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Department of Defense Fuel Costs in Iraq

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Summary

Since the invasion of Iraq in 2003, the average price of fuels purchased for military operations in Iraq has steadily increased. The disparity between the higher price of fuel supplied to the United States Central Command compared to Iraq's civilian population has been a point of contention. Several factors contribute to the disparity, including the different types of fuel used by the military compared to Iraqi civilians, the Iraqi government's price subsidies, and the level pricing that the DOD's Defense Logistics Agency charges for military customers around the world. The Iraqi government has been pressured to reduce its fuel subsidy and black market fuel prices remain higher than the official subsidized price.

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Background

The Defense Energy Support Center (DESC), the primary agency responsible for procuring DOD's ground and air transportation fuels, buys bulk energy commodities and "resells" the fuel to various military customers—with a price markup to cover its cost of operation (e.g. storage, transportation, and maintenance).[1] In order to deliver fuel as cost effectively as possible, the DESC will often provide its overseas customers with energy purchased from regional suppliers. However, the DESC generally charges all of its customers worldwide a uniform price. For example, a military unit in Iraq pays the same price for jet fuel (JP-8) as a military unit stationed in most other parts of the world.[2] Fuels purchased by the DESC include jet, diesel, motor and aviation gasoline. The DESC also arranges contracts for direct purchase of fuels at commercial airports and contracts for supplying military posts, camps, and stations. The DESC's largest annual fuel procurement is JP-8 and JP-5 jet fuel, followed by diesel fuel.[3] In FY2007, JP-8 represented ~50% of total DOD petroleum product purchases. Though JP-8 is used primarily by Air Force and Army aircraft, it is also used in Army tactical vehicles, for example in the *Abrams* M1A1/M1A2 Main Battle Tank. It also serves as a substitute for diesel fuel in other tactical vehicles. Motor gasoline is typically used by light non-tactical vehicles operated at post, camps, and stations. In Iraq, the breakdown of petroleum used by DOD in FY2007 was 81.5% jet fuel, 15.8% diesel, and 2.6% gasoline.[4]

In FY2007, the DOD's average cost for fuel ranged from $2.00 a gallon for diesel to $2.05 for JP-8 (**Table 1** and **Figure 1**). In comparison, commercial jet fuel (Jet A-1) averaged $2.17 per gallon and refiner crude oil $1.62 per gallon. As represented in **Table 1** and **Figure 1**, refiner crude oil is the average annual cost that a U.S. refiner would pay for a gallon of crude.[5]

Table 1. Petroleum Product Costs FY1997-FY2007

	Total Products $/gal	JP-8 $/gal	JP-5 $/gal	Diesel	Jet A-1 $/gal	Refiner Crude Oil Cost	
						$/gal	$/barrel
FY1997	0.68	0.67	0.65	0.63	0.61	0.45	19.04
FY1998	0.51	0.50	0.49	0.48	0.45	0.30	12.52
FY1999	0.50	0.49	0.50	0.47	0.54	0.42	17.51
FY2000	0.82	0.85	0.82	0.74	0.90	0.67	28.26
FY2001	0.90	0.89	0.88	0.85	0.78	0.55	22.95
FY2002	0.73	0.70	0.69	0.68	0.72	0.57	24.10
FY2003	0.91	0.88	0.87	0.85	0.87	0.68	28.53
FY2004	1.11	1.09	1.07	1.04	1.21	0.88	36.98
FY2005	1.61	1.66	1.60	1.57	1.74	1.20	50.24

[1] DESC falls under the overall command of the Defense Logistics Agency.

[2] For a complete listing of prices the DESC charges customers for fuel worldwide, see http://www.desc.dla.mil/DCM/Files/FY2008StandardPrices_07012008.pdf. Last visited July 8, 2008.

[3] JP stands for jet petroleum.

