fuel in support of Operation Iraqi Freedom (since March 19,2003).

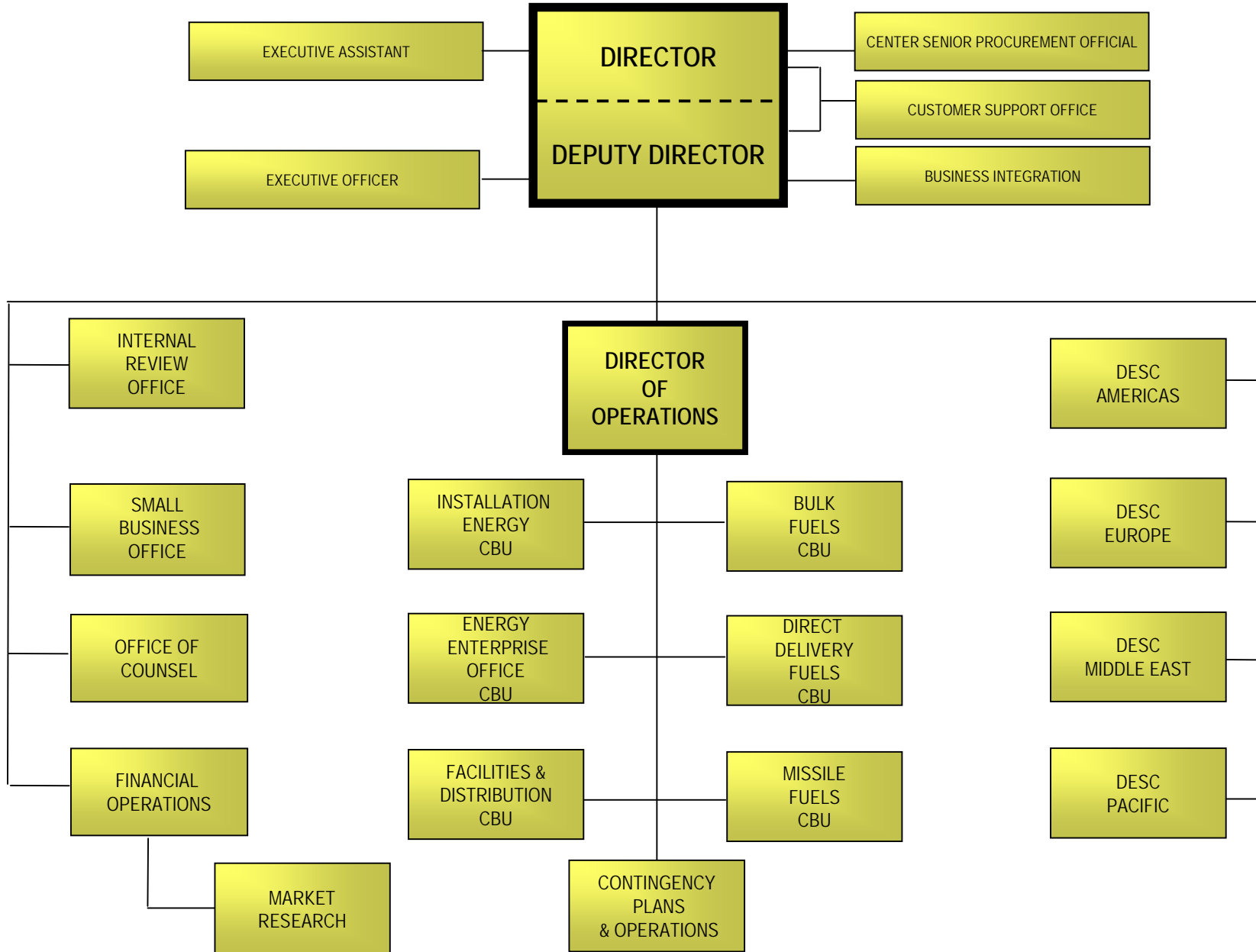
In support of Defense Logistics Agency goals and objectives, DESC continues to initiate and develop new programs and business practices designed to meet the ever-changing challenges ahead, including Fuels Automated System (FAS), the Balanced Scorecard, information technology and transformation issues. DESC's continued success with meeting these fast-paced challenges is due to the cooperation, dedication and commitment of over 800 military and civilian DESC employees whose goals include exceeding expectations and meeting mission needs - wherever and whenever they occur.

# **DEFENSE ENERGY SUPPORT CENTER DIRECTOR'S PLAN FOR FISCAL YEAR 2005**

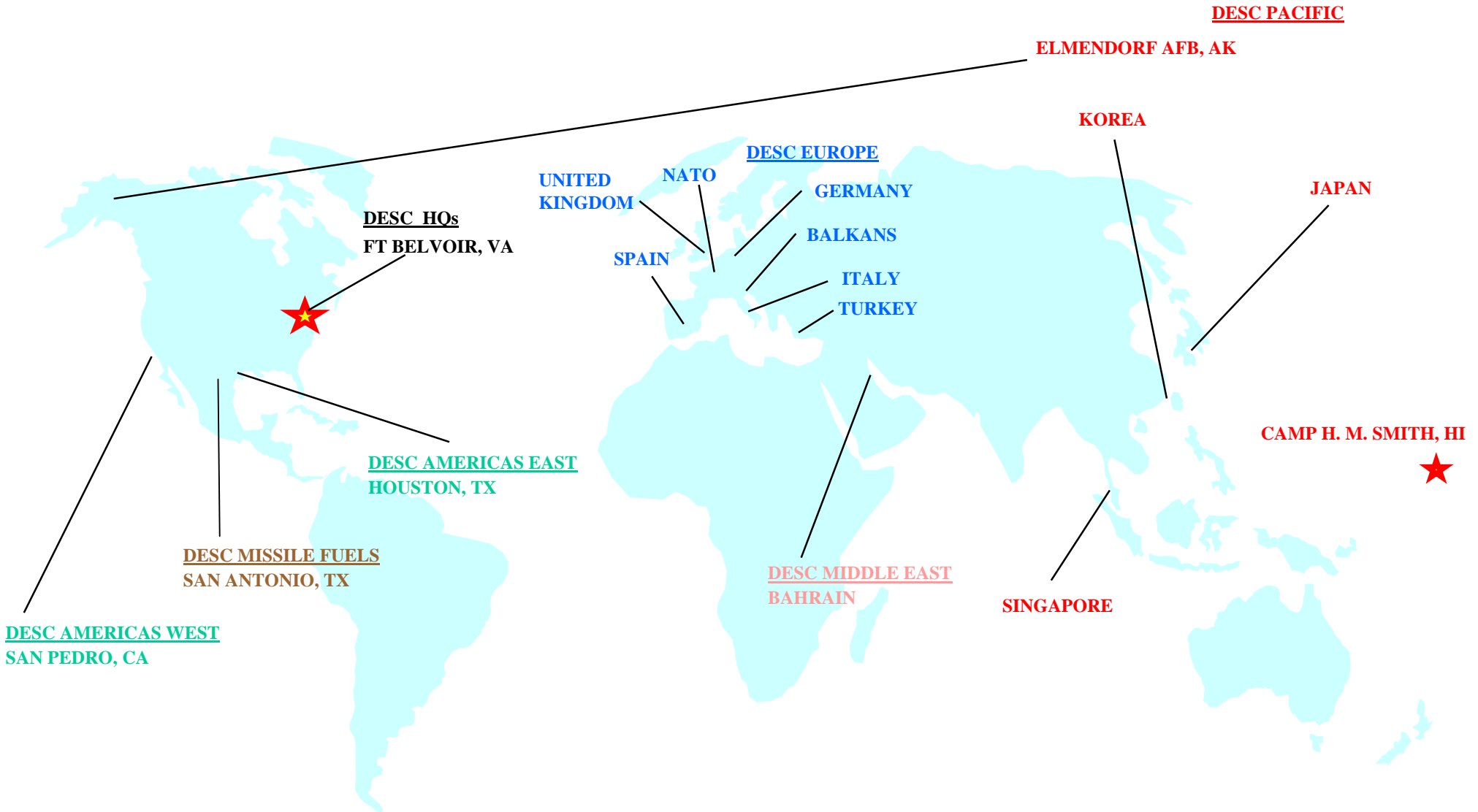
DESC is committed to supporting the warfighter and will continue to fulfill its vision of its customer's first choice for energy solutions. Along with current Commodity Business Unit's (CBUs) mission requirements, DESC will support and play an integral part in DLA strategies and initiatives. DESC's continuing support consists of the following:

- As the Executive Agent (EA) for Bulk Petroleum, we continue to develop initiatives that will enhance and streamline fuel support to the Warfighter;
- We partner and leverage the commercial fuel card industry to maximize customer fuel support as well as promoting financial stewardship;
- We will enhance and further develop DESC's Balanced Scorecard (BSC) to provide a true representation of DESC's business and align strategically to DLA's BSC;
- We will ensure DESC's financial statements are measured internally to commercial audit standards and procedures and reflect a true picture of DESC's financial operations;
- We will seek out and continue to implement strategic supplier/vendor alliances whenever possible;
- We aggressively support the Office of the Secretary of Defense (OSD) to achieve its goal of privatizing on-base utility infrastructure to maximize energy efficiency and better support the Warfighter.

# DESC ORGANIZATION



# DESC WORLDWIDE LOCATIONS



## BIOGRAPHY

# **RICHARD J. CONNELLY**

### **Director, Defense Energy Support Center**

**Mr. Richard J. Connelly became Director of the Defense Energy Support Center (DESC) November 3, 2003. As Director of the Defense Energy Support Center, Defense Logistics Agency, Fort Belvoir, Virginia, Mr. Connelly directs the Department of Defense (DoD) organization that is responsible for purchasing and managing all petroleum resources used by the United States military. In addition, Mr. Connelly guides the growing mission of total energy support by developing strategies to buy and sell deregulated electricity and natural gas to DoD and other federal agency customers. In his capacity as the Director, Mr. Connelly also directly supports DoD's initiative to privatize the military base infrastructure that distributes those utilities (in addition to lighting, heating, air conditioning and water/wastewater systems).**

**Mr. Connelly is a career executive with a long history of service to DLA and the nation. He came to DLA in 1972 as a management intern in the budget office. In 1986, he was appointed to the Senior Executive Service and was named the Budget Officer for the Agency. He later served as DLA Comptroller, as Administrator of the Defense National Stockpile Center, and as the Director, DLA Support Services.**

**He graduated from Boston College in 1968 and served in the United States Army until 1971. He is a graduate of Office Candidate School at Fort Sill, Oklahoma, and served one year in Vietnam.**

**Mr. Connelly attended Stanford University Graduate School of Business as a Sloan Fellow and received a Master of Science degree in management in 1978.**

**In 2003, he was selected for the Presidential Rank Award of Meritorious Executive.**

## BIOGRAPHY

# CAPTAIN MARVIN C. WENBERG II

### United States Navy Deputy Director, Defense Energy Support Center

Captain Wenberg was born in Chicago, Illinois, on 15 April 1952. He graduated from West Lafayette High School in 1970, and Purdue University, West Lafayette, Indiana, in December 1976, with a Bachelor of Science in Chemistry. He is a graduate of the Navy's Petroleum, Oil and Lubricant Intern Program and the Armed Forces Staff College. He received a Master of Science degree in Petroleum Management from the Science and Business Schools, University of Kansas, and a Master of Science in Acquisition and Contract Management from the Florida Institute of Technology. Captain Wenberg is also a graduate of the University of Michigan Winter 2000 Executive Training Program.

After graduation from Purdue, he attended the Naval Officer Candidate School, Newport, Rhode Island, and was commissioned an Ensign in May 1977. Captain Wenberg was then sent to the Navy Supply Corps School, Athens, Georgia, and after graduation, he completed Submarine School at Groton, Connecticut. He then became the Supply Officer of the USS DANIEL BOONE (SSBN 629) Blue Crew. Some of his other assignments include:

- Assistant to the Director, Fuel Director, Naval Supply Center, Pearl Harbor, Hawaii;
- Director, Fuel Department, and Director, Material Turned Into Store, Naval Supply Center, Charleston, South Carolina;
- Readiness and Services Officer, USS ENTERPRISE (CVN 65).

Originally assigned to Defense Fuel Supply Center as the Assistant Chief, Special Acquisitions Division, Captain Wenberg moved up to the position of Chief, Plans, Policy and Systems Office and then became the Executive Officer. In 1993, he became the Deputy Program Manager (Business and Operations), V-22 Program Office (NAVAIR) and in 1996 the Supply Officer, USS SAIPAN (LHA 2).

In May 1998, Captain Wenberg reported to United States Strategic Command to assume the duties of Chief, Weapon Systems Logistics and Readiness Division (J44), which included nuclear surety functions. In June 2000, Captain Wenberg assumed additional responsibilities as Chief, Combat Logistics and Readiness Division (J41), Operations and Logistics Directorate, when the Mobility Plans Division, J42, and his former J44 Division were disestablished and replaced by the J41 Division. Captain Wenberg assumed duties as Commanding Officer of the Naval Petroleum Office on 26 April 2002. In this assignment, he was responsible for providing leadership and technical direction for all petroleum programs within the Navy and Marine Corps. This integrates all Naval Petroleum duties. On 6 August 2003, Captain Wenberg assumed duties of the Deputy Director of the Defense Energy Support Center.

He is authorized to wear the Naval Aviation Supply Officer and Submarine Breast Insignias. Captain Wenberg is designated a Joint Services Officer in the Department of Defense. Some of his personal awards include the Defense Superior Service Medal, the Legion of Merit and the Defense Meritorious Service Medal. He is a member of the American Chemical Society, and of the Acquisition Community in the Department of the Navy.

## **BIOGRAPHY**

# **COLONEL KEITH STEDMAN**

**United States Army  
Director, Operations Defense Energy Support Center**

Colonel Keith Stedman is assigned as DESC's Director of Operations and the Commander of DESC-Americas. He has received a Bachelor of Science Degree in Public Administration from the University of Arizona and later received a Masters Degree in Logistics Management from the Florida Institute of Technology. His military career began in 1976 and he was commissioned as a Second Lieutenant after completing Officer's Candidate School.

Colonel Stedman's military education includes the Quartermaster Basic and Advanced Officer Courses, the Leadership Executive Development Course, Armed Forces Staff College and the Army War College.

Previous assignments include Commander, 200th Materiel Management Center, Strategic Research Analyst, Strategic Studies Institute; Commander of the 559th Quartermaster Battalion (WS); Chief of both the United States Southern Command and United States Pacific Command Joint Petroleum Offices; Battalion Executive Officer and Support Operations officer, 7th Support Battalion (F), 7th Infantry Division (L); Division Chief, Sacramento Army Depot; Commander B Company, 4th Support Battalion (AVN), 9th Infantry Division (MTR), and Battalion S3, 4th Support Battalion (AVN) 9th Infantry Division (MTR). He also served as a Platoon Leader and Aide de Camp.

His awards include the Legion of Merit, Defense Meritorious Service medal (first oak leaf cluster), the Army Meritorious Service Medal (third oak leaf cluster) and the Army Commendation Medal (with oak leaf cluster).

# DEFENSE ENERGY SUPPORT CENTER

**Director**

**Deputy Director**

**Executive Officer**

**Director, Operations**

**Director, Contingency Plans & Operations**

**Director, Installation Energy**

**Director, Bulk Fuels**

**Director, Facilities Distribution Management**

**Director, Direct Delivery Fuels**

**Director, Missile Fuels**

**Customer Support Office**

**Business Integration Office**

**Internal Review Office**

**Small Business Office**

**Office of Counsel**

**Center Senior Procurement Official**

**Director, Financial Operations**

**Market Research**



**767-9706**

**767-9700**

**767-9721**

**767-9301**

**767-8370**

**767-8572**

**767-9304**

**767-9360**

**767-8500**

**(210) 925-4455**

**767-2945**

**767-9675**

**767-9671**

**767-9465**

**767-5011**

**767-8505**

**767-9484**

**767-8353**

# DEFENSE ENERGY SUPPORT CENTER

## Regional Offices

DESC Americas  
DESC Americas East  
DESC Americas West

### DESC AMERICAS

(703) 767-9306  
(713) 718-3770 ext. 101  
(310) 241-2800 ext. 101

DESC Pacific  
DESC Middle Pacific  
DESC Korea  
DESC Japan  
DESC Alaska

### DESC PACIFIC

(808) 477-3600/6692  
(808) 477-5441/6692  
011-82-53-470-5147/5204  
011-81-311-755-2671/2673  
(907) 552-3949/3941

DESC Europe  
DESC United Kingdom  
DESC Mediterranean  
DESC NATO  
DESC Balkans

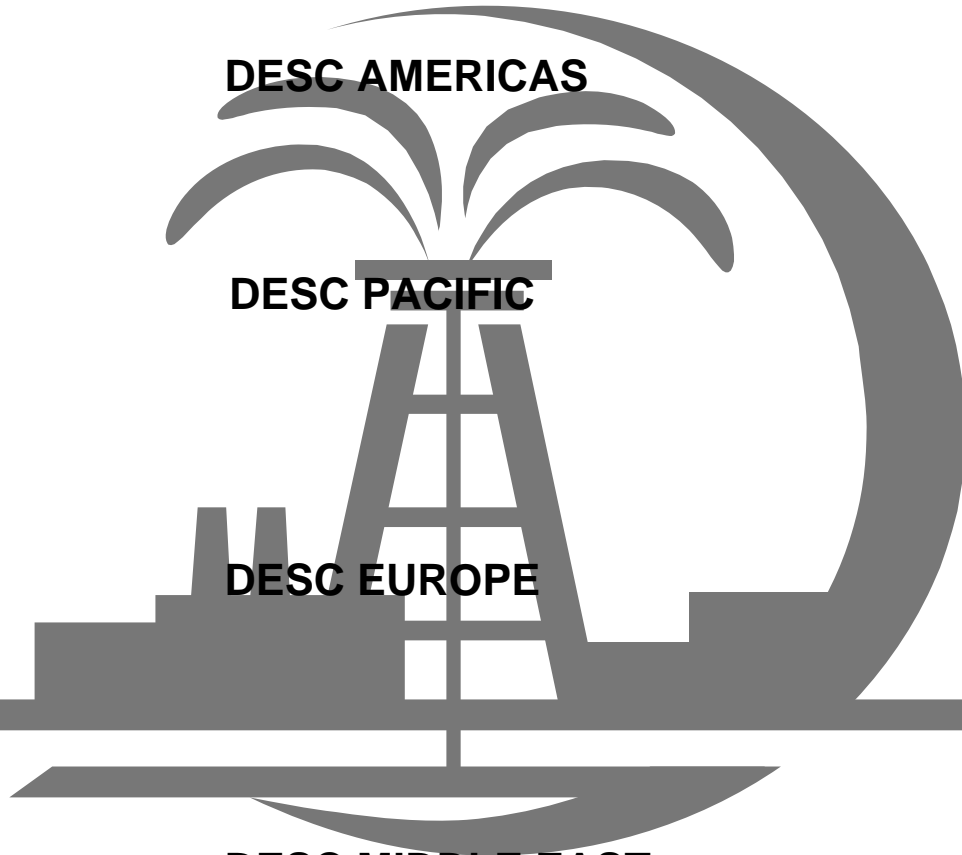
### DESC EUROPE

011-49-611-380-7710  
011-44-208-385-5449  
011-39-050-54-7085  
011-32-2724-3118  
011-385-1-390-8510

DESC Middle East

### DESC MIDDLE EAST

011-973-72-4650





## **ENERGY SUMMARY**

**(In Millions of Dollars)**

### **FY2004**

<b>Purchases At Cost</b>	<b>\$7,863.4 (1)</b>
<b>Net Sales</b>	<b>\$5,929.1 (2)</b>
<b>Ending Inventory</b>	<b>\$3,906.8 (3)</b>

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

**(2) Includes Net Sales for Petroleum, Natural Gas, and Missile Fuel \$561.4 million of FY2004 Sales was in support of a special one time mission ( Humanitarian Assistance in Iraq ).**

**(3) Includes Petroleum and Missile Fuel Inventory**





# MILITARY AND CIVILIAN END STRENGTHS



	MILITARY		CIVILIAN	
	AUTHORIZED	ONBOARD	AUTHORIZED	ONBOARD
FY97	81	74	654	633
FY98	82	71	658	607
FY99	81	72	649	595
FY00	76	64	610	599
FY01	76	61	621	599
FY02	76	68	710	689
FY03	76	67	804	731
FY04	78	61	772	743

SOURCE: FINANCIAL OPERATION

# OPERATIONS PROGRAM

## (\$ IN MILLIONS)

	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>
CIVILIAN PAY	\$42.7	\$51.3	\$61.3	\$73.2
MILITARY PAY	7.7	9.2	8.2	6.4
NON-LABOR	84.7	93.5	100.5	98.5
<b>TOTAL</b>	<b>\$135.1</b>	<b>\$154.0</b>	<b>\$170.1</b>	<b>\$178.1</b>
<b><i>Average Annual Salary Rate (\$actual)</i></b>				
	<b>\$71,960</b>	<b>\$76,412</b>	<b>\$83,301</b>	<b>\$91,270</b>

