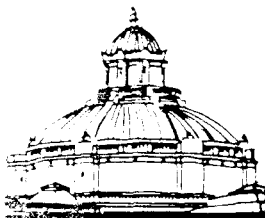

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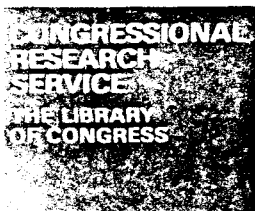
PERSIAN GULF OIL TRADE: NUMBERS AND ISSUES

**GOVERNMENT DOCUMENTS
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Lawrence C. Kumins
with
Robert L. Bamberger
and
Michele Passarelli
Environment and Natural Resources Policy Division



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ABSTRACT

This report is an overview of the role of Persian Gulf petroleum exporters in world oil supply. Dependency of importing nations is discussed, and the current supply situation is described, as is the potential for reducing shipments through the vulnerable Hormuz Strait.

PERSIAN GULF OIL TRADE: NUMBERS AND ISSUES

The recent missile attack on a U.S. Navy vessel in the Persian Gulf has once again focused attention on the fragile nature of ocean transport via the Strait of Hormuz. This paper describes oil production and exports from the Persian Gulf region, and the dependence of the U.S., Japan and Western Europe on oil shipments through the Gulf as it stands today. Also discussed is the alternative of using pipelines to avoid shipping through the area of difficulty.

Reduced dependence on shipping in the Gulf and through the Strait of Hormuz is a near-term possibility. Nearly 1 mbd of unused pipeline capability designed to circumvent the hazards of shipping in the region now exists. If current plans are realized, by year end an additional 2 mbd of such capacity will be on line. The net result will be that world dependence on shipping through the Gulf could be reduced by more than one-third.

Measuring Vulnerability: How Important Is Persian Gulf Oil Supply?

Current petroleum exports by Persian Gulf countries--Iran, Iraq, Bahrain, Kuwait, Saudi Arabia, Qatar, and the United Arab Emirates--are shown in Table 1. Currently, these countries export about 9 mbd of petroleum, but not all of it is shipped through the Gulf and the Strait of Hormuz.

Table 1. Recent Persian Gulf Oil Exports(mbd)

Country	Production	Consumption	Exports via Hormuz	Exports via pipeline
Kuwait	1.35	0.15	1.20	
Qatar	0.30	nil	0.30	
Saudi Arabia	5.00	0.90	3.06	0.50
UAE	1.20	0.13	1.07	
Iran	2.20	0.60	1.60	
Iraq	1.65	0.28		1.37
Total			7.01	1.87

N.B.: Exports from Bahrain amount to 40,000 b/d and have not been included here.

Sources: CRS estimates based on most recent available data. Production data from January, 1987 Monthly Energy Review (DOE), Table 10.1a. Consumption data from International Energy Statistical Review(CIA), 28 April, 1987, p. 4.

Iraq exports 1.4 mbd, but virtually none of it moves via the Gulf. Indeed, Iraq currently need not be considered a Persian Gulf oil exporter: it has exported no oil via the Gulf for some years, and is not likely to do so in the foreseeable future. Its exports move via pipeline through Turkey, and across Saudi Arabia to the Red Sea port of Yanbu. Further expansion of pipeline capacity in Turkey is scheduled for completion in late 1987, which will bring capacity up to 1.5 mbd. This could accommodate all of Iraq's current exports.

Expansion of the Saudi pipeline to Yanbu on the Red Sea from about 1.9 mbd to 3.2 mbd is also scheduled for late-1987 completion. This will raise export capability at Yanbu by 1.3 mbd. Additionally, another 500,000 b/d of capacity on this line could be available if Iraq exports were routed via Turkey. Thus, Saudi Arabia would be able to export over 3 mbd from the Red Sea--an amount equal to roughly 75 percent of current exports.

Measuring Vulnerability: Who Depends on Persian Gulf Oil Trade?

A quick review of the statistics indicates that Japan is most heavily dependent on Gulf petroleum at about 50 percent of consumption, the OECD is less dependent at below 30 percent of consumption. The U.S. imports less than 10 percent of its oil from the Gulf. These data are shown in Table 2.

Table 2. Consumption, Imports, and Imports Transiting the Persian Gulf:
Selected Countries(mbd).

Country	Consumption	Total Imports	Gulf Imports	Percent of Consumption	Percent of Imports
USA	16.2	6.0	0.9	5.5	15.0
Japan	4.4	4.4	2.1	47.7	47.7
OECD(Europe)	12.0	10.3	2.9	24.2	28.2
[France	1.9	1.9	0.5	26.3	26.3]
[Germany	2.5	2.5	0.2	8.0	8.0]
Total	32.6	20.7	5.9	18.1	28.5

Sources: CRS Estimates based on current data. Consumption from DOE Monthly Energy Review, Jan. 1987, Table 10.2; Imports from International Energy Statistical Review(CIA) 28 April, 1987, p.4

These statistics describing dependency are based on imports actually transiting the Gulf now. As discussed later, existing and new pipelines will effectively reduce this dependence by a factor of one-third by the end of the year.

