SAUDI OIL POLICY

by David E. Long

Isaac Newton is said to have been the last man in the world who knew everything. This is not an indictment of subsequent generations but simply a recognition of the fact that the sum of human knowledge has expanded beyond the grasp of any individual.

So have the complexities of petroleum production.

To understand them fully one must be a geologist and a petroleum engineer versed in the mysteries of rock strata and seismography, an economist comfortable with the intricacies of supply and demand, and a political scientist familiar with the shifting eddies of domestic and foreign policy. An outsider, trying to understand how Saudi decision-makers perceive all these factors, also must be, to some degree, an anthropologist.

Yet the task is important. With proved reserves of roughly 150 billion barrels (possibly as much as 250 billion barrels), Saudi Arabia is sitting on one-quarter of the world's oil. Of the globe's oil producers, it has the greatest potential for sustained, large-scale expansion of production capacity—the amount of oil it *could* be pumping. The kingdom's production capacity has been increasing steadily for some time. Between 1960 and 1977, the Saudi share of OPEC production doubled; Saudi Arabia also accounted for 40 percent of the total increase in world production between 1970 and 1977. Some 20 percent of U.S. oil imports come from the kingdom: about 1.4 million barrels per day (b/d). What the Saudis do directly affects us all.

It is easy to forget that the kingdom was virtually penniless just 40 years ago. Until oil was discovered in commercial quantities in 1938, the Saudis were barely able to make ends meet with earnings from the Hajj (the annual Muslim pilgrimage to Mecca). During the 1930s, the Saudi Minister of Finance, Abdallah Sulayman, reportedly kept the financial accounts of the entire kingdom in a big, black ledger which he slipped under his bed at night.

The first concession to search for oil was awarded in 1923 to an entrepreneur from New Zealand named Frank Holmes. He didn't find any. The agreement lapsed, and in 1933, Standard Oil of California (Socal) acquired a new concession, establishing the California Arabian Standard Oil Company (Casoc) to explore for oil. In 1935, Texaco joined Socal in the venture; in 1948, Standard of New Jersey (now Exxon) and Standard of New York (Mobil) also bought in. Meanwhile, in 1944, Casoc's name was changed to the Arabian American Oil Company (Aramco). Commercial quantities of oil were not exported until after World War II. Since then, Saudi revenues have risen steadily, with the most dramatic jump occurring in 1973, with the fourfold increase in oil prices from $3.01 to $11.65 per barrel.

Under the terms of the original concession, virtually all Saudi oil belonged to Aramco.* By the 1970s, however, ownership had begun to change hands under a policy styled "participation," which was devised by the Saudi Petroleum Minister, Shaykh Ahmad Zaki Yamani. In 1972, the Saudi government bought 25 percent of Aramco's equity; by 1974, the kingdom had acquired 60 percent. Ultimately, the Saudis are expected to buy out Aramco entirely. The company will be retained as essentially a service agency to operate the Saudi-owned fields and facilities.

Even seasoned diplomats find it hard to determine who really makes Saudi oil policy. To be sure, the royal family, through consensus, determines the general direction of most matters in the kingdom and sets the bounds within which subordinate officials may act. The family does not, however, become directly involved in government operations, despite the placement of a number of princes in key positions. Royal family politics and government politics, though closely related, are quite distinct. Some very senior princes in the family, like the King's older brother, Prince Muhammad ibn Abd al-Aziz, are not even in government, whereas Princeton-educated Prince

*Japanese and some small American companies were awarded minor concessions in the former Saudi-Kuwaiti "Neutral Zone" and its offshore waters.

David E. Long, 41, is a senior analyst at the Office of Research for Near East and South Asia, U.S. State Department, and a lecturer at Georgetown University and the Johns Hopkins School of Advanced International Studies. He is a graduate of Davidson College (1959) and received his doctorate in government in 1973 from George Washington University. His foreign service experience includes a tour in the Middle East from 1963 to 1969. He is the author of The Persian Gulf: An Introduction to Its People, Politics and Economics *(1976) and* The Hajj Today: A Survey of the Contemporary Pilgrimage to Makkah *(1978). The views expressed in this article are not necessarily those of the U.S. government.*

Saud al-Faisal, who holds the very important Foreign Affairs portfolio, is considered to be a junior member of the family.

King Khalid acts as the link between the family and the government, being at once the head of the family, Prime Minister, and Chief of State. The key national security positions—First and Second Deputy Prime Minister, Defense, Interior, and Foreign Affairs—are also held by royal princes. While this places them in more powerful positions than the non-royal ministers, it does not guarantee that their views will always prevail.