\* INCLUDES OPERATION ENDURING FREEDOM SUPPORT AND COSTS FOR THE FUELS AUTOMATED SYSTEM (FAS)

SOURCE: FINANCIAL OPERATIONS-TRIAL BALANCE REPORT NO. UPFE640A

# PETROLEUM & NATURAL GAS

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# STATEMENT OF FINANCIAL CONDITIONS

## BULK FUEL CATEGORY (Millions of Dollars)

<b><u>ASSETS:</u></b>	<b><u>FY02</u></b>	<b><u>FY03</u></b>	<b><u>FY04</u></b>
Accounts Receivable	331.9	304.0	291.3
Claims Receivable	0.5	3.0	31.0
Inventories	2,043.9	2,096.4	3906.8
Undistributed Collections	<449.8>	<300.4>	<747.7>
Other Assets	0	0	<0.9>
<b><u>TOTAL ASSETS</u></b>	<b>\$1,926.5</b>	<b>\$2,103.0</b>	<b>\$3480.5</b>
<b><u>LIABILITIES:</u></b>			
Accounts Payable	550.0	616.8	748.1
Undistributed Disbursements	<318.1>	<443.2>	<449.6>
Other Liabilities	.3	<.1>	36.7
<b><u>TOTAL LIABILITIES</u></b>	<b>\$232.2</b>	<b>173.5</b>	<b>335.2</b>
<b><u>CAPITAL:</u></b>			
Cash Allocations	<2,631.0>	<1,789.9>	<501.7>
Capitalized Inventories	523.7	604.7	630.1
Decapitalized Inventories	<3.7>	<3.7>	<3.7>
Other Assets Capitalized/Decapitalized	2,256.0	2,256.0	2,257.8
Other Liabilities Capitalized/Decapitalized	141.5	144.6	145.2
Accumulated Operating Results	792.4	1671.1	617.6
<b><u>TOTAL CAPITAL</u></b>	<b>\$1,078.9</b>	<b>\$2,882.8</b>	<b>\$3145.3</b>
<b><u>TOTAL LIABILITIES AND CAPITAL</u></b>	<b>\$1,311.1</b>	<b>\$3,056.3</b>	<b>\$3480.5</b>

# STATEMENT OF SALES

## PETROLEUM, NATURAL GAS AND MISSILE FUEL

(In Millions of Dollars)

<b><u>PRODUCT:</u></b>	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>
U.S. ARMY	341.1	372.0	439.5
U.S. NAVY	1,830.7	1742.2	1627.3
U.S. AIR FORCE	3,309.4	2764.8	2841.0
U.S. MARINE CORPS	25.0	22.7	22.7
OTHER DoD	32.7	14.8	34.8
<b>TOTAL DoD</b>	<b>5,538.9</b>	<b>4,916.5</b>	<b>4961.6</b>
OTHER GOVERNMENT AGENCIES	365.3	386.2	409.2
<b>SUBTOTAL</b>	<b>5,904.2</b>	<b>5,302.7</b>	<b>5,370.8</b>
FOREIGN GOVERNMENTS	159.2	137.3	742.8
DoD CONTRACTORS	15.2	17.4	15.6
UNIDENTIFIED ISSUES	0	0	7.1
<b>TOTAL GROSS SALES</b>	<b>6,078.6</b>	<b>5,457.4</b>	<b>6136.3</b>
<b><u>LESS:</u></b>			
PRICE REDUCTION ON SALES	8.5	1.2	3.0
MATERIAL RETURNS/CREDITS APPLIED	300.8	248.2	207.2
<b>NET SALES</b>	<b>5,769.3</b>	<b>5,206.1</b>	<b>5926.1</b>

# NET SALES BY CATEGORY

## PETROLEUM AND NATURAL GAS

PETROLEUM (Thousands of Barrels)			
<b><u>BULK and PC&amp;S:</u></b>	<b><u>FY02</u></b>	<b><u>FY03</u></b>	<b><u>FY04</u></b>
AVGAS	3	4	7
DISTILLATES & DIESEL	21,831	24,528	22,084
GASOHOL	4	7	9
JP-4, JAB, JAA, & JA1	2,410	2,721	1,818
JP-5	20,590	16,294	13,974
JP-8, JTS	77,499	81,022	78,238
LUBE OILS	29	28	28
MOGAS (LEADED & UNLEADED)	1,510	1,541	895
RESIDUALS	<u>431</u>	<u>1,094</u>	<u>1,281</u>
<b>BULK SUBTOTAL</b>	124,307	127,239	118,334
TF-RIO	N/A	N/A	10,042
INTOPLANE	4,078	4,780	5,094
BUNKERS	2,334	8,026	8,370
LOCAL PURCHASE	<u>1,584</u>	<u>2,455</u>	<u>2,160</u>
<b>TOTAL PETROLEUM</b>	<b>132,303</b>	<b>142,500</b>	<b>144,000</b>
<b>NATURAL GAS (Millions of Dekatherms)</b>	24.3	18.45	17.60

SOURCE: FINANCIAL OPERATIONS

\* Starting in FY2003 Bulk and PC&S are merged.

\*FY04 Includes Sales in Support of Task Force – Restore Iraq Oil

# PRODUCT COST

## PETROLEUM AND NATURAL GAS

PETROLEUM ( <i>Millions of Dollars</i> )			
<b><u>BULK CATEGORY</u></b>	<b><u>FY02</u></b>	<b><u>FY03</u></b>	<b><u>FY04</u></b>
AVGAS	\$0.2	\$0.7	\$1.2
DISTILLATES & DIESEL	613.6	901.7	919.8
GASOHOL	0.2	0.4	0.5
JP-4,JAB,JAA,JA1	351.1	529.6	231.7
JP-5	599.3	653.8	722.7
JP-8	2,147.6	2,659.4	3,584.70
LUBE OILS	4.1	3.5	3.5
MOGAS ( <i>LEADED &amp; UNLEADED</i> )	53.7	65.5	55.1
RESIDUALS	12.3	50.0	38.4
<b>BULK SUBTOTAL</b>	<b>\$3,782.1</b>	<b>\$4,864.6</b>	<b>\$5,557.60</b>
TF-RIO	N/A	N/A	573.6
INTO-PLANE CATEGORY	187.9	258.1	326.3
BUNKERS CATEGORY	76.1	297.6	332.0
LOCAL PURCHASE	96.4	144.0	159.3
<b>TOTAL PETROLEUM</b>	<b>\$4,142.5</b>	<b>\$5,564.3</b>	<b>\$6,948.8</b>
NATURAL GAS	\$102.5	\$96.6	\$98.7
MISSILE FUEL	\$44.1	\$36.1	\$32.2

# PURCHASES BY CATEGORY

## PETROLEUM AND NATURAL GAS

PETROLEUM (Thousands of Barrels)			
<b><u>BULK and PC&amp;S:</u></b>	<b><u>FY02</u></b>	<b><u>FY03</u></b>	<b><u>FY04</u></b>
AVGAS	2	5	7
DISTILLATES & DIESEL	21,563	25,245	22,039
GASOHOL	5	8	9
JP-4, JAB, JAA, & JA1	8,774	11,390	5,356
JP-5	20,578	17,918	16,055
JP-8, JTS	73,518	72,202	74,710
LUBE OILS	32	28	28
MOGAS (LEADED & UNLEADED)	1,592	1,493	682
RESIDUALS	<u>529</u>	<u>1,561</u>	<u>1,347</u>
<b>BULK SUBTOTAL</b>	126,593	129,850	119,243
TF-RIO	N/A	N/A	10,042
INTOPLANE	4,077	4,777	5,094
BUNKERS	2,334	8,023	8,370
LOCAL PURCHASE	<u>1,584</u>	<u>2,459</u>	<u>2,160</u>
<b>TOTAL PETROLEUM</b>	<b>134,588</b>	<b>145,109</b>	<b>144,825</b>
<b>NATURAL GAS (Millions of Dekatherms)</b>	24.3	18.5	17.6

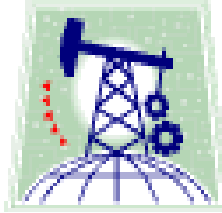
SOURCE: FINANCIAL OPERATIONS --\*Starting in FY2003 Bulk and PC&S are merged.

# WORLDWIDE BULK FUEL ENDING INVENTORY FY03

## PETROLEUM INVENTORY (\$ IN MILLIONS)

<u>PRODUCT</u>	<u>FY03</u>		<u>FY04</u>	
	<u>BARRELS</u>	<u>DOLLARS</u>	<u>BARRELS</u>	<u>DOLLARS</u>
AVGAS	0.0	\$0.1	0.0	\$0.3
DISTILLATES & DIESEL	9.9	\$335.3	10.4	\$544.7
JP-4 (JP-4, JAB, JAA, & JA1)	2.6	\$127.0	2.9	\$188.7
JP-5	14.7	\$495.6	14.7	\$821.7
JP-8	28.2	\$1,003.7	28.4	\$1,963.2
LUBE OILS	0.0	\$2.9	0.0	\$3.1
MOGAS (LEADED & UNLEADED)	0.3	\$12.7	0.2	\$13.3
RESIDUALS	0.2	\$6.3	0.4	\$11.2
ADDITIVES	<u>0.0</u>	<u>\$0.0</u>	<u>0.0</u>	<u>\$4.0</u>
<b>TOTAL ON-HAND</b>	<b>55.9</b>	<b>\$1,983.5</b>	<b>57.0</b>	<b>\$3,549.9</b>
<b>TOTAL IN TRANSIT</b>	<b>1.8</b>	<b>\$86.6</b>	<b>2.5</b>	<b>\$329.3</b>
<b>TOTAL</b>	<b>57.7</b>	<b>\$2,070.1</b>	<b>59.5</b>	<b>\$3,879.2</b>

# DIRECT SUPPLY NATURAL GAS PROGRAM SUMMARY FY 04



Dekatherms (DTH) and Dollars

	<b><u>TOTAL DTH</u></b>	<b><u>TOTAL VALUE</u></b>
<b>DWCF FUNDED</b>	<b>15.83M</b>	<b>\$ 96.44M</b>
<b>SERVICE FUNDED</b>	<b>38.18M</b>	<b>\$ 198.11M</b>
<b>TOTAL</b>	<b>54.01M</b>	<b>\$ 294.55M</b>

# INFRASTRUCTURE DATA

<b>TITLE</b>	<b>PAGE</b>
Number of Wholesale Terminals	24
Cost of Storage/Distribution Services	25
Maintenance, Repair & Environmental Costs	26
Number & Size of Domestic Refineries	27

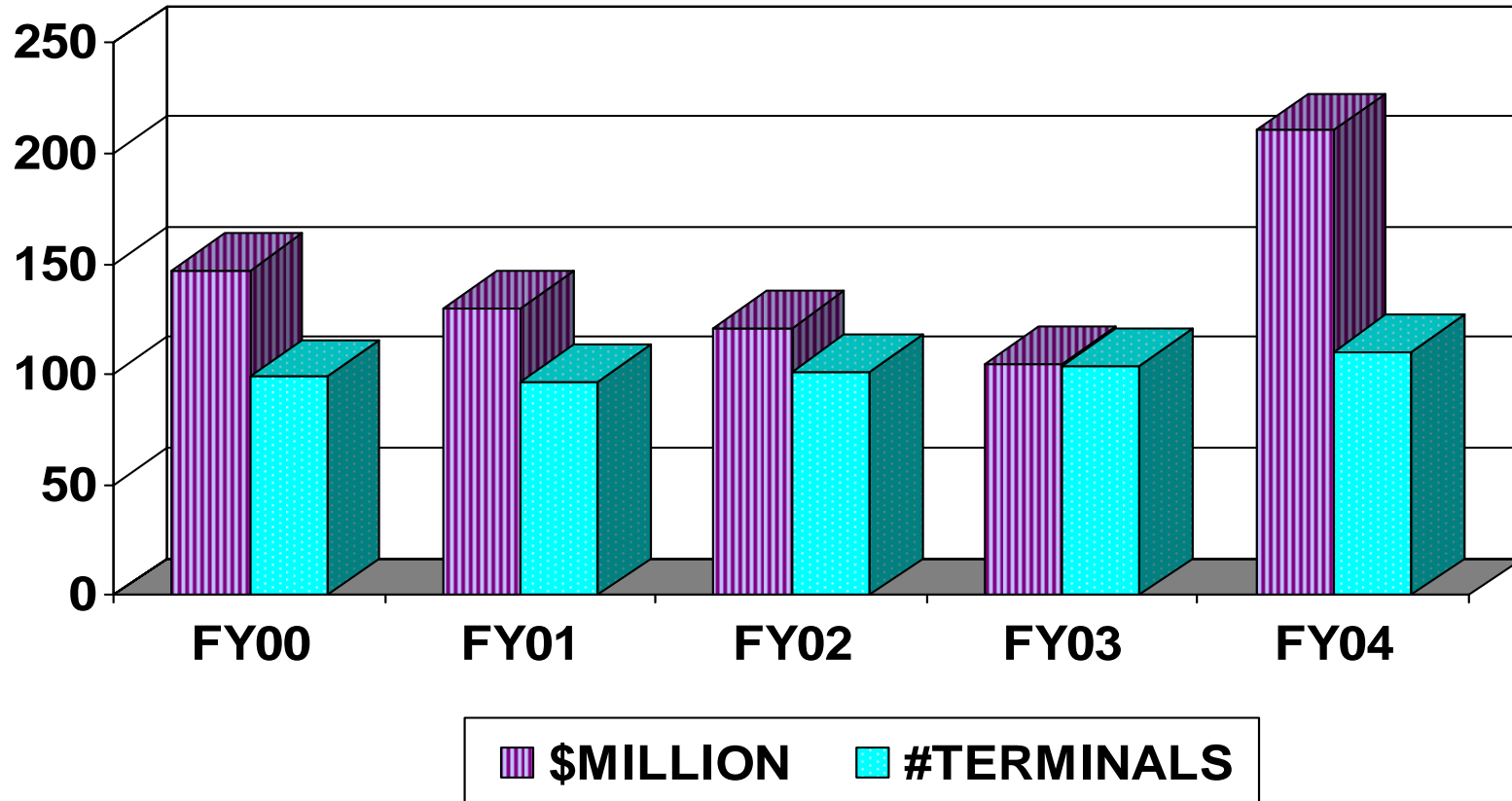
# NUMBER OF TERMINALS STORING GOVERNMENT-OWNED FUEL FY04

<u>TYPE OF OPERATION</u>	<u>ARMY</u>	<u>NAVY</u>	<u>AIR FORCE</u>	<u>DLA</u>	<u>TOTAL</u>
GOVERNMENT-OWNED GOVERNMENT-OPERATED (GOGO)	168	34	171	0	373
GOVERNMENT-OWNED CONTRACTOR-OPERATED (GOCO)	12	31	30	18*	91
CONTRACTOR-OWNED CONTRACTOR-OPERATED (COCO)	0	0	3	37	40
NORTH ATLANTIC TREATY ORGANIZATION (NATO)	0	1	0	6	7
COMMERCIAL PIPELINE	0	0	0	41	41
FLOATING STORAGE	0	61	0	0	61
FOREIGN GOVERNMENT (FG)	3	0	9	8	20
TOTAL	183	127	213	110	633

**Note: Defense Fuel Support Points as of September 30, 2004**

- \* Includes 3 Service-Managed, DLA-funded GOCOs
- GOCOs in caretaker status during environmental cleanup not included in numbers
- Increase in number of DFSPs is the result of Phase IIB capitalization

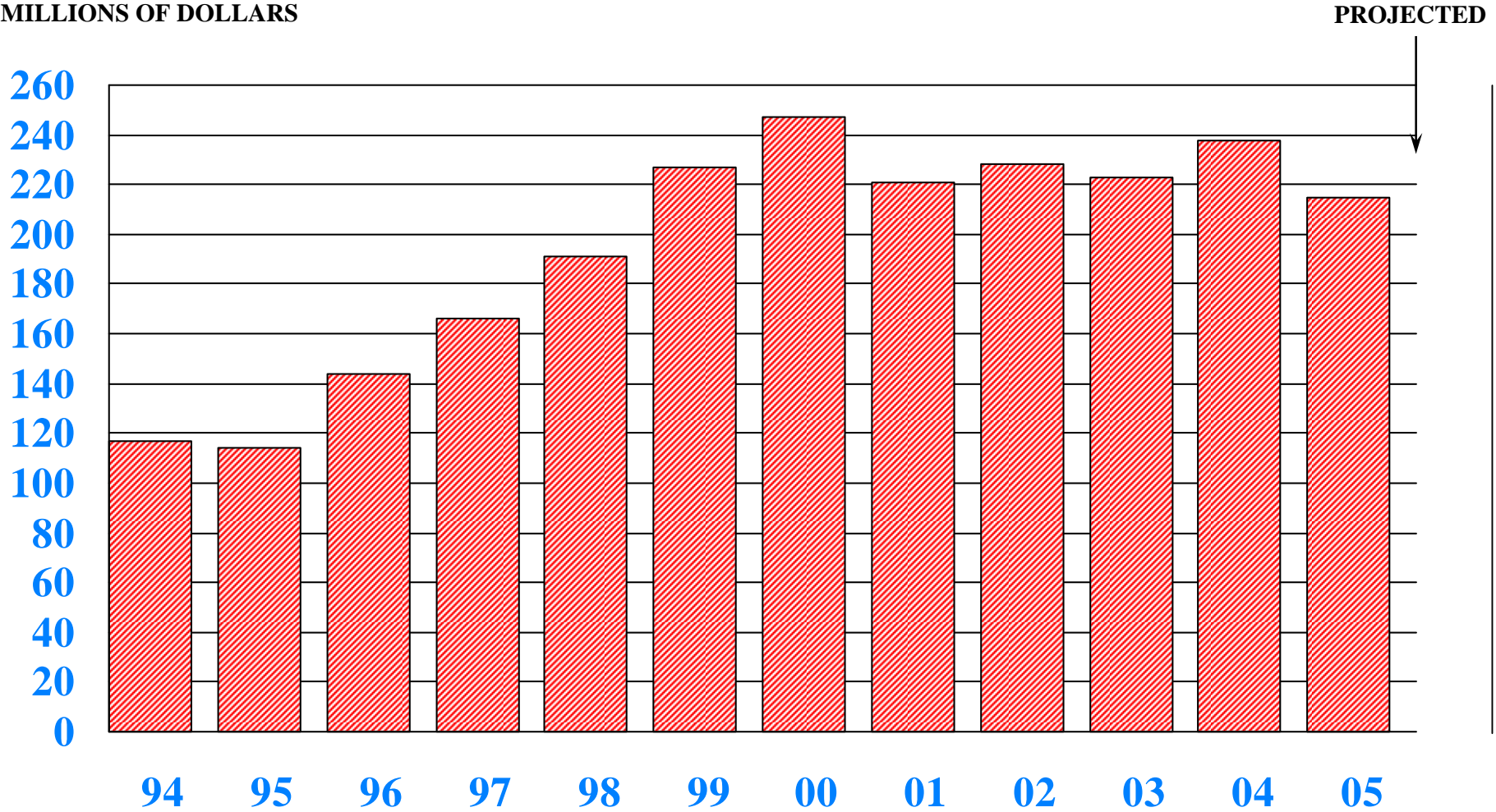
# COST OF STORAGE/DISTRIBUTION SERVICES GOGO/GOCO/COCO/FG/NATO



SOURCE: FACILITIES AND DISTRIBUTION MANAGEMENT COMMODITY BUSINESS UNIT

# MAINTENANCE, REPAIR, AND ENVIRONMENTAL COSTS

MILLIONS OF DOLLARS



SOURCE: FACILITIES AND DISTRIBUTION MANAGEMENT COMMODITY BUSINESS UNIT

# NUMBER AND SIZE OF DOMESTIC REFINERIES (BY CALENDAR YEAR)

<u>Crude Distillation Capacity</u> <u>Barrels/Day</u>	<u>1988</u>	<u>1990</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>Change</u> <u>1988 - 2004</u>
<b>Less Than 50,000</b>	117	106	57	55	54	52	49	47	47	-70
<b>50,000 - 100,000</b>	37	39	37	42	42	41	40	40	39	2
<b>100,001 - 175,000</b>	29	31	26	25	24	23	22	22	23	-6
<b>Over 175,000</b>	22	23	31	32	32	34	36	36	36	14
<b>Total</b>	<b>205</b>	<b>199</b>	<b>151</b>	<b>154</b>	<b>152</b>	<b>150</b>	<b>147</b>	<b>145</b>	<b>145</b>	<b>-60</b>