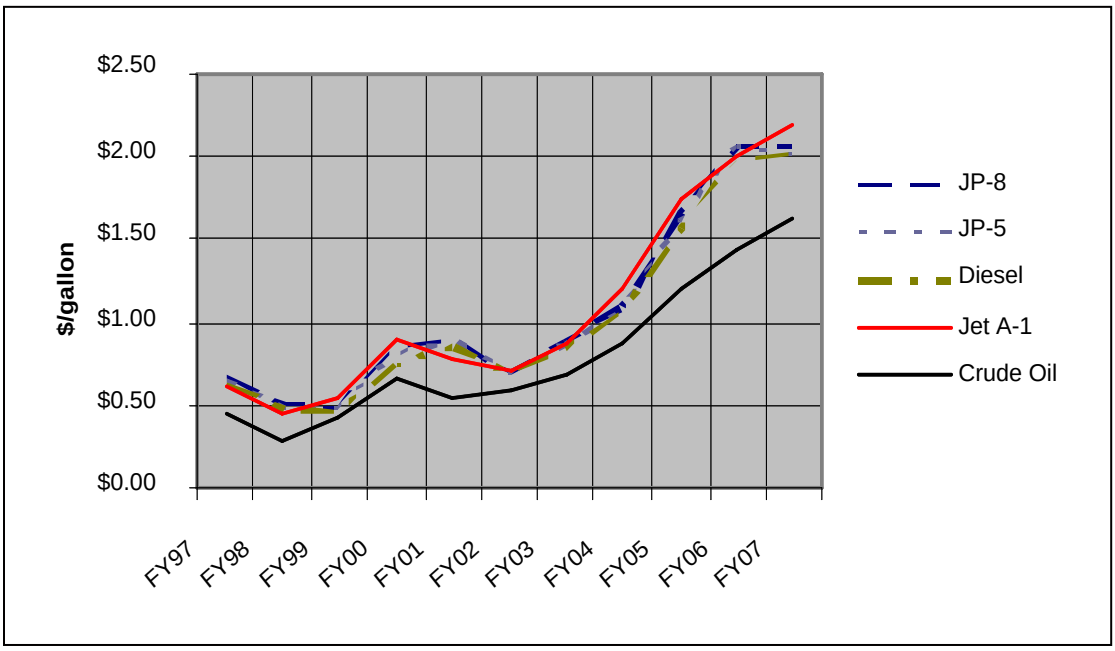
[4] Numbers do not sum to 100% due to rounding. Data provided to CRS by the Defense Logistics Agency.

[5] Crude oil costs are typically reported in terms of $/barrel, but for the purpose of this analysis, the cost is graphed in terms of $/gallon (1 barrel = 42 gallons).

	Total Products $/gal	JP-8 $/gal	JP-5 $/gal	Diesel	Jet A-1 $/gal	Refiner Crude Oil Cost	
						$/gal	$/barrel
FY2006	2.02	2.06	2.05	1.96	2.00	1.43	60.24
FY2007	2.01	2.05	2.00	2.00	2.17	1.62	67.93

Sources: Defense Energy Support Service, Fact Book (2000-2007). Energy Information Administration—Petroleum Navigator, Refiner Acquisition Cost of Crude Oil, and Refiner Petroleum Product Prices by Sale Type.

Figure 1. DOD Petroleum Product Costs ($/gallon)



Sources: Defense Energy Support Service, *Fact Book* (2000-2007). Energy Information Administration—*Petroleum Navigator*, Refiner Acquisition Cost of Crude Oil & Refiner Petroleum Product Prices by Sale Type.

DOD Fuel Costs in Central Command Area of Responsibility

The DESC reports buying fuel used in support of Central Command (CENTCOM) Area of Responsibility (AOR), which includes Operation Iraqi Freedom, primarily from five suppliers (**Table 2**).[6] The contracts for fuel contain price escalation provisions that increase or decrease the contract award prices based on fluctuations occurring in the regional commercial markets for the same or similar fuel products. As of December 31, 2007, fuel costs from these contracts ran from $1.96 to $2.88 per gallon, except for AVGAS, a specialized fuel, which ranges from $4.98 to $5.29 per gallon.[7]

[6] Personal communication between V. O'Toole, DLA, and A. Andrews, May 2, 2008.

[7] AVGAS (aviation gasoline) is a specialized gasoline that has limited use in commercial aviation. It is commonly used for unmanned aerial vehicles.