In the latter part of the late King Faisal's reign, the chief officials with whom the King consulted on oil matters were appointed to a newly created Supreme Petroleum Council. The council has survived King Faisal (and many of the original members) to remain the principal "consultative" body on oil policy. Its members include two princes and four "technocrats."* The make-up of the council allows for a broad expression of views. For example, Yamani, by expressing the Petroleum Ministry's point of view, may find himself at odds with Aba al-Khayl looking at the same problem from a fiscal standpoint, or Planning Minister Shaykh Hisham Nazer looking at it from an economic development perspective, or Saud al-Faisal looking at the foreign policy implications.

The New Conservationists

The proceedings of the Supreme Petroleum Council appear to be highly informal. There are no regularly scheduled meetings, and in the absence of a member, no provision is made for an alternate. Decisions are reached through the time-honored Saudi practices of consultation (*shura*) and consensus (*ijma*). Because of the press of business on each member, the Council meets infrequently. Nevertheless, it remains the institution most directly responsible for the formulation of Saudi oil policy.

There are three major determinants of that policy: (*a*) the need to generate oil revenues at a level compatible with the country's total economic development; (*b*) the need to ensure regional and international political and economic stability; and (*c*) the need to maintain a predominant influence over price-

*The council's members are Prince Fahd, Crown Prince and First Deputy Prime Minister; Prince Saud al-Faisal, Foreign Minister; Ahmad Zaki Yamani, Minister of Petroleum and Mineral Resources; Hisham Nazer, Minister of Planning; Muhammad Aba al-Khayl, Minister of Finance and National Economy; and Abd al-Aziz al-Qurayshi, the Governor of the Saudi Arabian Monetary Agency (SAMA), the central bank. The secretary to the council is Abd al-Aziz al-Turki, the Deputy Petroleum Minister. The term "technocrat" is used here broadly to refer to those with advanced Western (usually U.S.) university degrees.

setting through the Organization of Petroleum Exporting Countries (OPEC).

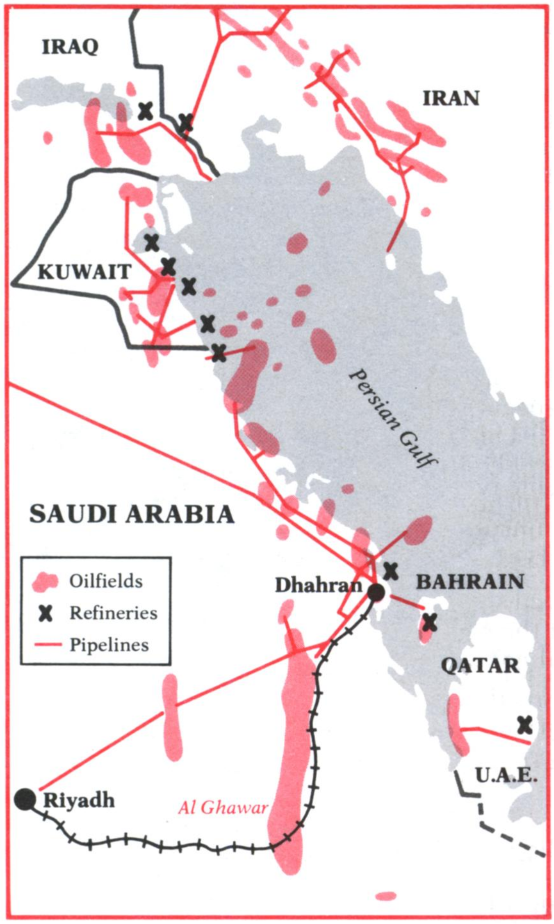
The matter of oil revenues is complicated. Whenever Saudi Arabia adjusts its oil production rates, it must weigh the advantages of increased revenue against the resulting depletion of its oil reserves. In recent years, Saudi Arabia has consistently produced more oil (about 7.5 million b/d in 1978) than it "needed" to. The kingdom, with a population estimated at 4 to 5 million and few natural resources other than petroleum, can only absorb so much investment. According to Planning Minister Nazer, it could probably generate sufficient income to meet its domestic economic needs by exporting a mere 5 million b/d. Other observers have cited lower figures. By producing beyond its ability to spend, Saudi Arabia can only watch its growing foreign exchange reserves (estimated at $70 billion) lose value through inflation and currency fluctuations. Indeed, some Saudi "conservationists," such as Nazer, argue that the oil may be worth more in the ground.

Over a Barrel

"Very high production raises serious problems for us," Nazer told columnist Joseph Kraft last summer. "It puts pressure on our institutions, which have to manage rapid growth. It creates more inflation. It brings in more foreigners. It gives us more assets than we can handle in investments." The conservationists believe lower production will boost oil prices, thereby dampening total world demand and further forcing consumers to shift to other forms of energy. This would slow the depletion rate of Saudi Arabia's principal marketable resource.