Source for 1986-1994, 1997, 1999-2004: US Department of Energy  
Source for 1996, 1998: Oil and Gas Journal

# DESC'S BUSINESS VENTURES

## TITLE

## PAGE

DESC Optimization Projects	28
Energy Savings Performance Contract Awards	29
Utility Privatization Awards/Cost Avoidance	30-31
Small & Disadvantaged Business Utilization	32

## DESC OPTIMIZATION PROJECTS (\$ IN MILLIONS)

LOCATION	SERVICE	TYPE	CONTRACT DATE	SAVINGS	NOTE
Ft Bragg, NC	USA	COCO	Apr-98	7.5	*
Schofield Barracks, HI	USA	COCO	Jun-98	6.7	*
Ft Jackson, SC	USA	COCO	Jun-99	1.5	*
29 Palms, CA	USMC	COCO	Jul-99	5.2	*
Ft Hood, TX	USA	GOCO	Dec-00	4.5	**
Hunter AAF, GA	USA	GOCO	Dec-00	0.7	**
Ft Stewart, GA	USA	COCO	Jun-01	3.5	*
MC Bases, Okinawa	USMC	GOCO	Apr-02	2.0	**
Ft Gordon, GA	USA	COCO	Oct-02	0.5	**
Moffett, CA	ANG/NASA	COCO	May-03	5.0	*
Ft Lewis, WA	USA	COCO	Sep-03	6.0	***
Simmons/Camp Mackall, NC	USA	GOCO	Sep-03	3.5	*
Ft. Carson, CO	USA	COCO	Mar-04	8.7	*
<b>TOTAL</b>				<b>\$55.5</b>	

\* Savings are 20 year NPV (\$M)

\*\* Savings are 5 year NPV (\$M)

\*\*\* Savings are 4 year NPV (\$M)

SOURCE: FACILITIES AND DISTRIBUTION MANAGEMENT COMODITY BUSINESS UNIT

# ENERGY SAVINGS PERFORMANCE CONTRACT AWARDS

LOCATION	ENERGY CONSERVATION MEASURES	ENERGY SERVICE COMPANY (ESCO)	DATE	TOTAL AWARD AMOUNTS	CONTRACT TERM
Fort Hood, TX	UMCS Improvements Vending Machine Controls Cooling Tower Improvements, Lighting Retrofit	Johnson Controls Government Systems, LLC	Sep 03	\$13.6 M	23 years
Fort Monmouth, NJ	Lighting Upgrade HVAC Renovation UESC Implementation GHP Cogeneration System Site Preparation/Feasibility	Ameresco Solutions, Inc.	Sep 03	\$51.5M	24 years
Carlisle Barracks, PA	Direct Digital Controls HVAC	Energy Performance Services, Inc.	Jul 02	\$16.3M	17 years
Fort Hamilton, NY	Lighting Retrofits Energy Management Control System Water Savings	ConEdison Solutions	Nov 01	\$7.3M	15 years
Fort Jackson, SC	Lighting Upgrades GSHP Retrofits Chiller Plant Upgrades Demand Limiting System	Ameresco Solutions	Sep 01	\$43.8M	22 years
Aberdeen Proving Ground, MD	GSHP	Constellation Energy Source	Sep 01	\$5.6M	20 years
Northeast Regional Office (NERO) formerly MDW	15 ECMs	Pepco Gov't Services, LLC	Jul 99	\$216.0M	18 years

# UTILITY PRIVATIZATION CONTRACT AWARDS/COST AVOIDANCE

LOCATION	SYSTEM	CONTRACTOR	DATE	TOTAL AWARD AMOUNTS	COST AVOIDANCE Annual \$ (Estimated)	% SAVINGS (Annual % on NPV Basis) (Estimated)
Fort Knox, Kentucky	Wastewater/ Stormwater	Hardin County Water District No.1	Sep 04	\$150.0M combined for 50 Years	\$2,170,364	33.8%
Fort Monroe Fort Story Fort Eustis, Virginia	Electric	Dominion Virginia Power Corporation	Jun 04	\$73.1M 50 Years	\$582,000	15.0%
Fort Lee, Virginia	Electric	Dominion Virginia Power Corporation	Jun 04	\$67.5.0M 50 Years	\$96,000	15.0%
Fort Bliss, Texas	Water/ Wastewater	American States Utility Services	Jun 04	\$197.5M 50 Years	\$13,936,000	7.5%
Bolling AFB, Washington, DC	Water/ Wastewater	Washington Suburban Sanitary District	Nov 03	\$12.1M 50 Years	\$119,040	31.3%
Dobbins ARB, Georgia	Electric	Georgia Power Corporation	Oct 03	\$7.9M 50 Years	\$179,400	32.0%
Randolph AFB, Texas	Wastewater	San Antonio River Authority	Sep 03	\$11.9M 50 Years	\$30,180	11.2%
Sunny Point, North Carolina	Electric	Brunswick Electric Membership Cooperation	Sep 03	\$42.0M 50 Years	\$512,548	4.3%
Fort Leavenworth, Kansas	Water/ Wastewater	American Water Services (AWS)	Sep 03	\$47.0M 50 Years	\$349,361	13.5%

## UTILITY PRIVATIZATION CONTRACT AWARDS/COST AVOIDANCE (Cont.)

LOCATION	SYSTEM	CONTRACTOR	DATE	TOTAL AWARD AMOUNTS	COST AVOIDANCE Annual \$ (Estimated)	% SAVINGS (Annual % on NPV Basis) (Estimated)
Fort Rucker, Alabama	Water/ Wastewater	American Water Services (AWS)	Sep 03	\$54.0M 50 years	\$900,761	13.3%
Fort Rucker, Alabama	Electric	Alabama Power Corporation	May 03	\$88.0M 20 years up to 50	\$335,000	13.3%
Fort Rucker, Alabama	Natural Gas	Southeast Alabama Gas District	Apr 03	\$8.6M 50 years	\$329,000	52.8%
Fort Bliss, Texas	Natural Gas	Texas Gas Service	Mar 03	\$9.5M 10 years up to 50	\$34,300	12.0%
Fort McNair, DC	Natural Gas – GSA	Washington Gas & Light Company	Feb 03	\$403.0K 10 years	\$167,386	89.7%
Fort Bliss, Texas	Electric	Rio Grande Electric Cooperative	Oct 02	\$98.0M 50 years	\$1,360,000	40.4%
Picatinny Arsenal, New Jersey	Electric	Sussex Rural Electric Cooperative	Sep 02	\$43M 50 years	\$313,000	26.4%
Minn-St Paul	Gas	Minneapolis Gas Company	Sep 01	\$92K 6 years	\$13,834	47.5%
Bolling AFB DC	Gas	Washington Gas & Light Company	Jul 01	\$428K 6 years	\$16,005	15.6%
Fort Detrick, Maryland	Gas	Washington Gas & Light Company	Dec 00	\$451K 6 years	\$49,866	35.6%

# SMALL BUSINESS ACHIEVEMENT OFFICE

( IN THOUSANDS )

	FISCAL YEAR 02			FISCAL YEAR 03			FISCAL YEAR 04		
	TARGETS	PERFOR.	DOLLARS	TARGETS	PERFOR.	DOLLARS	TARGETS	PERFOR.	DOLLARS
<b>Small Business Preference Programs.</b>									
<b>Small Business Awards</b>	27.77%	28.10%	\$ 990,682	23.00%	21.20%	\$ 720,030	23.00%	29.90%	\$ 1,188,743
<b>Small Disadvantaged Business Awards</b>	5.07%	5.00%	\$ 174,131	5%	4.20%	\$ 142,154	5%	3.60%	\$ 143,575
<b>Direct Competitive</b>			\$ 163,715			\$ 136,617			\$ 144,060
<b>Section 8(a)</b>	0.50%	0.30%	\$ 10,487	0.50%	0.20%	\$ 5,537	0.50%	0.00%	\$ (485)
<b>Women-Owned Small Business Awards</b>	1.00%	3.80%	\$ 135,467	1.30%	0.50%	\$ 17,703	1.40%	1.00%	\$ 41,397
<b>Hubzone Small Business Awards</b>	2.50%	2.40%	\$ 85,116	2.10%	1.80%	\$ 60,649	2.50%	1.40%	\$ 57,411
<b>Svc-Disabled Vet-Owned Small Business Awards</b>	0.20%	0.02%	\$ 662	3%	0.00%	\$ 25	3%	0.00%	\$ 275
<b>Total Domestic Awards</b>			<b>\$ 3,513,282</b>			<b>\$ 3,396,521</b>			<b>\$ 3,971,769</b>

Note: All percentages based on total domestic dollars awarded

# FUEL TRANSPORTATION

<b>TITLE</b>	<b>PAGE</b>
Number of Shipments	33
Worldwide Transportation By Mode	34
Worldwide Bulk Fuels Transportation Expenses	35
Demurrage Collected	36



# NUMBER OF SHIPMENTS FY04



<u>DESC</u>	<u>TRUCK*</u>	<u>RAIL</u>	<u>PIPELINE**</u>	<u>BARGE*</u>	<u>TOTAL</u>
AMERICAS-EAST	25,170	715	2,920	1,824	30,629
AMERICAS-WEST	<u>6,195</u>	<u>0</u>	<u>281</u>	<u>136</u>	<u>6,612</u>
<b>SUBTOTAL CONUS***</b>	31,365	715	3,201	1,960	37,241
<b>TOTAL OCONUS</b>	16,660	6,336	0	21	23,017
<b>TOTAL SHIPMENTS</b>	<b>48,025</b>	<b>7,051</b>	<b>3,201</b>	<b>1,981</b>	<b>60,258</b>
* Includes truck and barge contracts					
** Alaska only. Other shipments incorporated into International Agreements (Code F)					
*** Data extrapolated as POWERTRACK system used for payment does not currently provide this information via query					

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

# WORLDWIDE TRANSPORTATION BY MODE

<b>FY04 WORLDWIDE TRANSPORTATION</b>							
(MILLIONS OF BARRELS)							
		<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>
BARGE*		11.1	12.8	17.9	27.1	17.0	10.2
PIPELINE		51.1	45.6	56.2	72.9	93.5	80
RAIL		4.2	4.2	4.3	7.3	2.7	6.8
TRUCK*		<u>19.5</u>	<u>12.7</u>	<u>16.6</u>	<u>24.7</u>	<u>17.2</u>	<u>17.5</u>
<b>SUB TOTAL</b>		<b>85.9</b>	<b>75.3</b>	<b>95.0</b>	<b>132.0</b>	<b>113.4</b>	<b>114.5</b>
OCEAN TANKER		<u>48.1</u>	<u>39.7</u>	<u>45.0</u>	<u>51</u>	<u>52.2</u>	<u>47.6</u>
<b>TOTAL</b>		<b>134.0</b>	<b>115.0</b>	<b>140.0</b>	<b>183.0</b>	<b>165.6</b>	<b>162.1</b>
* Includes truck and barge contracts							

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

# TRANSPORTATION EXPENSE

## (\$ IN MILLIONS)

<b><u>WORLDWIDE PETROLEUM FUEL:</u></b>	<b><u>FY 02</u></b>	<b><u>FY 03</u></b>	<b><u>FY 04</u></b>
AVGAS	0	0	0
DISTILLATES & DIESEL	50.4	66.8	48.2
JP-4, JAB, JAA, & JA1	22.6	35.8	12.3
JP-5	57.7	54.7	42.4
JP-8, JTS	203.9	219.4	197.9
LUBE OILS	0.1	0.1	0.1
MOGAS (LEADED & UNLEADED)	3.9	3.3	2.7
RESIDUALS	<u>0.7</u>	<u>1.4</u>	<u>2.1</u>
<b>TOTAL</b>	<b>\$339.3</b>	<b>\$381.5</b>	<b>\$305.7</b>
 <b>MISSILE FUEL TRANSPORTATION</b>	 <b>\$2.6</b>	 <b>2.1</b>	 <b>\$0.9</b>

SOURCE: FINANCIAL OPERATIONS - FINANCIAL RECORDS

# DEMURRAGE COLLECTED

(\$ IN MILLIONS)

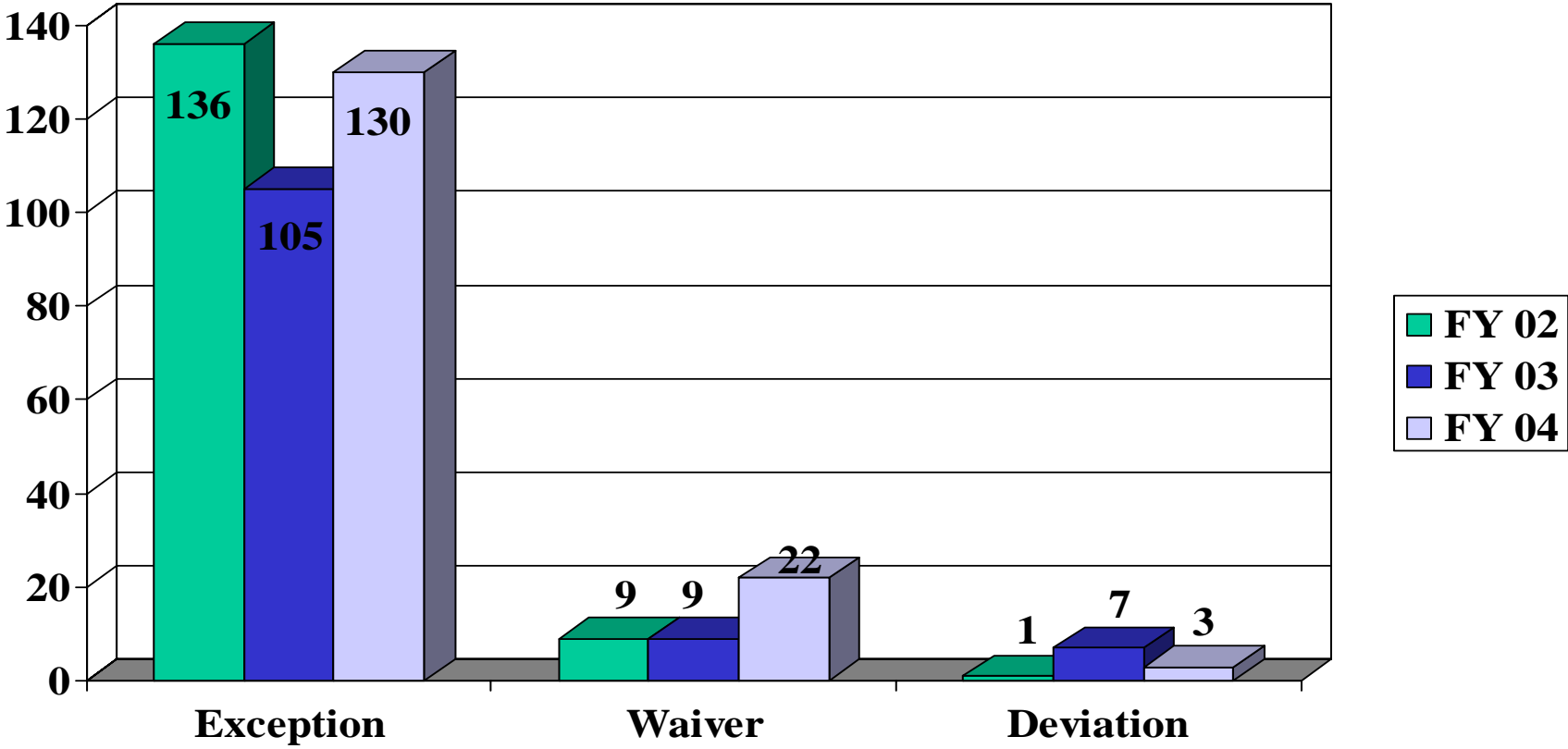
<u>FISCAL YEAR</u>		<u>TOTAL</u>	<u>FISCAL YEAR</u>		<u>TOTAL</u>
2004		\$1.0	1998		\$4.2
2003		\$1.08	1997		\$2.0
2002		\$2.4	1996		\$1.2
2001		\$1.6	1995		\$1.8
2000		\$3.1	1994		\$0.6
1999		\$1.3	1993		\$1.3

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

# PRODUCT TECHNICAL REVIEWS

<b>TITLE</b>	<b>PAGE</b>
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Direct Delivery Technical Reviews	41
Direct Delivery Top Five Technical Reviews	42

**PRODUCT TECHNOLOGY AND STANDARDIZATION  
TECHNICAL REVIEWS FOR BULK PROGRAMS  
(FY 02 TO FY 04)**



SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION  
TECHNICAL REVIEWS FOR DIRECT DELIVERY PROGRAMS  
FY 04**

<b>BULK PROGRAM</b>	<b>EXCEPTION</b>	<b>WAIVER</b>	<b>DEVIATION</b>	<b>OTHER</b>	<b>TOTAL</b>
<b>Atlantic/Europe/Mediterranean <sup>1/</sup></b>	18	1	1	5	25
<b>Deep Freeze (Antarctica)</b>	0	0	0	1	1
<b>Foreign Military Sales</b>	9	0	0	2	11
<b>Inland/East/Gulf Coast <sup>2/</sup></b>	8	5	0	2	15
<b>Lubes/Additives</b>	15	1	0	3	19
<b>Rocky Mountain/West <sup>3/</sup></b>	15	6	1	12	34
<b>Western Pacific <sup>4/</sup></b>	19	2	0	3	24
<b>Afghanistan/Pakistan</b>	5	1	0	1	7
<b>Restore Iraqi Oil</b>	40	4	1	0	45
<b>Operation Enduring Freedom Middle East</b>	0	0	0	1	1
	1	2	0	0	3
	<b>130</b>	<b>22</b>	<b>3</b>	<b>30</b>	<b>185</b>

<sup>1/</sup> **Atlantic/Europe/Mediterranean:** Spain, Azores, Central Europe, United Kingdom, Norway, Italy, Greece, Turkey, Ascension Island, and Germany

<sup>2/</sup> **Inland/East/Gulf Coast:** Alabama, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Guantanamo Bay, Bermuda, Canal Zone, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas (except El Paso), Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

<sup>3/</sup> **Rocky Mountain/West:** Alaska, Arizona, California, Hawaii, Idaho, Johnston Island, Kwajalein, Montana, Nevada, Oregon, New Mexico, Utah, Washington, Wake Island, and El Paso, TX.

<sup>4/</sup> **Western Pacific:** Guam, Japan, Korea, Okinawa, UAE, and Saudi Arabia

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

**FY 04**

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION  
TOP FIVE TECHNICAL REVIEWS SUBMITTED BY  
FUEL SUPPLIERS UNDER THE BULK PROGRAM<sup>1</sup>**

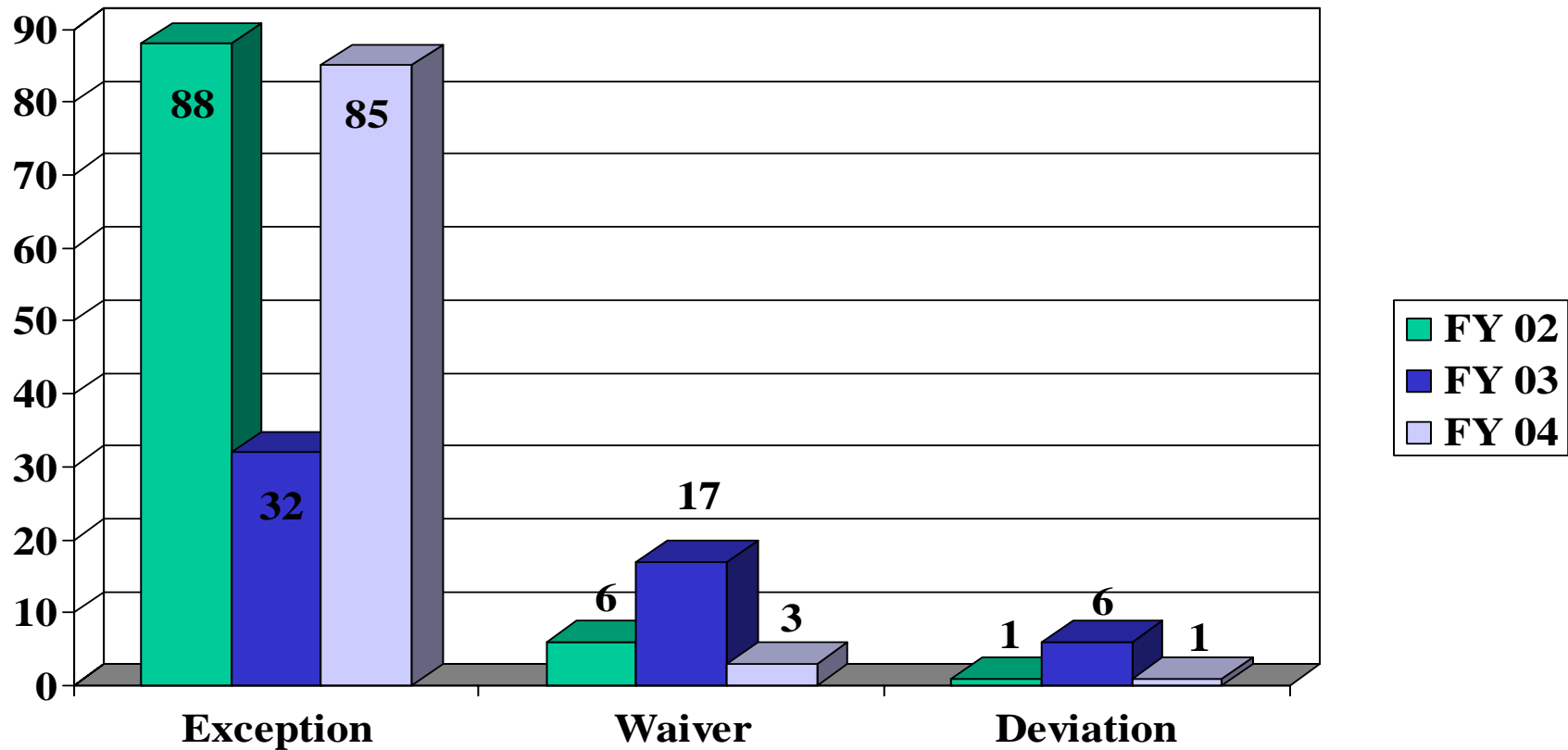
<b><u>Technical Reviews</u></b>	<b><u>Percent of Total Reviews</u></b>
<b>Specification Review</b>	23.2
<b>Alternate Test Methods<sup>2</sup></b>	15.7
<b>MSEP</b>	6.5
<b>Conductivity</b>	4.9
<b>Hydrogen</b>	3.8
<b>TOTAL</b>	<b>54.1</b>

1/ The above chart is all inclusive of exceptions, waivers and deviations and provides information on the type of request submitted by fuel suppliers.