Shipping in the Persian Gulf--1987

Since the beginning of the "shipping war" in 1983, there have been over 200 attacks on vessels in the Persian Gulf, more than half by Iraqi forces. The year 1987 saw increasing attacks on vessels transiting the Iran-Iraq War

Exclusion Zone, including two Soviet vessels. Vessels in this area are subject to Iranian and Iraqi interdiction. The Zone covers a large area of the Persian Gulf, which further constricts the Strait of Hormuz pressure point. While most recent attacks have been focused on vessels calling on ports in Kuwait, other vessels have been fired upon, including those outside the Exclusion Zone. The focus on Kuwait-bound vessels stems from a perception on the part of Iran that Kuwait is trans-shipping war material, financing Iraqi war efforts and assisting Iraq oil exports. Additionally, the distance between the Iran and Kuwait border is small, and Kuwait is a potential target for Iranian expansion.

With the pace of attacks escalating, the Soviet Union has leased 3 crude carriers to Kuwait. When the transaction actually takes place, these vessels will fly the U.S.S.R. flag and carry Soviet crews. Russia has long sought an opportunity to exert a presence in the region, where it has historically been unwelcome. In response, the United States has extended an offer to re-flag Kuwait tankers, placing U.S. masters--but not complete U.S. crews--aboard these vessels. ¹ U.S. flag vessels would presumably be offered U. S. naval protection, which has been enhanced in the region. In all likelihood Russian vessels would be protected by Soviet naval forces, although the Russian navy does not now have a permanent presence in the Gulf per se.

Beyond the issue of protecting U.S. flag vessels is the extent of protection the U.S. Navy will offer shipping generally. At issue is whether U.S. policy will be to keep sea lanes open to all traffic or protect only

¹ This has created a separate area of legislative interest: exactly what, under the Merchant Marine Act of 1936, constitutes a U.S. vessel. These Kuwaiti vessels appear to have benefited from waiver of many of the requirements normally imposed by the Coast Guard on ships Documented as vessels of the United States.

U.S. flag ships. This decision is one entailing substantial risk and foreign policy significance. Most vessels serving the U.S. in world trade do not fly the U.S. flag even though they may be owned by U.S. shipping interests.

Reducing Dependence on Gulf Shipping: Pipeline Potential

There is a great deal of pipeline capacity in the region designed to circumvent the need to transport oil through the Strait of Hormuz, a major pressure point in world shipping. Some is now operational and more is under construction and will be available in 1987. Additionally there are two pipeline systems that transit to the Mediterranean. Both of the latter are not operating due largely to political problems. And a good deal of other capacity is planned for the more distant future. For a complete review of the regional pipeline situation, attention is called to CRS Report to Congress, Disruption of Oil From the Persian Gulf: Near-Term Vulnerability (Number 86-565 ENR).

There are several points to be made about the pipeline situation. In the very near term, there is nearly 1 mbd of currently available capacity to export Saudi crude via the Red Sea. This is available now. But, by years end, the Yanbu pipeline will be expanded to carry 1.3 mbd more crude.

By late 1987, there will be an expansion of the Iraq-Turkey pipeline to 1.5mbd. This will be capable of accommodating all Iraq's current exports. The expansion could obviate Iraq's need to use Saudi facilities to export oil, which should relieve some political pressure on Saudi Arabia from Iran. If Iraq uses its expanded facilities through Turkey, Saudi Arabia will then have the ability to export three-quarters of its current output via the Red Sea.

All told, the flow of oil through the Gulf and Strait of Hormuz could be reduced by 2.7 mbd if Saudi Arabia fully utilized its Yanbu pipeline for export purposes. And Iraq could export another 400,000 b/d via Turkey. The net result is that world dependency on Gulf shipping could be reduced by over 3 mbd, declining to the 4.5 mbd level.

This is illustrative of the potential for pipelines to be used to circumvent troublesome shipping pressure points. The earlier CRS report describes the pipeline situation more broadly, and highlights limitations and problem areas as well. And it is unlikely that pipelines could reduce the dependence on shipping in the Gulf completely, but the magnitude of potential problems can be diminished, and indeed will diminish later this year.

The discussion above is set in reference to today's level of Persian oil trade. But it must be kept in mind that world dependence on the region's oil is likely to grow. While dependence on shipping could decline in the near-term, it is likely that this could be a transient situation. This is particularly true for the United States, where demand has grown and production declined.