Table 2. DESC Cost of Fuels for CENTCOM AOR

($/gallon)

Company	Fuel	Award Price Range (Through 12/31/2007) Low	High
Kuwait Petroleum Corp.	Jet A-1/Diesel/Gasoline	$1.96	$2.08
International Oil Trading Co.	JP-8/Diesel/Gasoline	$2.73	$2.88
Petrol Ofisi	Specialized Aviation Gasoline	$4.98	$5.29
Golteks	Diesel	$2.17	$2.27
Tefirom	Gasoline	$1.99	$2.03

Source: Defense Energy Support Center.

The average fuel costs between FY2003 and FY2007 (during Operation Iraqi Freedom) are shown in **Table 3.** Fuel prices rose dramatically in FY2008. As shown in **Table 4**, gasoline costs now ranges from $3.39 to $4.52 a gallon and diesel from $4.08 to $5.21 a gallon.

Table 3. Average DESC Fuel Costs for CENTCOM AOR (FY2003-FY2007)

($/gallon)

	Gallons (million)	Barrels (million)	Cost ($million)	Average $/gallon
FY2003	932.2	22.0	800.6	0.87
FY2004	1,092.2	26.0	1,040.4	0.95
FY2005	987.7	23.5	1,386.4	1.40
FY2006	1,141.0	27.2	2,535.2	2.22
FY2007	1,351.8	21.2	2,986.3	2.21

Source: Defense Energy Support Center

Table 4. DESC Fuel Costs for CENTCOM AOR (July 1, 2008)

($/gallon)

Company	Fuel	Award Price Range Low	High
Kuwait Petroleum Corp.	Jet A-1	$1.26	$3.97
	Diesel	$4.08	$4.08
	Gasoline	$3.39	$3.39
International Oil Trading Co. (IOTC)	JP-8	$5.02	$5.02
	Diesel	$5.21	$5.21
	Gasoline	$4.52	$4.52
Petrol Ofisi	Specialized Aviation Gasoline	$4.98	$5.29

Company	Fuel	Award Price Range	
		Low	High
Golteks	Diesel	$4.21	$4.39
Tefirom	Gasoline	$3.55	$3.58

Source: Defense Energy Support Center

Of the five companies providing fuel to the DESC for use in Iraq, one (IOTC) is based in the United States, one (Kuwait Petroleum Corp.) is the state oil company of Kuwait, and three (Petrol Ofisi, Golteks, and Tefirom) are based in Turkey. Some of these companies, such as Kuwait Petroleum Corp., International Oil Trading, and Petrol Ofisi have been among the top 100 suppliers to the Defense Logistics Agency in recent years.[8]

According to the DLA, fuels purchased from Kuwait Petroleum Corp. are transported into Iraq by Jassim Transport and Stevedoring Company.[9] Jassim is paid on a per-truck per-day basis. Prices range from $159 -$194 a day, depending on the size of the truck and the type of fuel being transported. Fuel purchased from IOTC is transported from Jordan. The cost of fuel charged by IOTC includes shipping into Iraq.[10] The cost of gasoline, diesel, and aviation gasoline originating from Turkey also includes shipping costs.[11] JP-8 originating from Turkey is supplied by truck under a separate tender agreement put in place by ICTB (Intratheater Commercial Transportation Branch, European Command).

Deliveries to the DESC during 2007 include the following: From February -December of 2007, the DESC received 430 thousand gallons of AVGAS from Petrol Ofisi, 25 million gallons of diesel fuel from Golteks, and 3 million gallons of motor gasoline from Tefirom. From July-December 2007, the DESC received 190 million gallons of Jet A-1, 50 million gallons of diesel, and 8 million gallons of motor gasoline from Kuwait Petroleum Corp. In that same time period, the DESC also received 80 million gallons of JP-8 jet fuel, 4.5 million gallons of diesel fuel, 670 thousand gallons of motor gasoline. As previously mentioned, the price the DESC pays for fuel destined for Iraq does not directly impact how much military units and commands in Iraq are paying because DESC generally charges a set price to all of its customers worldwide.

The price of fuel charged to U.S. military units by DESC was raised on July 1, 2008, to reflect the increased cost of crude oil. **Table 5** illustrates the change:[12]

[8] See http://www.dla.mil/library/Top100Contractors.pdf. Last visited July 7, 2008.