2/ Majority of the request for Alternate Test Method were under the Lubes Program.

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

# PRODUCT TECHNOLOGY AND STANDARDIZATION TECHNICAL REVIEWS FOR DIRECT DELIVERY PROGRAMS (FY 02 TO FY 04)



SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION  
TECHNICAL REVIEWS FOR DIRECT DELIVERY  
FY 04**

<b>DIRECT DELIVERY PROGRAM</b>	<b>EXCEPTION</b>	<b>WAIVER</b>	<b>DEVIATION</b>	<b>OTHER</b>	<b>TOTAL</b>
<b>Azores PC&amp;S</b>	0	0	0	1	1
<b>Bosnia PC&amp;S</b>	15	2	0	0	17
<b>Bunkers (Domestic)</b>	0	0	1	0	1
<b>Bunkers (Overseas)</b>	10	0	0	0	10
<b>Domestic PC&amp;S</b>	3	0	0	0	3
<b>Guatemala PC&amp;S</b>	2	0	0	0	2
<b>Sao Tome PC&amp;S</b>	5	0	0	1	6
<b>Turkey/Iraq PC&amp;S</b>	26	1	0	1	28
<b>United Kingdom PC&amp;S</b>	24	0	0	0	24
	85	3	1	3	92

**Exception:** A request made by an offeror to deviate from the proposed solicitation requirements before contract award. (Example: The solicitation requires JP8 and the offeror states that he can only offer or guarantee Jet A1)

**Waiver:** A request made by a contractor to deviate from contract requirements after production of the product (one-time request only or for a set period). (Example: The contractor tests the finished product and finds the distillation 10% recovered temperature does not meet specification requirement. The contractor requests DESC to accept the product as is.)

**Deviation:** A request made by contractor to deviate from contract requirements after contract award but prior to production of the product. (Example: A contractor receives a new crude oil and believes he shall deviate from a particular specification requirement using his normal production process. The contractor requests permission to deviate in anticipation of not meeting the specification.)

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

**FY 04**  
**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION**  
**TOP FIVE TECHNICAL REVIEWS SUBMITTED BY FUEL SUPPLIERS**  
**UNDER DIRECT DELIVERY<sup>1</sup>**

<u>Technical Reviews<sup>2</sup></u>	<u>Percent of Total Reviews</u>
<b>Specification Review</b>	48.9
<b>Cloud point</b>	6.5
<b>Cold Filter Plugging Point (CFPP)</b>	4.3
<b>Acid Number</b>	4.3
<b>Water &amp; Sediment</b>	<u>4.3</u>
<b>TOTAL</b>	<b>68.3</b>

1/ The above chart is all inclusive of exceptions, waivers and deviations and provides information on the type of request submitted by fuel suppliers.

2/ The majority of requests were submitted under the Turkey/Iraq PC&S Program.

SOURCE: BULK FUELS COMMODITY BUSINESS UNIT

# **INTERNATIONAL AGREEMENTS & FOREIGN MILITARY SALES**

## **TITLE**

## **PAGE**

Facility/Service Agreements

43

Product Agreements

44

Foreign Military Sales

45

# FACILITY/SERVICE AGREEMENTS FY04 (\$ IN MILLIONS)



<u>REGION</u>	<u># AGREEMENTS</u>	<u>ANNUAL COST (Est)</u>
DESC-EUROPE	10	\$ 52.0
DESC-MIDDLE EAST	0	\$ 0
DESC-PACIFIC	3	\$ 11.1
DESC-AMERICAS	0	\$ 0
<b>TOTAL</b>	<b>13</b>	<b>\$ 63.1</b>

SOURCE: FACILITIES AND DISTRIBUTION MANAGEMENT COMMODITY BUSINESS UNIT

# PRODUCT AGREEMENTS

## FY04 (\$ IN MILLIONS)



<u>REGION</u>	<u># AGREEMENTS</u>	<u>ANNUAL COST (Estimated)</u>
DESC-EUROPE	0	\$ 0
DESC-MIDDLE EAST	3	\$ 201.4
DESC-PACIFIC	1	\$ 24.9
*FEA'S/RIK'S	20	\$ 46.4**
		**Net Sales to Foreign Gov = 71.9M Recvd from Foreign Gov =25.5M
<b>TOTAL</b>	<b>24</b>	<b>\$ 272.7</b>

\* foreign exchange agreements/replacement in kind

# FOREIGN MILITARY SALES (FMS)/ MISCELLANEOUS

- FMS

  - Bosnia \$22.8M

- Port Tampa Dock Services \$1.9M

- Killingholme Fuel Depot – BFC

  - Transportation & Storage \$2.5M

- Kuwait Trucking Services \$11.5M

- Yumurtalik, Turkey Mooring Services  
\$.12M

# **DESC's CONTRACT STATISTICS**

## **TITLE PAGE**

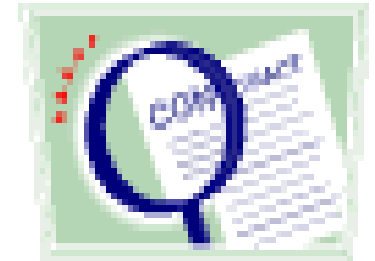
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# PETROLEUM CONTRACT INTRODUCTION

## FY04

### NATURE OF DESC PETROLEUM PRODUCT CONTRACTS

- ✓ **Contracts are requirements-type contracts.**
- ✓ **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.**
- ✓ **All indicators are carefully selected and tested by the DESC Market Research and Analysis Office.**
- ✓ **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.**





# CONTRACT AWARD DATA



	<u>DOLLARS</u> <u>MILLIONS</u>	<u>AWARD</u> <u>ACTIONS</u>
<u>BULK FUEL DIVISION</u>		151
DOMESTIC	3,018.7	
OVERSEAS	1,674.4	
BULK LUBES	4.0	
BULK FOREIGN MILITARY SALES	109.5	
CRUDE OIL	15.7	
GROUND FUELS DIVISION		1,280
DOMESTIC	252.8	
OVERSEAS	87.2	
BUNKERS	179.9	
SPECIALTY FUELS DIVISION		213
INTO-PLANE	324.9	
FACILITIES PROCUREMENT DIVISION		332
STORAGE	108.7	
ALONGSIDE AIRCRAFT REFUELING	29.3	
ENVIRONMENTAL	41.6	
TESTING/SERVICES/MISCELLANEOUS/FMS	4.5	
INSTALLATION ENERGY		67
NATURAL GAS	89.5	
COAL	19.8	
ELECTRICITY	115.3	
MISSILE FUELS	51.4	470
ENERGY ENTERPRISES		17
PRIVATIZATION	7.0	20
SPECIAL PROJECTS	3.9	3
TASK FORCE RESTORE IRAQI OIL (civilian population)	728.4	
<b>TOTAL</b>	<b>6,886.2</b>	<b>2,530</b>

SOURCE: PROCUREMENT PLANNING AND SUPPORT DIVISION, PROCUREMENT OVERSIGHT BRANCH

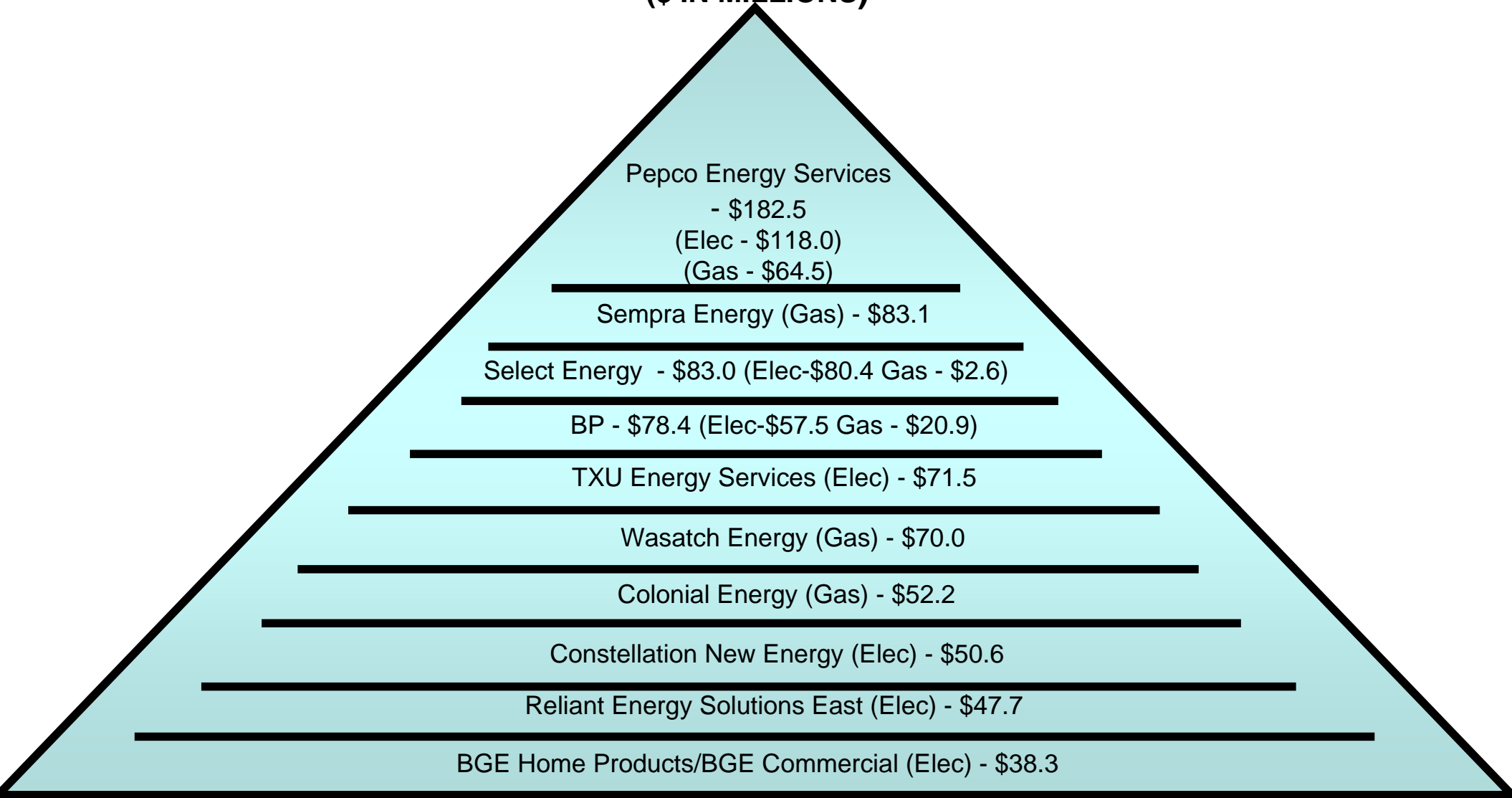


**FY04**  
**TOP TEN DESC PETROLEUM CONTRACTORS**  
**(\$ IN MILLIONS)**

	<b><u>AWARD AMOUNT</u></b>	<b><u>PERCENT OF TOTAL CONTRACT \$</u></b>
SHELL	\$ 1,067.6	17.2
BP	\$ 601.9	10.0
VALERO MARKETING & SUPPLY CO	\$ 333.7	5.5
ABU DHABI NATIONAL OIL CO.	\$ 276.5	4.6
EXXON MOBILE CORP	\$ 274.8	4.5
SSANGYONG	\$ 233.3	3.9
KUWAIT PETROLEUM CORPORATION	\$ 211.5	3.5
MOTOR OIL (HELLAS)	\$ 197.4	3.3
THE BAHRAIN PETROLEUM COMPANY	\$ 196.5	3.2
REFINERY ASSOCIATES OF TEXAS	\$ 121.3	2.0
<b>TOTAL</b>	<b>\$ 3,514.5</b>	<b>57.7%</b>

# FY 04 TOP TEN INSTALLATION ENERGY CONTRACTORS\*

(\$ IN MILLIONS)



\* Represents FY04 annual and multi-year contracts

# DEFENSE ENERGY SUPPORT CENTER'S TOP TEN CUSTOMERS FOR FY04

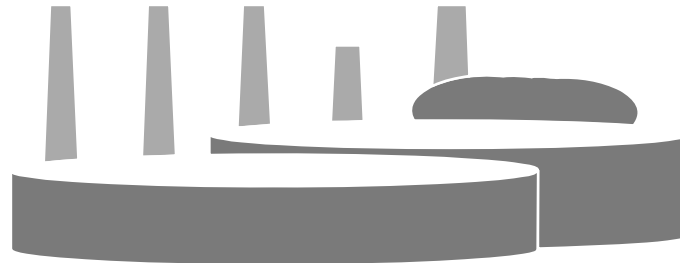
(\$ and Gallons in MILLIONS)

INSTALLATIONS	QUANTITY (gal.)	EXTENDED COST	
TRAVIS AFB (CA)	233	\$203	
CHARLESTON AFB (SC)	192	\$173	
MCCHORD AFB (WA)	190	\$173	
GRAND FORKS AFB (ND)	123	\$127	
FAIRCHILD AFB (WA)	118	\$107	
MCCONNELL AFB (KS)	116	\$106	
MCGUIRE AFB (NJ)	155	\$140	
HQ ARCENT	98	\$89	
DOVER AFB (DE)	94	\$77	
BARKSDALE AFB (LA)	69	\$63	

SOURCE: FINANCIAL OPERATIONS – FINANCIAL RECORDS

# DESC MANAGED STORAGE CONTRACTS

FY04



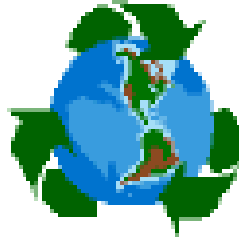
	OCONUS		CONUS	
	NUMBER OF CONTRACTS	BARRELS (Storage Capacity) (in millions)	NUMBER OF CONTRACTS	BARRELS (Storage Capacity) (in millions)
COCO	13	8.7	16	4.7
GOCO	6	1.5	7	5.0

NOTE: FIGURES REPRESENT ACTUAL CONTRACTS (NOT TERMINALS)

SOURCE: FACILITIES AND DISTRIBUTION MANAGEMENT COMMODITY BUSINESS UNIT

# ENVIRONMENTAL CONTRACTS

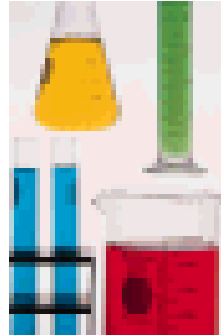
FY04



- 23 Assessment/Remediation Contracts at DLA-Managed GOCOs
  - 10 Active/13 Inactive
- 6 Environmental Service Contracts
  - Preparation of Environmental Plans
  - Environmental Audits
  - Occupational Safety and Health Services
  - Pollution Prevention Studies and Assessments
  - Oil Spill Response Training
  - Compliance Monitoring
- 1 Blanket Purchase Agreement

# TESTING CONTRACTS

FY04



- 4 Domestic contracts for 32 locations
- 5 Overseas contracts for 22 locations

# ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)

## Utilizing Memorandum of Understanding Partnering with DOE to Increase Customer Support

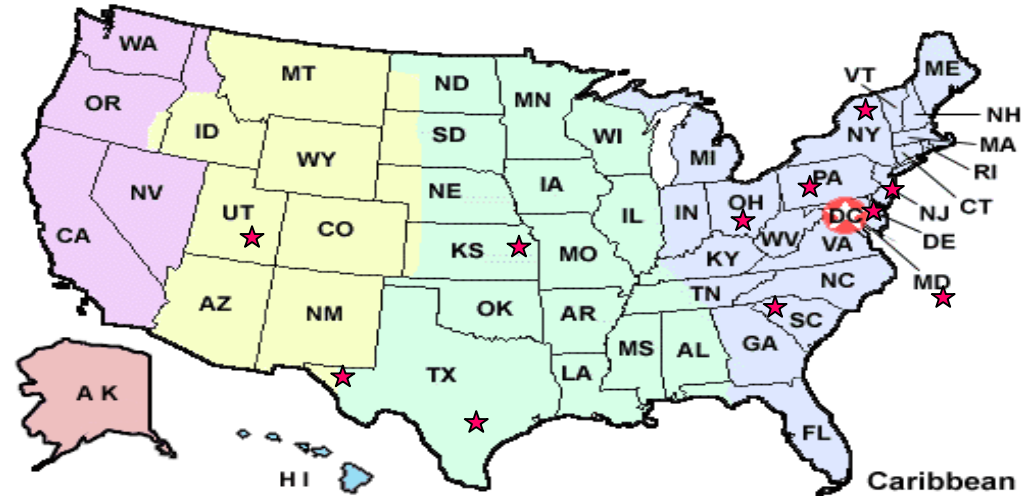
### AWARDS - FY 2003

#### Fort Hood, Texas – Sep 29, 2003

- UMCS Improvements
- Vending Machine Controls
- Cooling Towers VFDs
- Lighting Retrofits

#### Fort Monmouth, New Jersey – Sep 30, 2003

- Geothermal Heat Pumps
- Heating and Air Conditioning Renovation
- UESC Implementation
- Lighting Upgrades
- Cogeneration System Site Preparation/Feasibility



### CURRENT INTER-SERVICE EFFORTS

Fort Leavenworth, Kansas  
Fort Bliss, Texas  
Army Test Evaluation Command, Utah  
Air Force Materiel Command, Ohio

The terms “energy savings contract” and “energy savings performance contract” mean a contract which provides for the performance of services for the design, acquisition, installation, testing, operation, and, where appropriate, maintenance and repair of identified energy conservation measure or series of measures at one or more locations.  
[42 USC 8287c(3)]

SOURCE: ENERGY ENTERPRISE COMMODITY BUSINESS UNIT

**NOTE: FY 04 projects were placed on hold since legislative authority had expired. New legislative authority was enacted as of Nov 04 and energy savings projects are now proceeding.**

# UTILITY PRIVATIZATION SUPPORT

## Ongoing Actions

In December 1997, the Deputy Secretary of Defense directed the Military Departments to develop plans for privatizing all of their utility systems (electric, natural gas, water and waste water), except those needed for unique security reasons or where privatization is not economical. Since that time and by request from the Military Services, DESC has established a customer-centric team, segmented by Services, to support the Military Departments in their efforts to privatize on-base infrastructure and acquire safe, reliable utility services along the privatized systems.