But setting production rates to meet only domestic financial requirements would jeopardize worldwide political stability, in which the Saudis have a major stake. Saudi foreign exchange reserves are invested mainly in the capital markets of Europe and the United States. If the world economy were to suffer as a result of Saudi oil cutbacks, the Saudis would suffer too.

As devout guardians of the Muslim holy places, Mecca and Medina, the Saudis feel a special responsibility to protect the Islamic way of life. One of the greatest threats to that way of life, in the Saudi view, is the expansion of communism or indeed any kind of radical, atheistic ideology. Only a healthy West can contain that threat. As Petroleum Minister Yamani candidly observed, "We cannot go to extremes in our nationalistic outlook and ignore the world economic situation by producing at levels which would satisfy our strict requirements alone. Such actions



Middle East oil deposits (including Saudi Arabia's giant Ghawar field) are clustered along the Persian Gulf. Saudi Arabia produced about 7.5 million barrels per day in 1978, 30 percent of total OPEC oil production. A barrel of oil, which cost $3.01 before the 1973 embargo, now sells for more than $12. In December 1978, OPEC approved a 14.5% price increase, deplored by the Saudis, while in strife-torn Iran, production dropped sharply, tightening supply.

would lead to a world economic recession, shake governments all over the world, and generate massive unemployment—factors which would inevitably lead to war in which we would be a party and a target."

With the recent introduction on world markets of new, non-OPEC oil from Mexico, Alaska, and the North Sea, and with the sluggish pace of the global economy, there is currently an abundance of oil on the market. However, this is expected to change in the 1980s, with world demand again exceeding available supply. The result could be an energy crisis worse than that of 1974. Saudi Arabia will be under tremendous pressure from the major oil consumers to further expand its productive capacity in order to avert a major world economic crisis. Such a decision would have to be made soon; yet too rapid expansion of capacity could too quickly deplete Saudi Arabia's recoverable oil reserves. Expanded capacity would also be another step toward increasing actual production; as production increased, the problem of idle revenue would become even more troublesome than it is now. Moreover, an assured flow of petroleum from Saudi Arabia to the West would do nothing to lessen world dependence on oil—something Saudi Arabia dearly desires, for reasons of both long-term economics and security.

Water and Salt

The Saudis must also deal with the worrisome technical aspects of oil production itself, particularly as they take over the reins of Aramco. Lately they have begun to encounter problems associated with older oil fields. Salt has begun to encroach on some of the oil reservoirs, and there has also been a drop in the natural pressure which forces oil to the surface. Both problems, if unsolved, could lead to a permanent loss of recoverable reserves.

In order to combat salt encroachment, some wells have been shut in. In other wells, the oil and salt water are separated at the surface. To maintain production levels, meanwhile, natural gas and water are being injected back into the reservoirs to increase pressure. Thus far, the Saudis have been using ancient and slightly saline water from aquifers deep underground. Concerned that this resource, too, should be conserved, the Saudis have now decided to inject sea water, and sea water injection has been scheduled (December 1978) for Ghawar, the largest single oil field in the world.* Initially, the lighter oil will rise and float above the water; but over time, the sea water could threaten to cause salt encroachment as it mixes with the oil. In any event, the Ghawar field is so big that the mechanics of water injection there may not follow the usual rules. The behavior of this field will be a critical factor in how rapidly Saudi Arabia expands production capacity, which in turn will help determine Saudi oil production in the 1980s.

The Saudi commitment to political stability is a second major influence on its oil policies. It has, for example, induced the Saudis to earmark much of their oil revenues for foreign aid to Arab states, Islamic states, and the Third World in general.

*The Ghawar field comprises six distinct but interconnected structures: Fazran, Ain Dar, Shedgum, Uthmaniyah, Hawiyah, and Haradh. Two hundred kilometers long, it produced about 7.5 million b/d in 1977—9 percent of total world production.

The greatest threat to regional stability, in the Saudi view, is Israel. Not only do the Saudis look upon the creation of Israel as an injustice to the Arabs, including Palestinians; they also see the persistence of the dispute as the greatest radicalizing force in the Arab world. The Saudis have been willing to use their oil resources to help nurture a solution to the Arab-Israeli conflict: They have resisted pressures within OPEC to raise oil prices and to abandon the dollar as the monetary unit for computing prices, at least in part to acknowledge the U.S. role in peace negotiations.