[9] For more information of Jassim, see http://www.boodai.com/jtc.htm. Last visited July 18, 2008.

[10] The IOTC contract is a Freight on Board (FOB) destination contract for all fuel types, thus including all transportation costs.

[11] The agreements with fuel suppliers based in Turkey are also FOB destination contracts.

[12] Pre-July fuel prices are drawn from April 2008 press reports. Post-July fuel prices were supplied by DESC. Similar fuels can have different price points. For example, Fuel Oil Diesel (DL1) is listed as $4.70 a gallon whereas Diesel Fuel (DF1) is listed at $4.07 a gallon. For complete DESC price schedule, see http://www.desc.dla.mil/DCM/Files/FY2008StandardPrices_07012008.pdf.

Table 5. DESC Fuel Charges to Units

($/gallon)

Fuel Type	Pre-July Price	Post-July Price	$ Change	% Change
Jet Fuel	$3.04	$4.07	$1.03	33.9%
Motor Gasoline	$3.15	$4.19	$1.04	33.0%
Diesel	$3.51	$4.07	$0.56	16.0%

Source: Defense Energy Support Center.

DESC reports that 81.8% of the fuel used in Iraq during FY2007 was jet fuel, 15.8% was diesel, and 2.6% was gasoline.

Iraq Domestic Subsidized Fuel Costs

The cost of gasoline in Iraq is heavily subsidized by the Iraqi government. As such, the price most Iraqis pay for fuel is not indicative of the true cost of fuel. As part of an agreement with the International Monetary Fund, fuel subsidies have been and may continue to be reduced (see **Table 6** for current subsidized prices).[13] According to one report, the Iraqi government reduced its subsidies from $6 billion in 2005 to approximately $2.5 billion in 2007.[14]

Table 6. Official Civilian Prices of Refined Product in Iraq

($/gallon)

	2005	Mar. 2006	Dec. 2006	Jun. 2007
Regular Gasoline	0.05	0.27	0.75	1.23
Blended/Super Gasoline	0.13	0.67	1.05	1.38
Kerosene	0.01	0.07	0.22	0.46
Diesel	0.03	0.24	0.45	1.07

Source: Energy Information Administration, Official Energy Statistics From the U.S. Government. Iraq: Oil. See http://www.eia.doe.gov/emeu/cabs/Iraq/Oil.html.

It is estimated that the official price for a gallon of regular gasoline in Iraq now stands at approximately $1.44.[15] However, as this price is subsidized by the government, the black market price of gasoline can be almost three times the official price, reportedly hovering around $4.00 a gallon.[16] The black market price of gasoline may be a closer reflection of the true cost of gasoline in Iraq than the subsidized government price.

[13] Energy Information Administration, Official Energy Statistics From the U.S. Government. *Iraq: Oil*. See http://www.eia.doe.gov/emeu/cabs/Iraq/Oil.html. Visited July 2, 2008.

[14] Gulfnews.com, July 3, 2008, http://archive.gulfnews.com/articles/07/07/03/10136424.html. Visited July 2, 2008 ET. Difference in dates is due to time zone differences. According to another media report, Iraq is subsidizing diesel by $65 per barrel and petrol by $64 per barrel. See Organisation of Asia-Pacific News Agencies, *UAE Has Lowest Subsidies on Fuel Among Oil Producers*, July 3, 2008.

[15] Associated Press, *Particularly Long Gas Lines in Baghdad*, July 1, 2008.

[16] Ibid.

Comparing the cost of fuels delivered to the CENTCOM area of responsibility and the cost paid by Iraq's civilian population is difficult. A number of the fuels used by the U.S. military are generally not used by Iraqi civilians. Where comparable fuels such as gasoline and diesel are used, it is estimated that the military units pay higher prices than Iraqi civilians paying the official price for a number of reasons, including (1) the Iraqi government subsidizes the cost of gasoline and diesel in Iraq,[17] (2) the military likely has higher transportation costs associated with bringing fuel into Iraq, and (3) the price charged by the DESC is the "level price" that it charges to all its military customers around the world, irrespective of the actual cost of fuel supplied to Iraq.

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[17] Oil exporting countries have a long-standing tradition of subsidizing gasoline and other oil products by its citizens.