### Working 522 DoD Systems



**Army 164**



**Air Force 331**



**Navy 15**



**DLA 12**

Directed in DRID #49, Privatizing Utility Systems (December 23, 1998) and superceded by OSD Guidance (October 9, 2002)

### Contracts Awarded

**FY 2004** – (Total Value - \$488.1M)

Fort Knox, KY – Wastewater/Stormwater

Fort Monroe, VA - Electric

Fort Story, VA – Electric

Fort Eustis, VA – Electric

Fort Lee, VA – Electric

Fort Bliss, TX – Water/Wastewater

Fort McNair, DC – Gas (GSA)

**FY 2003** – (Total Value - \$359.4M)

Randolph AFB, TX - Wastewater

Sunny Point, NC - Electric

Fort Leavenworth, KS – Water/Wastewater

Fort Rucker, AL – Water/Wastewater/Electric/Gas

Fort Bliss – Gas/Electric

Fort McNair, DC – Gas (GSA)

**FY 2002** – (Total Value - \$43M)

Picatiny Arsenal, NJ - Electric

**FY 2001** – (Total Value - \$971K)

Fort Detrick – Gas (GSA)

Bolling AFB – Gas (GSA)

Minneapolis-St Paul – Gas (GSA)

# Installation Energy 2004 Contract Awards

- **ELECTRICITY:**

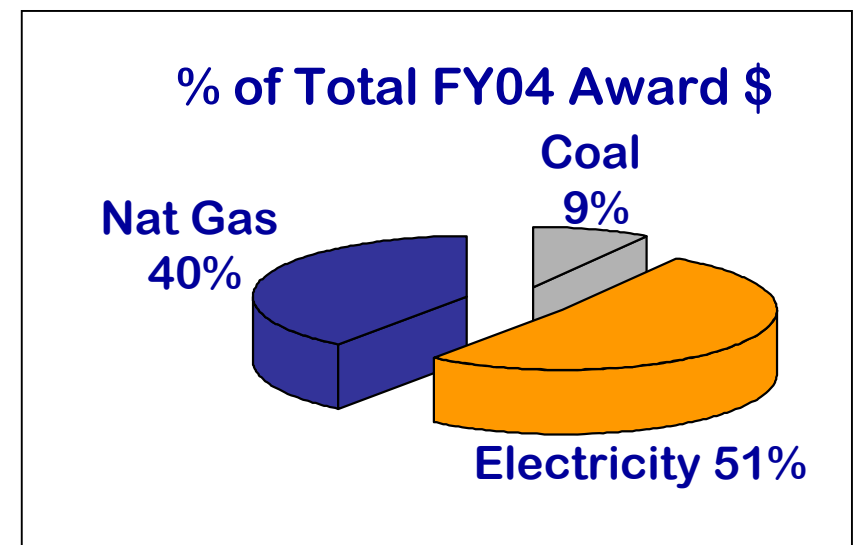
- Awarded 2,260,464,611 kWh of electricity valued at \$115M for customers
- Awarded Renewable Energy Credit (Green Tag) contracts for 69,237,599 kWh valued at \$316K

- **NATURAL GAS:**

- Awarded 22,189,463 dths of natural gas valued at \$89.5M for customers

- **COAL:**

- Awarded 270,500 tons of coal
- Estimated Contract \$ value: \$19.8M



# AIRCRAFT INTO-PLANE CONTRACTS FY04

## DOMESTIC (CONUS)

- 335 LOCATIONS SUPPORTED
- \$406 MILLION\*
- 5.8 MILLION BARRELS

## OVERSEAS (OCONUS)

- 184 LOCATIONS (101 Countries)
- \$229.2 MILLION
- 5.1 MILLION BARRELS



## TOTAL SALES

- \$339 MILLION CONTRACT
- \$93 MILLION NON-CONTRACT

REPRESENTS ACTIVE CONTRACT DATA AS OF 30 SEP 2004

SOURCE: DIRECT DELIVERY FUELS COMMODITY BUSINESS UNIT

# CONTRACTS SALES FOR SHIPS' BUNKERS PROGRAM FY04



## DOMESTIC SALES

- 96 PORTS UNDER CONTRACT
- \$319 MILLION SALES
- 2.07 MILLION BARRELS

## OVERSEAS SALES

- 108 PORTS in 74 COUNTRIES
- \$158 MILLION SALES
- 4.2 MILLION BARRELS

REPRESENTS ACTIVE CONTRACT DATA AS OF 30 SEPT 04

SOURCE: DIRECT DELIVERY FUELS COMMODITY BUSINESS UNIT

**AUTOMATED FUEL DISPENSING FACILITIES  
CONTRACT COSTS  
FY04 (\$ IN MILLIONS)**

**FORT BRAGG, NC - JP-8 & MOGAS-INITIAL 5-YR PERIOD: \$4.2**

**SCHOFIELD BARRACKS, HI - JP-8, DIESEL & MOGAS-INITIAL 5-YR PERIOD: \$4.8**

**29 PALMS, CA - JP-8, DIESEL & MOGAS-INITIAL 5-YR PERIOD: \$5.6**

**FORT JACKSON, SC - DIESEL & MOGAS-INITIAL 5-YR PERIOD: \$2.1**

**FORT STEWART, GA - JP-8, DIESEL & MOGAS - INITIAL 5-YR PERIOD: \$5.6**

**FORT GORDON, GA - DIESEL & MOGAS – INITIAL 5-YR PERIOD: \$2.5**

**FORT CARSON, CO – MOGAS, DIESEL, AND JP-8 – INITIAL 5-YR PERIOD: \$6.1**

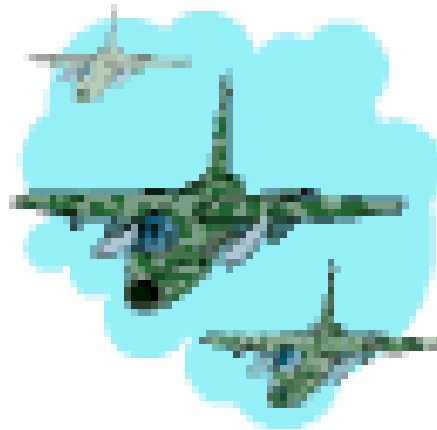
**SIMMONS/MACKALL (FT. BRAGG), NC – JP-8 – INITIAL 5-YR PERIOD: \$12.1**

**All contracts are written for five years with 3 five-year options.**

# ALONGSIDE AIRCRAFT REFUELING FY04

## CONUS

- 26 LOCATIONS
- \$103.5 MILLION IN CONTRACTS



## OCONUS

- OKINAWA, JAPAN
- SOUDA BAY, CRETE
- \$2.9 MILLION IN CONTRACTS

# FUEL PROCUREMENT

<b>TITLE</b>	<b>PAGE</b>
DESC Petroleum Procurement (Bulk Fuels)	61
CONUS and OCONUS Posts, Camps and Stations	62
Coal	63

# PETROLEUM PROCUREMENT

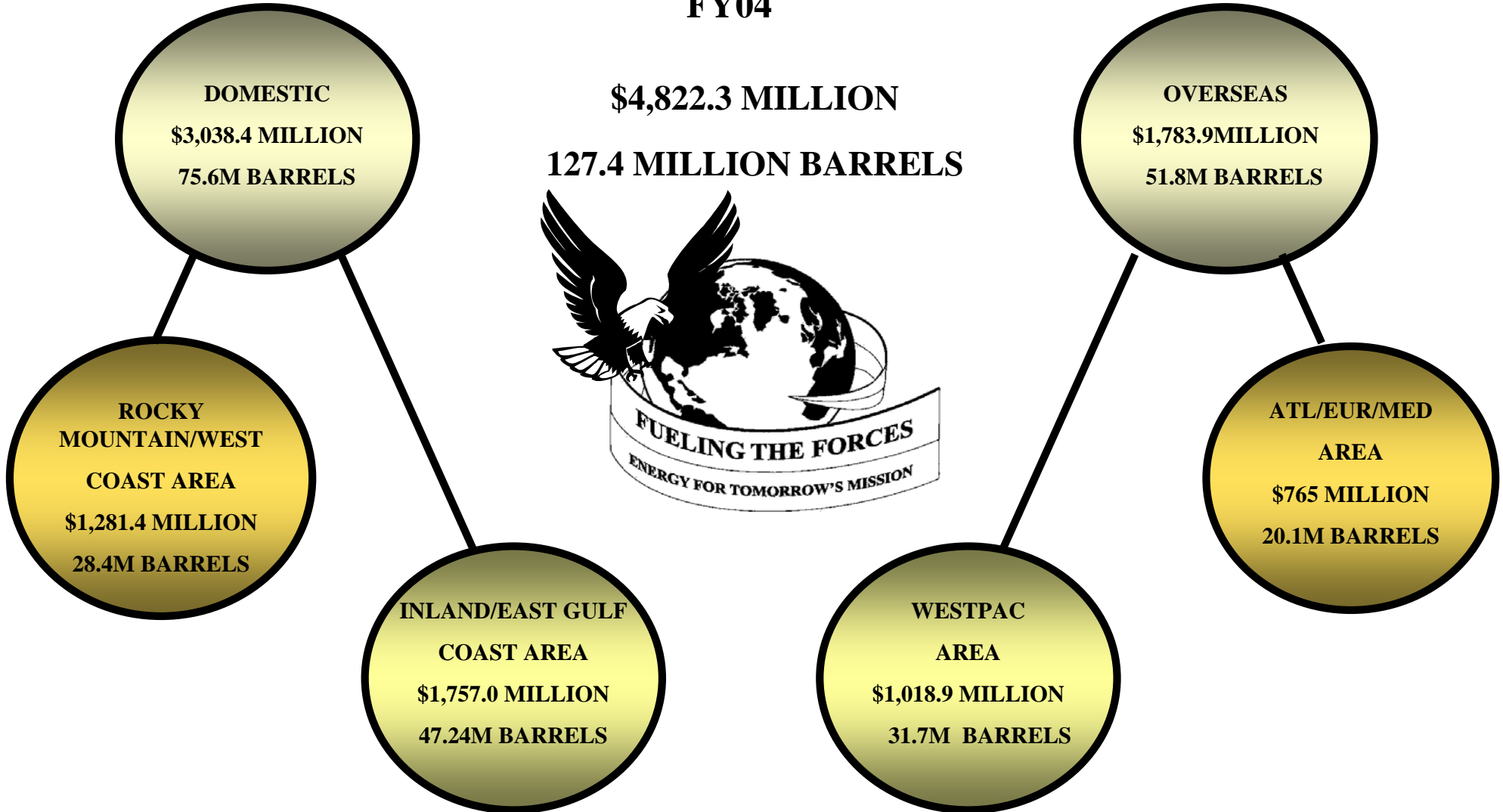
## BULK FUELS

(Estimated Amounts)

FY04

**\$4,822.3 MILLION**

**127.4 MILLION BARRELS**



FIGURES REPRESENT CONTRACT AWARDS IN FY04 (NOT ACTUAL PURCHASES)

SOURCE: PROCUREMENT PLANNING AND SUPPORT DIVISION, PROCUREMENT OVERSIGHT BRANCH

# CONUS AND OCONUS POSTS, CAMPS, AND STATIONS FY04



## Domestic (CONUS)

- 232 CONTRACTS
- 1940 ACTIVITIES
- 3,873 LINE ITEMS
- \$245.5 MILLION
- 4.43 MILLION BARRELS

## Overseas (OCONUS)

- 79 CONTRACTS, 37 COUNTRIES
- 450 ACTIVITIES
- 735 LINE ITEMS
- \$151.4 MILLION
- 3.08 MILLION BARRELS

REPRESENTS SALES DATA AS OF SEP 30, 2004

SALES DATA INCLUDES ONLY LINE ITEMS PAID THROUGH DWCF AND  
DOES NOT CAPTURE FED CIV AGENCIES SUPPORTED

SOURCE: DIRECT DELIVERY FUELS COMMODITY BUSINESS UNIT

# COAL

**FY 04**

## SUMMARY OF ANNUAL REQUIREMENTS

**SHORT  
TONS**

**REQUIREMENT  
DOLLARS**

**ARMY**

**233,500**

**\$13.5 Million**

**AIR FORCE**

**313,970**

**\$17.0 Million**

**NAVY**

**122,800**

**\$ 8.4 Million**

**OTHER**

**40,000**

**\$ 3.1 Million**

**TOTAL**

**710,270**

**\$42 Million**

# **COST AVOIDANCE/SAVINGS**

## **TITLE**

## **PAGE**

Federal Agencies

64

Department of Defense

65

DESC's Competitive Electricity Program

66-67

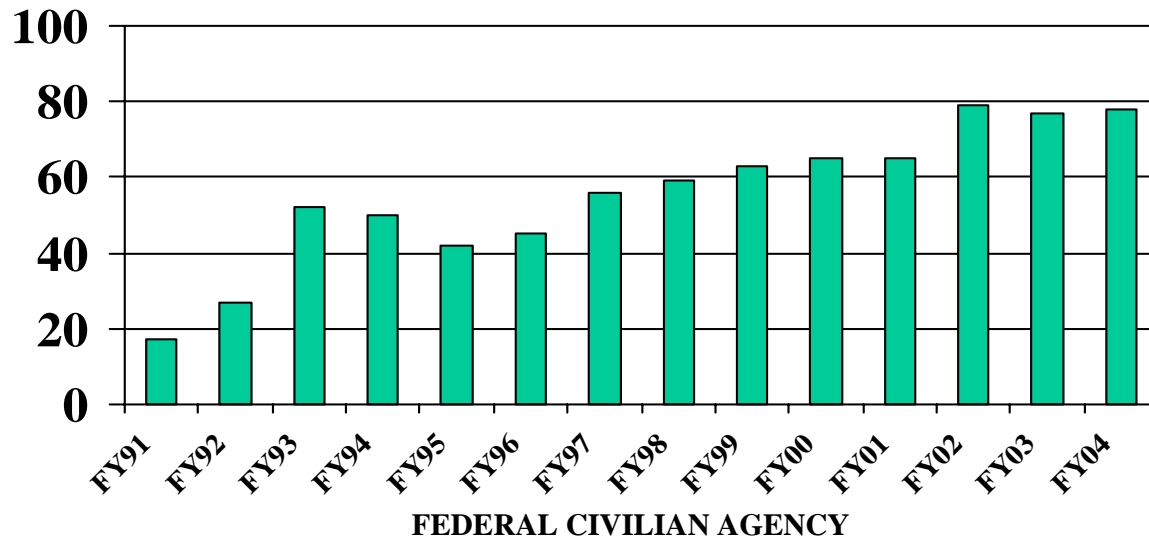
Reported Credit Card Savings

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# FEDERAL CIVILIAN AGENCIES

## NATURAL GAS PARTICIPATION & COST AVOIDANCE

### HISTORICAL PARTICIPATION



FEDERAL CIVILIAN AGENCY

COST AVOIDANCE

FY 91 – FY 04 = \$104.63

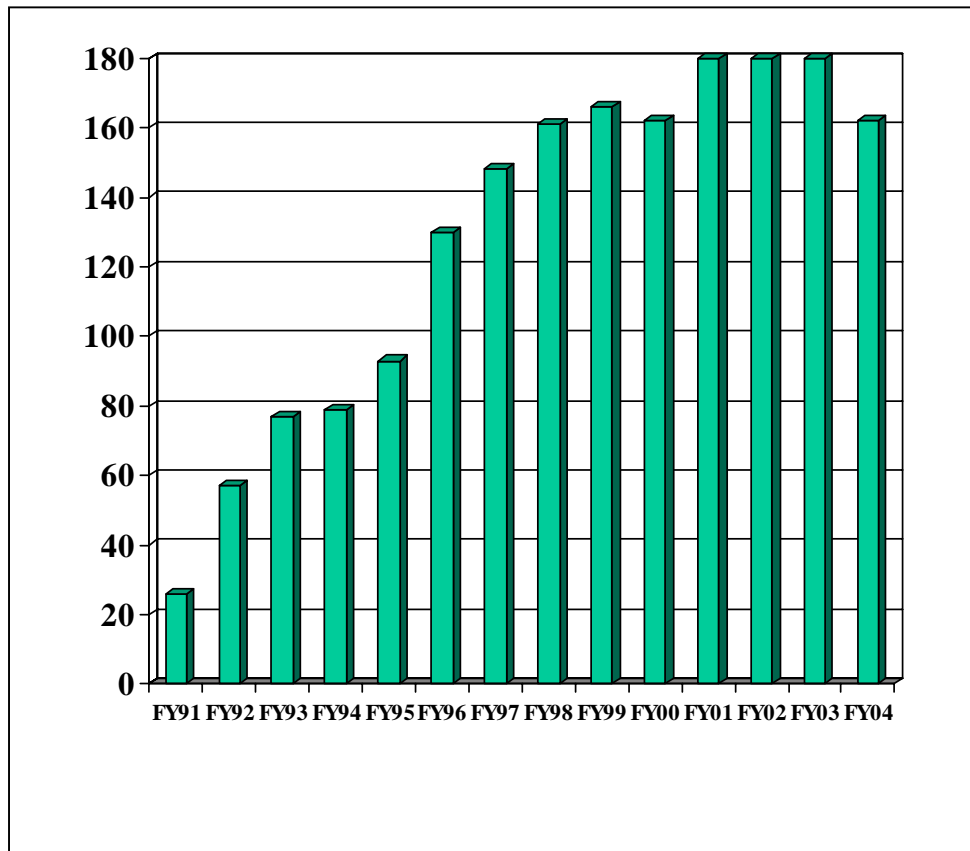
FY04 Federal Civilian Agency Participants	
DOE	15
Veterans Administration	18
Department of Justice	12
NASA	4
Others	29
<b>Total</b>	<b>78</b>

By partnering with DESC to procure direct supply natural gas, civilian agencies saved over \$12 million in FY04.



# DEPARTMENT OF DEFENSE NATURAL GAS PARTICIPATION & COST AVOIDANCE

DoD Participation



## DoD Natural Gas Cost Avoidance for FY 04

	FY91-03	FY04	Total
Army	\$111.57	\$ 17.5	\$ 129.07
Navy	\$ 83.45	\$ 10.1	\$ 93.55
Air Force	\$ 67.48	\$ 10.7	\$ 78.18
Other DoD	\$ 11.53	\$ 1.6	\$ 13.13
<b>Total</b>	<b>\$274.03</b>	<b>\$ 39.9</b>	<b>\$313.93</b>

(Dollars are in Millions)

### FY 04 DoD Participants

Army	58
Navy	48
Air Force	42
DoD	14

<b>Total</b>	<b>162</b>
--------------	------------

SOURCE: INSTALLATION ENERGY COMMODITY BUSINESS UNIT



# DESC'S COMPETITIVE ELECTRICITY PROGRAM

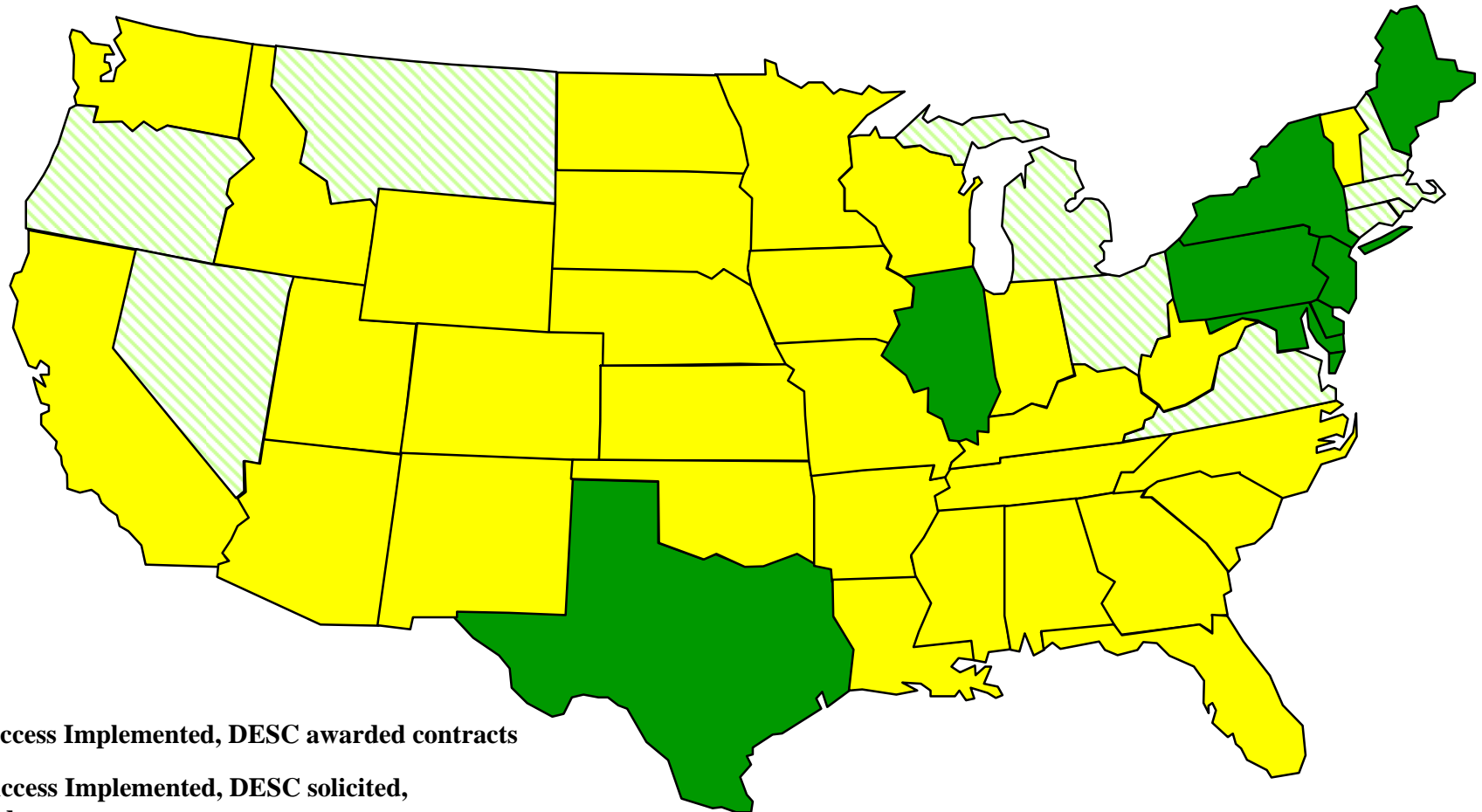


	# of Customers Solicited	# of Accounts Solicited	# Customers under DESC Contract
Army	21	163	13
Air Force	13	47	5
Navy	54	226	20
Marine Corp	4	7	0
Reserves	17	325	6
Other DoD	9	47	4
Dept of Energy	11	68	3
NASA	2	14	1
Coast Guard	7	82	3
Other Federal Civilian	12	43	7

**DESC, in partnership with the Military Services, has been contracting for deregulated electricity since May 1998.**

# ELECTRICITY RESTRUCTURING STATUS

**DESC has experience in all states in which deregulation/restructuring has occurred and in which requirements have been received.**



- Dark Green** Retail Access Implemented, DESC awarded contracts
- Light Green with Diagonal Lines** Retail Access Implemented, DESC solicited, no awards
- Yellow** Retail Access pending, DESC monitoring market

# LOCAL PURCHASE (NON-CONTRACT) FUEL CARD SAVINGS FY04



**AIR Cards:**

<b>Cards Issued:</b>	21,162
<b>Sales:</b>	\$92.7M
<b>Savings:</b>	\$ 8.6M

*Savings using card discounted price  
v.s. posted airport price.*

**Fleet Cards:**

<b>Cards Issued:</b>	57,638
<b>Sales:</b>	\$34.9M
<b>Savings:</b>	\$2.3M

*Savings from quantity discounts  
and direct tax rebates*



**New in 2005 – Ship’s Bunkers’ Easy Acquisition Card – SEA Card**

# MISSILE FUELS

## TITLE

## PAGE

Missile Fuels Business Profile	69
Missile Fuels Product Line Overview	70
Missile Fuels New Emerging Products	71
Missile Fuels Customer Profile	72
Missile Fuels Major Program Support	73
Missile Fuels Launch Support	74
Missile Fuels Largest Fed Civ Customer	75
Missile Fuels Number of Shipments	76
Missile Fuels Top Ten Contractors	77

# MISSILE FUELS BUSINESS PROFILE

□ 92 total NSNs – 64 Active Products

- ❖ All support DoD programs, weapons systems and/or space programs

- ❖ Designated DoD IMM

- ❖ Supplier of choice for Federal Civilian customers and commercial space contractors under Commercial Space Launch Act authority

□ 20 Controlled Storage Points (CSP)

□ \$65.1 Million in Sales\*

□ 70 contracts

- ❖ 65 for product

- ❖ 5 for services, including transportation

\*Down from projected sales due to delays of scheduled launches

# CBU SNAPSHOT – PRODUCT LINE OVERVIEW

## □ Three categories of products

### ❖ Propellants – 3 types

#### ➤ Hypergols

- ✓ Hydrazine – 7 grades
- ✓  $N_2O_4$  – Oxidizer

#### ➤ Liquids

- ✓ Priming Fluid (PF-1)
- ✓ RP-1
- ✓ Isopropyl Alcohol (IPA)
- ✓ Hydrogen Peroxide ( $H_2O_2$ )
- ✓ Inhibited Red Fuming Nitric Acid (IRFNA)
- ✓ JP-10

#### ➤ Cryogenic

- ✓ Liquid Oxygen (LOX)
- ✓ Liquid Hydrogen ( $LH_2$ )

### ❖ Non-Propellant Cryogenics

- Liquid Nitrogen (LN)
- Liquid Air
- Liquid Argon
- Liquid Helium

### ❖ Gases

- ✓ Nitrogen
- ✓ Argon
- ✓ Helium
- ✓ Hydrogen
- ✓ Gaseous Deuterium ( $D_2$ )
- ✓ Nitrogen Trifluoride ( $NF_3$ )
- ✓ Fluorine
- ✓ Xenon
- ✓ Krypton
- ✓ Neon



# DESC MISSILE FUELS

## NEW EMERGING PRODUCTS

- ❑ AF-L-103 Advanced Propellant – Air Force
- ❑ Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>) – Air Force, Army, Navy, NASA
- ❑ Dimethylaminoethylazide (DMAZ) (hydrazine replacement) – Navy, Air Force
- ❑ Pyrollidinyethylazide (PYAZ) (hydrazine replacement) – Navy, Air Force
- ❑ Hydroxyl ammonium nitrate (HAN) – Air Force
- ❑ JP-7 novel use for scramjet – Air Force, NASA
- ❑ RP-1/RG-1 upgrade – Air Force
- ❑ Gels for RP-1, IRFNA, MMH, JP-10 - Air Force, Navy, NASA, Army

# MISSILE FUELS' CUSTOMER PROFILE

<input type="checkbox"/> DoD	<u>#</u>	<u>%</u>
Air Force	109	38%
Army	44	12%
Navy	10	1%
USMC	2	1%
Subtotal DoD	165	52%
<input type="checkbox"/> Federal Civilian		
NASA	16	5%
DOE	1	13%
Subtotal Federal Civilian	17	18%
<input type="checkbox"/> Commercial	84	30%
Total	266	100%

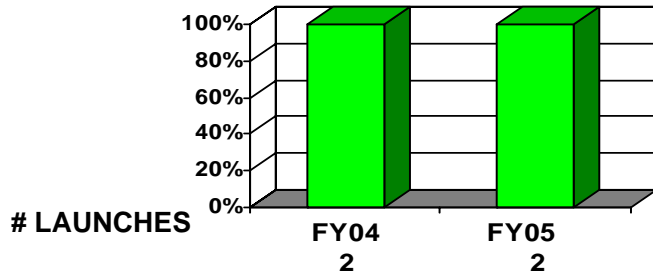
# MAJOR PROGRAMS SUPPORTED BY THE MISSILE FUELS CBU

- USAF Titan, Delta and Atlas - and commercial follow-on – the “EELV”  
(Evolved Expendable Launch Vehicle)
- F-16 Emergency Power Unit
- F-15/F-16 Air Intercept Missile, Avenger, Sidewinder
- All Cruise Missiles – Navy Tomahawk, Harpoon, & USAF’s ALCM/ACM
- AIM9 and Stinger Missiles
- AQM-37C and Lance Missile Drone Programs
- Fiber Optics Guided Missile (R&D)
- Wind Tunnels
- All DoD Laser Programs
- All Space-Based Weapons (R&D)
- NASA Space Shuttle
- International Space Station

# MISSILE FUELS LAUNCH SUPPORT

Performance Goal is 100% on time/on spec for all launches

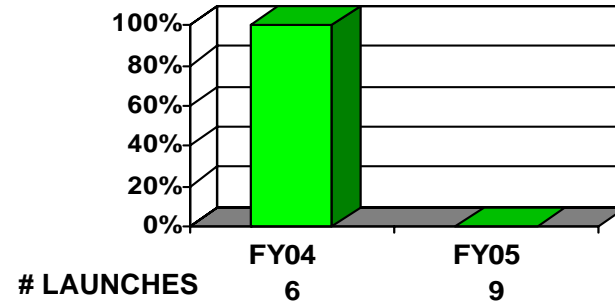
**Titan Mission Support  
OnTime/On Spec Product**



Products- N2O4,  
LH2, LOX, A-50



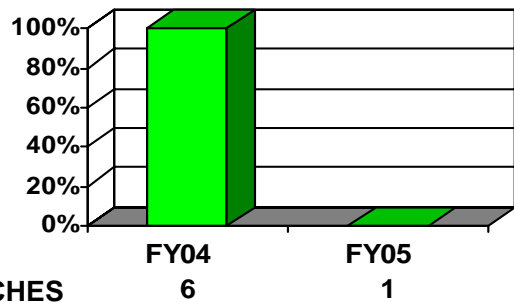
**Delta Mission Support  
OnTime/On Spec Product**



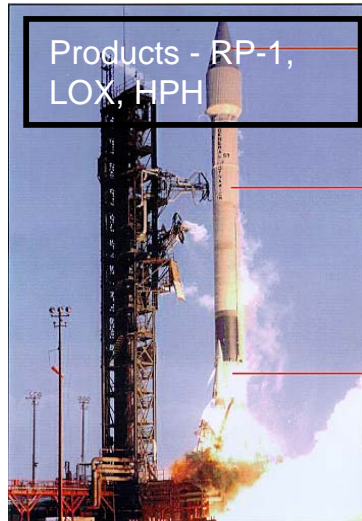
Products- A50,  
N2O4, LOX, RP-  
1



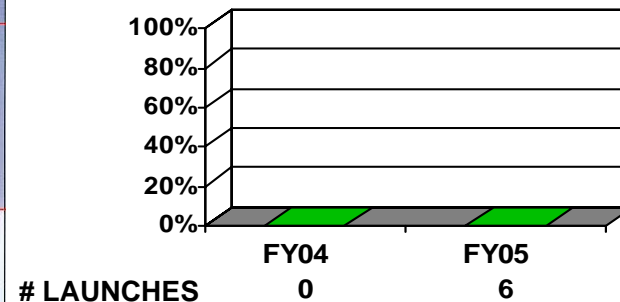
**Atlas Mission Support  
OnTime/On Spec Product**



Products - RP-1,  
LOX, HPH



**Shuttle Mission Support  
OnTime/On Spec Product**



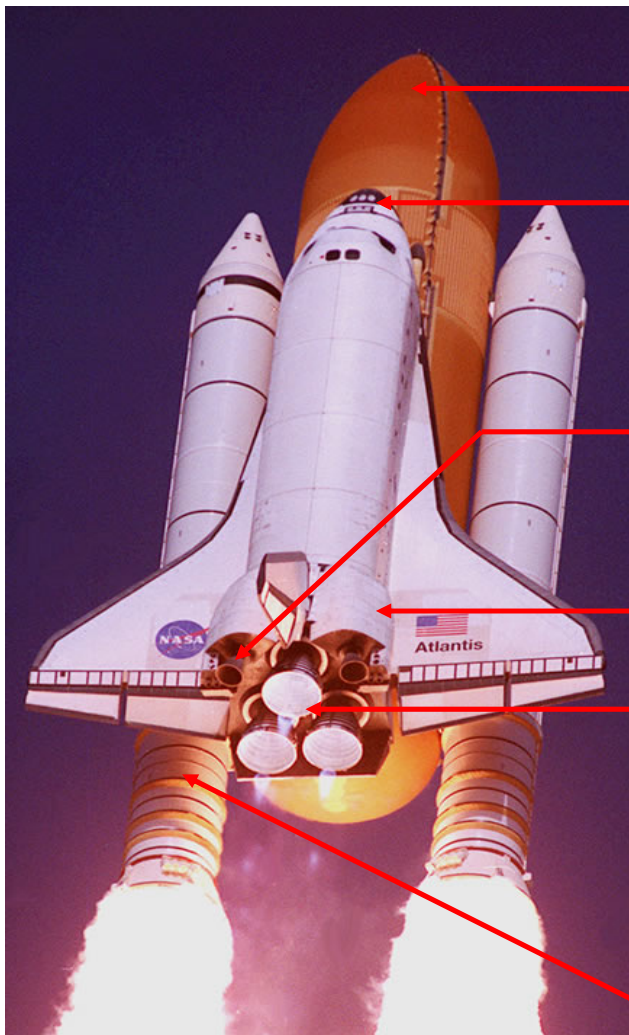
Products- N2O4  
and MMH



SOURCE: MISSILE FUELS

# LARGEST FEDERAL CIVILIAN CUSTOMER - NASA

## SPACE SHUTTLE



**EXTERNAL TANK**  
 LO2 – 1332,000 LBS (NASA)  
 LH2 – 279,697 LBS (NASA)

**FORWARD REACTION CONTROL SUBSYSTEM**  
 N2O4 – 1488 LBS  
 MMH – 930 LBS

**ORBITAL MANEUVER SYSTEM**  
 N2O4 – 14,866 LBS  
 MMH – 9,010 LBS

**AFT REACTION CONTROL SUBSYSTEM**  
 N2O4 – 2,976 LBS  
 MMH – 1,860 LBS

**SOLID ROCKET BOOSTERS**  
 16% POWDERED ALUMINUM  
 70 % AMMONIUM PERCHLORATE  
 0.17% IRON-OXIDE POWDER  
 12% POLYBUTABINE-ACRYLIC ACID-  
 ACRYLONITRILE TERPOLYMER  
 (PBAN)  
 2% LIQUID EPOXY RESIN

**THRUST**  
 MAIN ENGINES  
 470,000 LBS VACUUM  
 SOLID ROCKET BOOSTER (2)  
 2,900,000 LBS  
 ORBITAL MANEUVERING SYSTEM  
 6,000 LBS VACUUM (2)  
 REACTION CONTROL SYSTEM  
 870 LBS VACUUM  
 (38) THRUSTERS  
 25 LBS VACUUM  
 (6 VERNIERS)

SOURCE: MISSILE FUELS

# FY04 MISSILE FUELS TRANSPORTATION NUMBER OF CONTAINERS SHIPPED

Product	Bulk Trailer	Bulk Rail	Truckload Drum/Cylinder
Argon			1128
Deuterium	1		7
Helium	162		2034
Hydrazines	31		180
IPA			1
JP-10	17		92
N <sub>2</sub> O <sub>4</sub>	9	6	55
Nitric Acid			6
PF-1			4
RP-1	29		26
Xenon			1
<b>TOTALS</b>	<b>249</b>	<b>6</b>	<b>3534</b>

# MISSILE FUELS' FY04 TOP TEN CONTRACTORS (\$ IN MILLIONS)

1. Air Liquide America	\$ 20.1
2. ARCH Chemicals, Inc.	\$ 16.2
3. Matheson Tri-Gas	\$ 4.9
4. Praxair, Inc.	\$ 4.7
5. Air Products & Chemicals	\$ 2.9
6. Spectra Gases	\$ 2.2
7. BOC Gases	\$ .6
8. Global Gases	\$ .5
9. Chesapeake	\$ .4
10. National Welding	\$ .1



SOURCE: MISSILE FUELS

# DESC's "THE BEST OF"

**TITLE**

**PAGE**

Highlights of FY 2004

78-90

# DEFENSE ENERGY SUPPORT CENTER HIGHLIGHTS FOR FY04

**TASK FORCE – RESTORE IRAQI OIL:** In December 2003, the Office of the Secretary of Defense (OSD) officially tasked the Defense Energy Support Center (DESC) with providing the necessary expertise and support to the Task Force – Restore Iraq Oil (TF-RIO) mission for the importation and distribution of petroleum products to specified fuel depots in support of the Iraqi civilian populace. The TF-RIO coordinates with the Iraqi oil sector to rebuild petroleum infrastructure and to accelerate the country's petroleum production to support the movement of a newly freed people through civilian humanitarian aid. Given the current condition of the Iraqi oil infrastructure, the lack of Iraqi expertise to repair infrastructure, the constant threat of sabotage, and the security situation around centers of retail distribution, the tasking provided through DLA to DESC constituted a monumental shift in our current mission. In response to the OSD tasking, DESC deployed an initial team of six individuals to work alongside the Coalitional Provisional Authority (CPA) and Combined Joint Task Force 7 (CJTF-7) on what has become the largest humanitarian fuel distribution and oil infrastructure reconstruction project in military history. This collaborative effort required the dedication of a cadre of DESC Headquarters (HQ) individuals (listed above), along with DESC-Middle East, DESC-Europe, and DESC-Americas representatives to successfully execute and implement fuel import contracts with an estimated cost avoidance of \$96M in the first three months. Along with the establishment of fuel import contracts, the team managed to secure approximately \$1.14B in funding to continue the critical need of providing refined products to the Iraqi civilian populace. Upon completion of the TF-RIO contracts in August 2004, between April 2004 and August 2004 over 162,162,039 gallons of gasoline, 108,420,890 gallons of diesel and 92,925 metric tons of fuel had been delivered. Total dollar value of the fuel delivered was \$429M. A second DESC-Iraq team, deployed to assume responsibility for the mission, performed in-depth analysis and modeling of fuel product consumption that identified critical shortfalls in time to adjust supply strategies. The thrust of the mission at this stage was with performance-based metrics and DESC-Iraq Team II was critical in providing the necessary information and intelligence to (1) ensure the flow of petroleum to the Iraqis, (2) meet the CPA goal of 15 Days of Supply on-hand of all petroleum products, and (3) complete transition of the fuel import mission back to the Iraqi export arm of the Ministry of Oil. All of these goals were met and exceeded. The shared DESC HQ and DESC Regional Office effort to equip and deploy petroleum operations activities significantly contributed to the Coalition's ability to return control to the new Iraqi government. Although there are few occasions by which individuals can play such a proactive and vital role in the shaping of geopolitical history, the DESC Humanitarian Assistance (HA) team (listed above) fully achieved a commonality of purpose and a roadmap of success in providing refined petroleum products to the newly freed Iraqi populace. The DESC HA team evinced the highest standards of collaborative teamwork using flexible contractual instruments and defined measurement metrics. In doing so, the DESC HA team attained OSD and organizational goals under intense political and media scrutiny. The DESC HA contributions to the Gulf Region Division Restore Iraq Oil Directorate, the CPA, and CJTF-7 have been essential to the Coalition's ability to assist the Iraqi people in establishing a secure environment, enabling the resumption of oil production and sales, and providing the means for the Iraqi people to build a viable economy necessary for a stable post-war government.

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION SUPPORTS RESTORE IRAQI OIL (RIO):** Product Technology & Standardization (DESC-BP), was a key player in ensuring that the essential requirements for Restore Iraq Oil were met. Many specifications for products such as gasoline, diesel fuel, kerosene, jet fuel and Liquid Petroleum Gasoline were reviewed to ensure that the Iraqi people as well as our military forces under RIO were receiving on specification product. DESC-BP not only provided technical support, but also created National Stock Numbers (NSNs) and measurement clauses for all products purchased under RIO. DESC-BP were significant contributors in ensuring requirements were met under RIO.

**PC&S ALTERNATIVE FUELS INITIATIVES:** In support of the Energy Policy Act of 1992 and Executive Order 13149, Post Camps and Stations (PC&S) procurement of alternative fuels has increased significantly. This can be attributed to the use of PC&S Alternative Fuels Availability Survey which was used to determine potential contractors who could supply DESC with alternative fuels. As a result DESC-PL was able to increase the overall levels of competition received on alternative fuel items/locations procured across several geographical and market areas.

**NAVY JET FUEL SPECIFICATION UPDATE GENERATES SAVINGS, LOGISTICS SIMPLICITY:** One measured result of this year's Navy decision to lower the concentration of fuel system icing inhibitor (FSII) additive that must be included in JP5 was that DESC spent \$12,000 less per month for contract purchases of additized JP5. Negotiated agreement with Western Pacific purchase program contract suppliers to accept specification MIL-DTL-5624, updated January 5, 2004, resulted in a reduced price beginning in June 2004. At about the same time, just-awarded Atlantic/Europe/Mediterranean purchase program JP5 contracts were also calling out the lower FSII concentration of 0.10-0.15 volume%. The level of anti-icing protection required for JP5 was different than the amount required for JP8 during the period 1983-2003. With the additive injection rates once again aligned, overseas locations that handle both products (refineries, terminals, etc.) no longer have to consider which FSII concentration must be injected in a particular batch of jet fuel.

**DESC AGGREGATES DIESEL REQUIREMENTS OF 139 INSTALLATIONS FOR PURCHASE UNDER A SINGLE STANDARD COMMERCIAL SPECIFICATION:** As of the end of FY 04, all four Military Service branches and eleven Federal Civilian agencies have DESC contract support for their Midwestern U.S. diesel fuel requirements awarded to the same commercial product specification, ASTM D 975. It has been more than eight years since DESC was able to award U.S. conventional diesel fuel requirements for our various Federal customers to a single specification. Before 1996, a Federal Specification was widely used by DESC, and since the mid-90s, some customers have been supported with Federal Specification diesel purchases, while others have been supported with Commercial Specification diesel buys. Harmonization of U.S. government automotive diesel fuel requirements has been accomplished due to the Army's decision to order Standard Commercial diesel during a 39-month test program involving 48 Army and Army National Guard installations in the 14-state area of DESC's Customer Organized Group (COG) 6. Successful completion of this demonstration in August 2004 contributed to the Air Force decision to join other Federal activities in receiving Standard Commercial product. The Air Force decision to order ASTM D 975 product throughout COG 6 beginning in 2004 marked the successful completion of DESC's automotive diesel harmonization effort in the Midwest. Customer decisions to receive Standard Commercial fuel also had a significant beneficial impact on end user fuel costs. During the period 2001-2004, several Army installations that are high-volume users each spent \$100,000 less for commercial diesel fuel than they would have paid for Federal Specification product.

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION EXPANDS PETROLEUM QUALITY INFORMATION SYSTEM (PQIS):** This year marked the eighth edition of the Petroleum Quality Information System (PQIS) report that provides statistical analysis of Aviation Fuels (AN8, JA1, JP4, JP5, and JP8), Fuel Naval Distillate (F76), Marine Residual Fuel (RME-25) and Gasoline bought under the Bulk Purchase Program. PQIS is recognized as an invaluable report, its data is used by NATO countries, engine manufacturers, product specification developers, and research companies worldwide. The publication helps to monitor fuel quality trends around the globe. This publication was expanded to include JP10 (Propellant, High Density, Synthetic Hydrocarbon) and PF1 (Propellant, Priming Fluid) bought under DESC's Missile Fuels Commodity Business Unit. In our efforts to improve upon PQIS look to our next edition due in July 2005 in which Aviation Jet Fuel Thermally Stable (JPTS) will be added.

**INTO-PLANE POST WAR SUPPORT:** Direct Delivery's Into-Plane Division remained busy supporting Post War contingency and humanitarian efforts overseas. Contracts were awarded to support ongoing drug interdiction operations in Colombia, and humanitarian assistance requirements in Haiti and Africa to. The Into-Plane Division continues to support ad hoc requirements for Operations Enduring Freedom and Iraqi Freedom throughout the regions.

**AIR/SEA CARD CONTRACT AWARD:** On September 23, 2004, Direct Delivery awarded the follow on contract for the Aviation Into Plane Reimbursement (AIR) Card and new Ships Bunkers Easy Acquisition Card (SEA) to Multi Service Corporation (MSC) for AIR and SEA Credit Card Processing Services. The AIR and SEA cards are co-branded cards used to purchase fuel at commercial airports and seaports. In addition to fuel, the AIR Card can be used to purchase fuel related supplies and ground services. The SEA Card will be used to facilitate the purchase of fuel. The new contract award ensures continuity in ordering, receipt, and payment processes for both the Into Plane and Ships Bunkers' customers.

**PRODUCT TECHNOLOGY & STANDARDIZATION DIVISION (ALTERNATIVE FUEL INFORMATION STATION)** As a major advocate for the use of alternative fuels in the Department of Defense, the Product Technology & Standardization Division (DESC-BP) developed the Alternative Fuel Information Station (AFIS) to insure customers are trained on the various facets of alternative fuels. The AFIS is a web based tutorial which covers pertinent information on alternative fuels in the transportation sector. Specific information includes a discussion on national energy policy to Reduce consumption of petroleum based fuels as established by Public Laws and Presidential Executive Orders. It includes information on the manufacture, handling, storage and use of key alternative fuels provided by DESC. Guidance is also provided on alternative fuel logistics and how to acquire key products from DESC. Currently this information is covered in four tutorials which include the Energy Policy Act (EPACT) of 1992, Biodiesel (B20), Fuel Ethanol (E85) and Alternative Fuel Logistics. The AFIS is easily assessed through the DESC homepage under Energy Links.

**DESC AMERICAS PARTICIPATES IN QUARTERMASTER LIQUID LOGISTICS EXERCISE (QLLEX)-04:** QLLEX, formerly known as POLEX, is an annual CONUS-wide petroleum transportation and water exercise using US military reserve component forces and equipment to transport JP-8 to DESC customers. The 475th Quartermaster Group (Petroleum and Water), USAR, successfully completed QLLEX-04 on 26 June 2004. Historically, the largest joint petroleum transportation exercise in the Army, QLLEX-04 was dramatically reduced in size because of real-world deployments. Though QLLEX-04 was scaled back, soldiers still received valuable, real-world training. Reserve units supporting QLLEX 04 operated from the following Army installations: Fort Bragg, NC; Fort Devens, MA; Fort McCoy, WI; Fort Dix, NJ; Fort Drum, NY; and Fort Huachuca, AZ. The following DFSPs also participated in this year's exercise: Selma, NC; Ludlow, MA; Jacksonville, NJ; Verona, NY; and Davis Monthan, AZ. Partner installations participating this year included: Pope AFB, NC; Quonset ANG, RI; McGuire AFB, NJ; McGuire ANG, NJ; Willow Grove AFR, PA; Atlantic City ANG, NJ; Fort Drum, NY; and Arizona ANG Tucson, AZ. Combined, the DFSPs issued 972,000 gallons of JP-8. Of this quantity, 612,000 gallons was issued directly to partners via military tank truck and 360,000 gallons was issued through fuel system supply points. QLLEX-04 was an outstanding success. The 475th Quartermaster Group received valuable training and both our DFSPs and partners were pleased with the service provided. The 475th Quartermaster Group (USAR) plans for QLLEX-05 to include a larger role for both petroleum and water deliveries, but unit participation will be tempered by the high tempo, real-world demands. QLLEX-05 is scheduled to be the last CONUS-wide petroleum transportation exercise. Future exercises will be conducted on a regional basis. The Defense Logistics Agency (DLA) recognizes its industry partners and customers for their outstanding efforts in providing quality products and services, and assisting in the accomplishment of the DLA mission through the Business Alliance Awards Program. It acknowledges and celebrates DLA's partnership with industry (small and large business firms), Department of Defense (DoD) and Non-DoD customers. There are seven categories of awards in the program. The Defense Energy Support Center had two recipients of a Business Alliance Award for fiscal year 2004. The first award was the Non-DoD Customer of the Year Award given to the National Aeronautics and Space Administration (NASA). NASA has been a full partner with the Defense Energy Support Center in the acquisition of a 20-year Hydrazine rocket fuel production contract worth over \$100 million. They have provided world-class expertise in acquisition, engineering, and environmental management and have enthusiastically participated in and supported our source selection activities. Their efforts have been of significant assistance to DESC. The second award was the Commander's Choice Award given to Colonel Mitchell P. Slate, United States Air Force, Chief of the Logistics Readiness Division, Directorate of Logistics and Communication, Air Force Space Command (AFSPC). Colonel Slate has steadfastly supported the DESC Missile Fuels mission, with timely and positive approval of requests to utilize AFSPC' unique DoD capabilities to store and issue hypergol products in support of our Nations space program. His quick action has allowed DESC to ensure continued support for the war-fighters' mission, and has safeguarded the quality of life of our men and women in uniform. These two award recipients represent the exemplary support DESC receives on a daily basis from industry and customers alike. Without these people, our mission would be impossible.

**PHILIPPINES PC&S PROGRAM:** In December 2003, DESC received a requirement from the U.S. Army in the Philippines to establish a contract for the purchase of 306,240 USG of Diesel Fuel, 36,000 USG of Jet Fuel A-1 and 5,400 USG of Premium Unleaded Gasoline in Manila and Zamboanga areas of the Philippines. The implementation of this contract became necessary when the previous Blanket Purchase Agreement (BPA) put in place by the U.S. Embassy in the Philippines expired on December 31, 2003 and uninterrupted fuel support for the Balikatan Exercises was essential. As a result of in-country negotiations with Philippines contractors and with the help of the U.S. Embassy Procurement Staff, DESC successfully secured a contract. Due to some challenges faced by the Philippine contractor with the change in paying office and invoicing procedures and to make the payment process more efficient, DESC and the Direct Delivery Tech Team, in concert with DESC Pacific, introduced and trained the Philippine contractor on the Paperless Ordering & Receipt Transaction Screens (PORTS). As a result, of the discussions and training, the Philippine contractor has agreed to use PORTS and to receive payments in U.S. dollars in lieu of Philippines Pesos. DESC is in the process of implementing PORTS for all contracts under the Philippines Program.

**PLANTATION PIPELINE JFTOT PROBLEMS:** Plantation Pipe Line Company (PPLC) provides pipeline transportation for JP-8 originating at the Exxon Mobil and Placid refineries in Louisiana. Pipeline delivery locations include DFSPs in Lockhart, MS; Montgomery, AL; Moundville, AL; Columbus, GA; Macon, GA; and Bremen, GA. During the past year, JFTOT failures have been experienced at the Plantation Pipeline breakout terminal at Bremen GA. The failures are on JP-8 batches originating from the ExxonMobil Refinery at Baton Rouge, LA. Acceptance testing of the JP-8 at the ExxonMobil refinery and custody transfer point to Plantation Pipeline have all successfully passed JFTOT. Samples obtained at DFSPs prior to reaching the Bremen breakout terminal have also passed JFTOT. PPLC has installed a clay filter at their Bremen terminal and JP-8 batches arriving at the terminal that fail JFTOT are clay treated prior to delivery to either DFSP Bremen, GA or DFSP Macon, GA. DESC Americas, along with DESC-BQ, PPLC, and ExxonMobil, has established a rigorous sampling and testing program at the various DFSPs on the Plantation Pipeline. Retain samples on batches that fail the JFTOT analysis are shipped back to the ExxonMobil refinery for further testing at both the refinery and their research facility at Paulsboro, NJ. Research into the cause of the JFTOT failures is on-going.

**HURRICANE IVAN DAMAGES FUEL LOADING PIERS, NASSAU, BAHAMAS:** ExxonMobil, Nassau, Bahamas has a DESC contract to provide motor gasoline, diesel fuel, and Jet A to the US Navy's Atlantic Underwater Test and Evaluation Center (AUTEC) contract location at Andros Island and other downrange sites. Fuel distribution is accomplished via a small coastal tanker that is loaded every six to eight weeks. Hurricane Frances, a Category 4 hurricane, destroyed all tanker loading piers and facilities at ExxonMobil, Texaco, and Shell. Several days after the hurricane passed, AUTEC requested a tanker delivery of gasoline and Jet A. To accommodate the Navy's request, ExxonMobil loaded the tanker utilizing dedicated tank trucks in lieu of product pipelines. Complete restoration of the pier facilities is not expected to be completed until February 2005. However, work has progressed to the extent that tankers can be loaded via pipeline at the fuel pier.

**CHANGE IN TEPPCO PIPELINE DELIVERIES TO DFSP BOSSIER CITY, LA:** The LaGloria Refinery in Tyler, TX has historically supplied JP-8 to DFSP Bossier City, LA via the Texas Eastern Products Pipeline Company (TEPPCO) pipeline. DFSP Bossier City, LA, owned by TEPPCO, supplies Barksdale AFB via pipeline under a Transportation Operating Agreement (TOA). The TEPPCO pipeline from LaGloria to DFSP Bossier City was taken out of service for integrity testing on August 15, 2004 and TEPPCO believes there is a strong possibility that the pipeline will remain out of service for an indefinite period. In anticipation of this possibility, TEPPCO reversed the flow on their pipeline from El Dorado, AR into DFSP Bossier City to facilitate the movement of fuel from potential Gulf Coast suppliers. As a result, Barksdale AFB was able to continue to receive JP-8 by pipeline from DFSP Bossier City.

**JAPAN PC&S PROGRAM:** In April 2004, DESC received a requirement through DESC-Pacific from the U.S. Navy in Japan to establish a contract for the purchase of 1,075,000 USG of Midgrade Unleaded Gasoline in Akasaki and Hakosaki. Through intense marketing efforts spanning a period of four months, DESC was finally able to secure a contract for both locations. It should be noted that awarding this item under the PC&S program removed the requirement from the Bulk arena which allowed the activity the flexibility of receiving frequent deliveries over a 2-month period.

**DESC AMERICAS PARTICIPATES IN DLA J6 INFORMATION TECHNOLOGY TRANSFORMATION:** On October 3, 2004, General Order No. 05-04 was signed implementing the enterprise transformation. One of the many goals of General Order 05-04 was the creation of the J-6FI office, which realigned and merged the DESC IT staff into the DLA infrastructure. DESC Americas' two IT personnel were merged into the new J-6FI; while remaining at their respective Region offices (AME and AMW). The transition to the J-6FI structure was seamless and the level of support never wavered. As a result of the transformation, J-6F determined that an additional IT staff member was needed in DESC-AME. A statement of work was prepared and the position was filled expeditiously with a contract hire.

**PIPELINE PIGGING OPERATIONS AT DFSP NORTH LANDING, VA TO NAS OCEANA, VA:** DFSP North Landing, a Transportation Operating Agreement terminal, owned and operated by ST Services (Kaneb Pipeline Company), provides JP-5 to NAS Oceana via dedicated 6-inch pipeline. 49 CFR, Part 195, Transportation of Hazardous Liquids by Pipeline, required ST Services to conduct an internal integrity test of their pipeline to NAS Oceana. In June 2003, on the first attempt to "smart pig" the pipeline, the pig became lodged in the pipeline and stopped all product flow. As a result, NAS Oceana had to be resupplied by military and commercial tank trucks. DESC Americas activated the Americas Contingency Energy Solutions (ACES) program to provide emergency fuel transportation support using military tank trucks, with as many as 60 trucks arriving at NAS Oceana on a single day. Between June 2003 and September 2004, ST Services attempted unsuccessfully to smart pig the pipeline. In each case, the pig lodged in the pipeline and the line had to be cut to recover the pig. The smart pig was finally launched and recovered successfully on 28 September 2004. Through the cooperative efforts of NAS Oceana, DESC-Americas, and ST Services, the fuel requirements of NAS Oceana were met and the flying mission was accomplished without interruption.

**DESC AMERICAS SUPPORTS CITY OF LOS ANGELES FIRE DEPARTMENT:** Each year the Los Angeles Fire Department takes proactive measures to train their members for the upcoming brush fire season by providing refresher training in specific locations throughout the city. This training serves to improve both the safety of their members and their ability to save lives and property at brush fires in and around the city. In an effort to provide the best service to the citizens of Los Angeles, it was determined that training of local companies should be conducted within the communities they serve. DFSP San Pedro, CA was selected to provide brush fire training for fire resources from the Port of Los Angeles Harbor area. The Fire Department utilized the DFSP parking lot and selected hillside areas within the property to facilitate their training. They fully understood the importance of preserving the habitat for the endangered Palos Verdes Blue Butterfly and other wildlife that reside on the property. Equipment on site included fire trucks, fire engines, helicopters, Paramedic and EMT rescue ambulances, and battalion suburbans. The following is a breakdown of the various types of training that was accomplished: Helicopter safety and filling operations; fire shelter deployment; progressive hose lay operation; proper application of the product barricade; water shuttle assembly; and setting up an engine for Strike Team operation.

**DESC AMERICAS OPENS NEW COCO DFSP IN VANCOUVER, WA:** DFSP Portland, OR was replaced with DFSP Vancouver, WA. Both Contractor-Owned Contractor-Operated (COCO) terminals are operated by ST Services, Inc. The entire Vancouver terminal will be dedicated to the DESC JP-8 storage contract. Operational advantages of the new DFSP include: deeper draft berth, increased dock length, increased marine vessel loading and discharge rates, and increased storage capacity. The larger storage capacity positively affects the Economic Resupply Quantity and will reduce DESC transportation costs significantly. DFSP Vancouver services customers located in Oregon and eastern Washington.

**DIRECT SUPPLY NATURAL GAS:** In FY03, the Installation Energy CBU Direct Supply Natural Gas Program (DSNG) saved more than \$15M for customers receiving gas supplies from DESC contractors versus their local utility. Customer savings were down in FY03 as compared to previous years as price increases and volatility experienced during FY03 have been higher than normal. A colder than normal winter left inventories drawn down considerably. Low storage levels resulted in higher prices due to concerns that inventory levels would be depleted by winter's end. Due to the volatility of the market, the CBU focused efforts to inform installations and agencies of the risk mitigation tools available to them to help stabilize utility budgets for FY03 and into FY04. Late in FY03, DESC teamed with the Army's Installation Management Agency to serve as the execution arm for their risk management plan.

**DEFENSE ENERGY SUPPORT CENTER-PACIFIC:** Defense Energy Support Center-Pacific continued to provide top quality and cost effective supply chain management of bulk fuel to the warfighter in the Pacific AOR to include operations in more than 44 countries dispersed throughout 105 million square miles. This support was effected by the efforts of the Hawaii based region headquarters and four field offices. DESC-Pacific continues to be vital in supporting OPERATION ENDURING FREEDOM (OEF) and OEF-Philippines from en route and staging locations such as Diego Garcia, Guam and Hawaii. During the past year, DESC delivered over 1 billion gallons of petroleum products to 76 DFSP's in the Pacific AOR. In addition, DESC-Pacific maintained support for the U.S. Forces participating in OEF-Philippines through coordination with DESC-P to deliver product to Zamboanga, Manila and Subic Bay. DESC-Pacific also assisted with arranging the required petroleum products necessary for the Central Identification Lab Hawaii's (CILHI) search and recovery missions within the Pacific theater.

**DEFENSE ENERGY SUPPORT CENTER-KOREA:** DESC-Korea no longer has a back-log of Maintenance, Repair and Environmental (MR&E) projects. There are 95 active projects from FY04 and FY05 that are currently underway. DESC, APC, and KORO are in the process of determining the permitting process all of the Army's 14 Transportation Motor Pools (TMPs) service stations, as well as possibly the 5 Air Force gas stations located at Osan, Kunsan, Suwon, Taegu and Kwang Ju Air base. The Army gas stations are maintained under a Maintenance and Repair (M&R) contract. DESC-Korea's Quality Division continues to provide procurement quality assurance and surveillance both on and off the South Korean peninsula in support of DESC's world-wide mission. During FY04, the Transportation Division of DESC-Korea supported U.S. Forces in Korea by directing movement of over 58 million gallons of bulk fuel with 1,327 movements by rail and 8,414 movements by tank truck. In addition, over 77 million gallons of product was moved via pipeline. In July 2004, DESC-Korea completed negotiations and participated with United States Forces Korea (USFK) and Republic of Korea Ministry of Defense in the signing of the Korea Follow-On Bulk Petroleum Support Agreement. The Agreement transitions support from the former Trans Korea Pipeline (TKP) to the commercial South North Pipeline (SNP) and commercial terminals located at Ulsan and Songnam. Testing of the SNP support capability will start in February 2005 and the closure of the TKP will commence in April 2005.

**DEFENSE ENERGY SUPPORT CENTER-ALASKA:** During 2004, DESC-Alaska worked closely with the Army Corps of Engineers to correct major issues with the Elmendorf AFB Phase II, Type III Constant Pressure Hydrant System and finally brought the system on line through final commissioning in September 2004. This system, overdue initial commissioning by nearly 3 years, is now capable of supporting Northern air-bridge operational requirements transiting Elmendorf. DESC-Alaska also received approval from the Alaska Department of Environmental Conversation to begin demolition and contamination source extraction at former Defense Fuel Support Point in Whittier, Alaska on Prince William Sound. A pumphouse manifold and maintenance facility were demolished in Summer 2004 allowing for a scheduled contamination source removal in early 2005. DESC-Alaska once again successfully supported the annual Operation Closed Port and Cool Barge fuel re-supply missions and delivered 145 MBBLs of on-specification JP8 and diesel to the remote sites of Galena AFS, Attu Coast Guard Station, King Salmon AFS and Eareckson AFS. DESC-Alaska remained customer-focused throughout 2004 and continued to "provide optimal arctic energy support... all the time!" throughout the last frontier... Alaska!

**DEFENSE ENERGY SUPPORT CENTER–JAPAN:** During FY04, our staff of 10 exceptionally managed a throughput of over 12 million barrels of bulk fuel and over 60% of PACOM's petroleum inventory. Key accomplishments include: Building on the successes of the initial Strategic Fuels Infrastructure Action Plan for Japan (SFIAP-J) with the initiation of the first update; Implementation of the DFSP Status Update process where we partner with our DFSPs and the USFJ Sub Area Petroleum Officer to review key processes and information as a team and to set goals and objectives for the coming months; executing a closure plan for DFSP Koshiba that included the completion of a 2.3 million dollar contract to defuel and clean the terminal; overseeing 5 MILCON projects (3 of which are now completed), worth \$106.8 million dollars and 333 MR&E projects worth 142 million dollars; the seamless End of Japanese Fiscal Year closeout of the 22-million-dollar-per-year Utility Cost Sharing Program; and expanding Common User Land Transportation (CULT) contracts, as the result of switching agreements with the Japan Freight Railway Corporation, that contributed to reducing our CULT budget from 3 million dollars to 2.0 million dollars annually in FY03. In 2004 we welcomed aboard three new members to the Japan team. Mr. Lee Green came aboard as our Inventory Manager. Lee had active duty experience at Misawa AB and on the PACAF staff. We also had a 100% turnover in our Quality Staff and welcomed aboard Linda Richtsmeier who brings extensive DESC Experience from DESC Americas East and DESC Europe. Mr. Jim Fair also joined our quality team after running the laboratory for Petro Star Valdez Alaska Refinery and getting that lab ISO 2002 certified three different times. Before their arrival, we transitioned our quality staff office from Camp Zama so that they are now co-located with us on Yokota AB, Japan.

**DEFENSE ENERGY SUPPORT CENTER- MIDDLE PACIFIC:** Maintaining warfighter support to the largest theater of operations, DESC-Middle Pacific stepped forward to take on the mantle of responsibility for the Philippines. Thanks to active teamwork and involvement with our headquarters, many diverse mission taskings came to fruition. On the infrastructure front, maintenance, repair and environmental projects included completing repairs to the Kwajalein refueling pier, bringing this key facility back into full service. The MILCON program enhanced COMNAMAR Guam's capabilities as two new refueling arms were completed at the piers, reducing the manpower crunch and streamlining fuel servicing at this key port. Finally, MidPac saw the end of an era for DFSP-Johnston Island, as this key island facility which had seen honorable service since World War II, finally shut its doors for good. On the inventory front, MidPac welcomed PWC-Guam into the realm of capitalization as we helped this small function grow in capability and customer support. To cap off a challenging fiscal year 2004, the MidPac inventory team enjoyed another successful end-of-year closeout. In the quality assurance arena, we welcomed Mr. George Wilson to the team in our Singapore office, doubling our capability to support some of the most remote sites where DESC provides fuel support.

**DFSP AUGUSTA BAY, SICILY:** The Italian Army Engineering Group approved a phased approach to the Defense Fuel Support Point (DFSP) Augusta Bay (San Cusumano) depot renovation. Persistence on the part of the DESC-Mediterranean office was instrumental in overcoming strong initial resistance and convincing the Italians of the feasibility of the phased approach. A phased approach would constitute keeping the Depot 50% operational during the 3-to-5 year renovation period. The Punta Cugno NATO Depot, Sicily, was made available by the Italian Navy to augment fuel support to the U.S. Navy during the renovation period at Augusta Bay. Discussions are underway between DESC, U.S. Navy and the Italian Navy for amending the existing 1963 U.S. Navy and Italian Navy Agreement and adding Punta Cugno as an Annex. The Italian Navy plans to begin the Augusta Bay renovation projects in mid 2005.

**UNITED KINGDOM (UK) GOVERNMENT PIPELINE AND STORAGES (GPSS) AGREEMENT:** DESC finalized the negotiations and signed a fixed price agreement in March 2004 with the UK Defense Fuels Group for importation of fuel (JP-8), storage, pipeline transportation, issue, exchange, and quality control services on the GPSS. Previously, a cost share arrangement was in place to cover the services required.

**ELECTRICITY PROCUREMENT INITIATIVE:** Since the inception of the Electricity Program, DESC has been active in all states in which competitive electricity acquisition is permitted, and for which we have received requirements. During FY04 DESC issued solicitations for New York, Illinois, Maine, Texas, Pennsylvania, New Hampshire, Connecticut, Massachusetts, Rhode Island, New Jersey, Delaware, Maryland and the District of Columbia. The Electricity Team currently has contracts in place for competitive power in DC, MD, TX, IL, NJ, and NY. The DESC Electricity Team continues to work closely with our customers and with industry to evaluate and refine the way we conduct business so as to provide maximum support for our customers and to conduct business that closely mirrors commercial industry practice.

**ELECTRICITY TEAM MEMBERS RECEIVE 2004 PRESIDENTIAL ENERGY AND ENVIRONMENTAL AWARD:** In July 2004, DESC Electricity team members Andrea Kincaid and John Nelson received the Presidential Award for Leadership in Federal Energy Management, in partnership with the Environmental Protection Agency and their Green Power Purchase Program, for their support, leadership, and efforts in promoting and improving federal energy management. This prestigious award honored the team for their outstanding contributions as part of a federal purchasing team acquiring electricity from renewable energy sources. As a result of the partnership, DESC has assisted with EPA's procurement of over 122 million kilowatt hours of green power, or roughly 44% of EPA's electricity needs. As DESC continues to facilitate future procurements with renewables, our knowledge and expertise grows in this expanding and important new market.

**RENEWABLE ENERGY CERTIFICATES:** FY 2004 provided an opportunity for the DESC Electricity Team to excel in the new and quickly growing energy market of Renewable Energy Certificates (RECs). A REC represents the unique attribute of renewable energy generation that can be sold separately from the commodity. RECs provide an affordable way for federal installations to meet the Executive Order 13123 goal of 2.5% electricity consumption from new renewable energy sources by 2005. Approved energy sources consist of solar, wind, geothermal and biomass generation. These renewable power purchases encourage the growth of local renewable energy, support the development of green power markets and reduce greenhouse gas emissions. In FY04, DESC awarded over 69M kWh of wind and biomass RECs for customers in Georgia, Nevada, Michigan, Minnesota and Washington, DC.

**DIRECT SUPPLY NATURAL GAS:** In FY04, the Installation Energy CBU Direct Supply Natural Gas Program (DSNG) saved more than \$53M for customers receiving gas supplies from DESC contractors versus their local utility. Due to the continued price volatility within the market, the CBU continued to focus its efforts on informing installations and agencies of the risk mitigation tools available to them to help stabilize utility budgets for FY04 and into FY05. In FY04, DESC converted over 12.4M dekatherms from indexed to firm fixed price in an effort to mitigate price risk exposure and help stabilize customers' budgets.

**UTILITY PRIVATIZATION:** In FY 2004, the Energy Enterprise Directorate awarded four utility privatization contracts with a total value of \$488.1M. The electrical distributions utility privatization contracts were awarded to Dominion Virginia Power at the following Virginia Army installations: Forts Monroe, Eustis, Story, and Lee. One wastewater and storm water contract was awarded at Fort Knox, Kentucky, and one water and wastewater contract was awarded at Fort Bliss, Texas. All of the four contracts were awarded competitively for the utility privatization effort at DESC and are major accomplishments for the Department of the Army. Utility Privatization is mandated by the Office of the Under Secretary of Defense to divest all utility systems at military installations when it is deemed economically feasible to the government. For these four contracts, the total contract value of \$488.1 million resulted in an average annual cost avoidance of \$16.8 million or \$840 million over the contract term.

**COAL:** During FY04 the DESC Coal Team experienced another major price adjustment in the market similar to our experience in FY01. Delivered coal prices rose nearly 40% over FY03 prices by the winter months. Not only was the rising cost of diesel fuel a factor in raising the cost of transportation by rail, truck or barges; other contributing factors included explosive costs, low utility coal stockpiles, small business company mergers and increased exports. As a result, the availability of “stoker” bituminous coal was scarce due to the high demand of utility grade coal. Although we were successful in securing a firm fixed delivered cost on all of our contract awards, which kept our cost down, the cost kept rising for the small business producers. Due to this, we were unsuccessful in securing a contract for an 8(a) reservation for the Marine Corp Cherry Point in North Carolina and we terminated a contract for no performance for Army Tank Command, Lima, Ohio.

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**GASEOUS HELIUM SUPPORT:** FY 04 was a very busy year for the DESC Missile Fuels Helium Team. Gaseous Helium, delivered in high-pressure cylinders and bulk containers, supported various programs throughout the year, including our continuing support to border security and drug interdiction missions. New requirements in direct support of our war fighters in Operation Enduring Freedom were also satisfied. In Sep 04, the DESC Helium Inventory Managers responded to the US Army Intelligence and Security Command (INSCOM) request for Gaseous Helium support for the Persistent Threat Detection System (PTDS), an Aerostat Surveillance Balloon equipped with missile warning and optical sensors to protect ground forces and high-value assets for Operation Iraqi Freedom around the Baghdad International Airport. Earlier in the year, Aug 04, the helium team was called upon by a representative from the US Army Joint Land-Attack Elevated Netted Sensor (JLENS) project office in Huntsville, AL, to deliver an urgent load of Gaseous Bulk Helium to facilitate the demonstration of the Rapid Aerostat Initial Deployment (RAID) capabilities at the Pentagon. Through swift coordination, the DESC helium team provided helium support to the customer by their required delivery date supporting the deployment of the airship over the Pentagon. The RAID airship provides an elevated sensor that allows troops to monitor the surrounding area without having to patrol the perimeter, and to provide early warning of air and ground hostile elements.

**HYDRAZINE CUSTOMERS SUPPORT - BRIDGE CONTRACTS:** The DESC Missile Fuels CBU competitively solicited and awarded two separate contracts in FY04 to ensure interim customer support until a follow-on contract for production, storage, and distribution of all grades of hydrazine is awarded. A stand-alone contract for the production, storage and distribution of High Purity Hydrazine (HPH), awarded in February 2004, will ensure ongoing production capability to meet customer demands until a long-term production source is established. A separate contract for Interim Storage and Distribution of DLA-owned hydrazine products, produced on previous production contract, was awarded in November 2003. The combination of both of these contracts provides "business as usual" customer support for all grades of hydrazine until production begins under the follow-on full production contract. Both contracts are a result of the Missile Fuels CBU strategy to maintain uninterrupted customer support during the solicitation period through award of a cost-effective best value follow-on Hydrazine production, storage, and distribution contract.

**DESC SUPPORT FOR LOCKHEED MARTIN EELV WEST COAST LAUNCHES:** DESC-Missile Fuels continues to support the Atlas V, Lockheed Martin's Evolved Expendable Launch Vehicle (EELV), at Cape Canaveral Air Station FL under the authority of the US Commercial Space Launch Act. Due to our excellent support and working relationship with Lockheed Martin, DESC was contacted in Mar 04 to begin support of Atlas V launches from their west coast launch facility at Vandenberg AFB. Products provided include liquid nitrogen, hydrazine, liquid oxygen, liquid hydrogen, gaseous helium (bulk), gaseous nitrogen and RP-1 rocket propellant. Product support commenced Sep 04. The Atlas V EELV program is the Lockheed Martin replacement for the USAF Titan launch program which will terminate in FY05. As such, the Atlas V will be supporting DoD and commercial satellite launch requirements. It is significant that DESC is the supplier of choice for this commercial launch program.

**ENERGY SAVINGS PERFORMANCE CONTRACTS:** In FY 2004, the Energy Enterprise Directorate performed contract administration on various Energy Savings Performance Contracts. Just prior to the expiration of the legislative authority at the end of FY 2003, the Energy Enterprise Directorate awarded Delivery Order (DO) contracts to Johnson Controls for Fort Hood, Texas, and to Ameresco Solutions, Inc. for Fort Monmouth, New Jersey, respectively. These DO's were issued against a Department of Energy Indefinite Delivery-Indefinite Quantity (IDIQ) contracts. For Fort Hood, Texas, a total of four energy conservation measures were awarded: UMCS improvements, vending machine controls, cooling Tower VFDs, and light retrofits for a total contractor payment value of \$13.6M with a performance period of 23 years. For Fort Monmouth, New Jersey, a total of five energy conservation measures were awarded: lighting upgrades, HVAC renovation, UESC implementation, geothermal heat pumps, and cogeneration system site preparation/feasibility for a total contractor payment value of \$51.5M with a performance period of 24 years. Effective 30 September 2003, this program was halted from any new initiatives since legislative authority had expired. However, new legislative authority was enacted in November 2004 and DESC is ramping up to support additional energy savings projects for various Army identified initiatives.

**D2 BUSINESS CASE TO ENSURE GOOD STEWARDSHIP OF NATIONAL ASSET:** In August 2004, DESC-Missile Fuels employed an innovative process in the award to Spectra Gases of a 100% Small Business Set-Aside contract for production and delivery of Deuterium Gas (D2). D2 requires a product known as Heavy Water (D2O) in the manufacturing process. DESC currently has a limited supply of domestically produced D2O and could have provided this component as a Government Furnished Material (GFM) if that proved to be the best value solution. However, the Department of Energy (DOE) was very interested in purchasing the DESC D2O inventory as our product falls under a different technical classification than that produced commercially today. Accordingly, we built a Business Case Study and Acquisition Strategy that considered the option of obtaining D2O as a Contractor Furnished Material (CFM), as well as utilizing DESC stockpiles as GFM. The DESC D2 Team coordinated with Industry to determine the commercial availability of D2O and also worked with the Department of Energy (DOE) to complete the business case. By building a solicitation that requested pricing for both the GFM and CFM option, we found commercial D2O to be readily available and more cost-effective than use of our inventory. As a result of good planning and extensive negotiations, DESC achieved a win/win solution for DOE, DESC and our taxpayers. The resultant five-year firm fixed-price contract commenced 1 Sep 04.

**EXERCISE SERENE RESPONSE IX:** On 12-13 May 2004, after over a year of planning and preparation, DESC-M conducted Exercise Serene Response IX at the Northern Arizona University in Flagstaff, AZ, to test the effectiveness of the DESC "Highway Emergency Response Plan for the Transportation of Dinitrogen Tetroxide." Exercise Serene Response is conducted every two years in compliance with Department of Transportation (DOT) requirements. N2O4 is an oxidizer, poison by inhalation, necessary for launch and/or maneuvering of many of our nation's space launch vehicles, all essential to our nation's space program. The Emergency Response Plan was developed by DESC-M to provide the guidelines for federal, state and local first responders. A rapid response to a release or spill of a hazardous material is critical to both human life and the environment. Traditionally, the exercises involve a leak or spill of the hazardous material; however, this exercise focused on terrorism. One hundred eighty-seven representatives from various federal, state, and local emergency response agencies attended and/or participated in the exercise. The 2-day exercise provided informational briefings on N2O4 and unique transport equipment, a static display of response equipment, and a tabletop exercise. The tabletop exercise was scripted to ensure participation of all attending response agencies. By all accounts, Exercise Serene Response IX was a huge success, due to the professional efforts of the DESC-M team.

**SPACE INDUSTRY CONFERENCES, WORKSHOPS AND COMMITTEES PARTICIPATION:** To provide the best customer service possible and stay on the forefront of crucial new space propellant technology, DESC Missile Fuels participated in numerous space industry forums. Major events attended include the premier "National Space Symposium" at which DESC Missile Fuels exhibits to approximately 5,000 space professionals and program managers, and the Chemical Propulsion Information Agency (CPIA) Joint Army, Navy, NASA, Air Force (JANNAF) "Propulsion Meeting" at which the DESC Missile Fuels Director provided a presentation on propellants of high interest to customers. As a recognized leader and expert in propellants, DESC Missile Fuels, along with Product Technology and Standardization, office representatives lend logistical, technical and standardization experience by participating in the invitation only "Advanced Storable Liquid Propellant Workshop," the American Association of Aeronautics and Astronautics (AIAA) "Liquid Propellants Committee on Standards" and the CPIA JANNAF Liquid Propulsion Subcommittees "Hydrocarbon Fuels Panel", "Tactical Missile Panel" and "Hydrogen Peroxide Propulsion Panel" with participation by leading Department of Defense (DoD), NASA and industry research professionals developing new rocket propulsion. Because of DESC Missile Fuels' unique knowledge of the propulsion industry customer base, the AIAA "Liquid Propellants Committee on Standards" appointed a DESC representative as membership chair who has expanded the committee to include representatives from all areas of DoD and industry. DESC Missile Fuels fostered additional industry networking by hosting two Hypergol Container meetings with customers, and also a meeting of the "Hydrocarbon Fuels Panels" which included site visits to suppliers. In addition, DESC Missile Fuels regularly participated in the Vandenberg AFB "Propellant Working Group" meetings by teleconference to assure customer support at this major launch facility.

**PROPELLANT SUPPORT FOR LAUNCHES AND PAYLOADS:** DESC Missile Fuels supported the launch of the final historic Atlas II rocket, along with numerous other launches from Cape Canaveral Air Force Station and Vandenberg Air Force Base. A myriad of DESC Missile Fuels propellants, including major products such as Aerozine 50 Hydrazine, Dinitrogen Tetroxide and RP-1 Rocket Propellant, supported successful launches of seven Lockheed Martin Atlas rockets, two Titan rockets and six Boeing Delta rockets. These launches propelled National Reconnaissance Office classified payloads, Defense Support Program missile-warning and weather satellites, NAVSTAR Global Positioning System military navigation satellites, NASA MESSENGER space probe to the planet Mercury, NASA Aura spacecraft for Earth Observing System, NASA Gravity Probe-B satellite to measure space and time, and communications and broadcasting satellites. DESC Missile Fuels also supported satellites with High Purity Hydrazine, Mono-Propellant Hydrazine and Mono-Methyl Hydrazine used for thrusters, including four commercial satellites launched on Sea Launch Zenit rockets.

**ARGON SUPPORT TO OPERATIONAL UNITS INCLUDING OIF:** DESC-M manages gaseous argon in support of Air Force, Army and Navy weapon systems including the Aim 9 Sidewinder, the Bradley Stinger Fighting Vehicle, Bradley Linebacker, Avenger, and helicopters, as well as Man Portable Air Defense. The ground based weapon systems provide ground maneuver commanders force protection against low-altitude airborne targets, while the Aim 9 Sidewinder provides air to air capability. A total of 1270 cylinders of argon were provided to our customers during FY04, including the following: In Nov 03, DESC-M personnel completed the first of several deliveries as part of an urgent Air Force requirement from the Air Intelligence Agency (AIA), located at Lackland AFB, TX. The AIA requirement was for six demilitarized argon cylinders that were to be “abandon in place” in support of a classified Air Force project. Coordination between DESC-M, the argon contractor, DESC Quality Assurance Representative, carrier and customer was critical in the preparation, filling, inspection and shipping of the cylinder to meet the customer’s required delivery date. Due to the proximity of DESC-M to AIA the shipment was sent to DESC-M where the cylinders were inspected once again to ensure they met the customers’ demilitarization requirements. The cylinders were subsequently escorted by DESC-M personnel to Lackland AFB where AIA representatives were standing by to receive the cylinders. Other instances of critical argon gas support to our customers included a Jan 04 Air Force request for 6 cylinders in support of the Aim 9 Sidewinder to Udeid Air Base Al Qatar. Again, an urgent requirement, this time to avoid the grounding of mission critical aircraft, meant shipment by air as the only means of meeting the required delivery date. Extensive coordination between DESC-M personnel, the Air Force Clearance Authority at Wright-Patterson AFB, OH, and the aerial port at Dover AFB, DE, was made to successfully meet the requirement. In Feb 04, the Army’s 1st Brigade, 3rd Infantry Division, Fort Stewart, GA, requested the urgent delivery of 12 cylinders in support of Stinger Missile System testing prior to deployment to Operation Iraqi Freedom. DESC-M personnel coordinated the activities of the argon contractor, DESC QAR inspector and the carrier to expedite delivery. In Feb 04 the 379th Expeditionary Logistics Readiness Squadron requested our support in supplying gaseous argon cylinders for their deployed operations at Udeid Air Base Al Qatar. DESC-M’s responsive support to the war-fighter and extensive knowledge of our products and services continues to pay dividends to the DoD.

**FACILITIES STUDY:** DESC facilities awarded a contract in March 2004 to Shaw Environmental to conduct a facilities study. Shaw will send teams to each DFSP (approximately 550 sites) to reconcile real property records, determine whether DLA or the host Service has sustainment responsibility for the facilities, and identify and document outstanding deficiencies so that projects can be executed to correct them. These surveys began in April 2004, and all sites should be completed by the end of September 2005. The effort was funded by OSD to assist in identifying deficiencies at all fuel facilities and increase DLA's sustainment rates. OSD intends to give DLA additional fund in the FY08 and FY09 budgets to pay for these additional requirements.

**EMERGENCY LIQUID NITROGEN SUPPORT TO USAF:** USAF customers challenged DESC with some quick turn around requirements this year. DESC was up to the task in satisfying their needs and provided support to avert potential work stoppage situations. On 5 November 2003, the DESC Missile Fuels Cryogenics Team received an urgent requirement to provide liquid nitrogen to support US Air Force F-15C, F-15E, and F-16C aircraft at Mountain Home, ID. DESC-MK issued an emergency RFQ, received and evaluated three responsive offers, and awarded a four-month requirements type contract, with the first delivery scheduled on 20 November 2003. On 4 May 04, the Missile Fuels' Cryogenics Team received an urgent requirement to provide liquid nitrogen in support of manufacturing repair parts for the C-17, C-5, C-130, and F-15 aircraft at Warner Robins AFB, GA. In order to avoid mission failure, the customer required next-day delivery. The Contracting Officer orally solicited, negotiated and awarded a competitive three-month requirements type contract under the FAR's Simplified Acquisition Threshold procedures, and delivery commenced on 5 May 2004, successfully avoiding a potential mission failure at Warner Robins AFB.