The Saudis have also used oil as a tool of coercion. An oil embargo, even the hint of one, is a powerful weapon indeed. But it has its drawbacks. A sudden embargo-induced oil shortage would seriously weaken the economies of those industrialized states on which Saudi Arabia ultimately depends politically, militarily, and economically. It is doubtful, then, that the Saudis would consider enforcing an embargo under any circumstances short of a major crisis, such as another Middle East war. Indeed, the only time an embargo has been declared was during the October 1973 Arab-Israeli war. King Faisal, reacting to the announcement of a massive $2.2 billion U.S. military aid program to Israel, imposed an embargo through the Organization of Arab Petroleum Exporting Countries (OAPEC) aimed primarily at the United States and the Netherlands (for its alleged pro-Israeli policies).*

OPEC: Divided Cartel?

A third major factor in Saudi oil policy is the kingdom's commitment to OPEC, the Organization of Petroleum Exporting Countries. The organization was founded in 1960 by Venezuela and Middle Eastern oil producing countries to influence the price of oil. While often characterized as a cartel, the political and economic interests of OPEC members are so diverse that OPEC functions almost exclusively as an organization to set oil prices and production rates.

In its early years, OPEC was relatively ineffective, primarily

*Americans tend to blur the distinction between OAPEC and OPEC, as well as between the oil embargo and the quadrupling of the price of petroleum. In fact, OAPEC and OPEC are not the same; the embargo and the price hikes were not (initially) related; and the so-called quadrupling actually resulted from two separate doublings. To set the record straight: (1) the first price rise, which coincided with the October 1973 war but had nothing to do with it, was called for by OPEC; (2) the oil *embargo*, unconnected with the price hike, was begun by OAPEC, in part through Saudi efforts; (3) the second doubling of oil prices, in December 1973, *was* influenced by the embargo, as OPEC set new rates to reflect the short supply of petroleum on world markets. This second price rise, led by Iran, was opposed by King Faisal, who feared the economic consequences for the industrialized West.

because there was a buyers' market in petroleum. Since the producing countries could not "eat their oil," they were forced to sell it at whatever price the oil companies would pay. This changed in the 1970s with the shift to a sellers' market; by 1973, OPEC had acquired total power to set prices.

At the time, there was a fairly wide-spread sentiment among Westerners who should have known better that as the growing world recession depressed demand for oil, OPEC would cease to function as the price setter. The reasoning behind this view was that, of the major producers, only Saudi Arabia could afford the revenue losses of major production cuts, but that at some point, the Saudis would tire of voluntarily bearing the brunt and call for *pro rata* cuts from all other OPEC members. At that point, OPEC solidarity would break down.

More of the Same

This view was naive in several respects. It overestimated the total production cuts necessary to keep prices stable. It overestimated Saudi revenue requirements and therefore the threshold at which the Saudis would halt further unilateral production cuts. But worst of all, it *underestimated* the psychological commitment to OPEC of all its members. Having been wholly dependent on market conditions and the oil companies for, in some cases, 40 years or more, OPEC members are absolutely insistent that they maintain the power to set prices through OPEC solidarity, even in a declining market.

Saudi Arabia, no less than its fellow OPEC members, is determined to keep OPEC strong and will absorb considerable economic costs to that end. Moreover, within OPEC, the Saudis want to maintain their predominant position. In this regard, their ability to cut production in order to maintain prices—without seriously affecting their economic development—is highly advantageous. They also have the capacity to increase production in order to keep prices from rising too rapidly.

Barring a major crisis, such as the resumption of Arab-Israeli hostilities, it is both logical and likely that the Saudis will follow a middle of the road policy on oil for the foreseeable future. Yet there is still room for some flexibility. For example, with the present excess in world capacity, the "conservationists" in the Saudi government have succeeded in adopting a policy allowing the kingdom's oil production to fall without placing undue pressure on the world economy. In February 1978, the government placed a ceiling on production of light crude not to exceed 65 percent of total production. (The move was made to bring light crude production into line with the estimated proportion of light to heavy crude oil in total Saudi reserves, as well as to ease the strain on the Ghawar field.) The effect of this decision has been to reduce overall Saudi oil production to roughly 1 million b/d less than the present ceiling of 8.5 million b/d.

With a current capacity of over 10.5 million b/d, the Saudis can easily increase production as demand picks up in the 1980s. The real question, however, is not about future production within current capacity limits, but about future capacity itself. How fast will the Saudis expand capacity to keep up with anticipated demand? Some recent studies have stated that Saudi capacity will have to reach 20 million b/d by 1990 to keep up with world needs, a figure the Saudis reject out of hand. According to Yamani, studies "expecting the King to produce 20 million b/d are speculative and not to be taken seriously."

With world economic growth still below expectations, other Western observers have scaled down the figure of required Saudi capacity in the 1980s to about 16 million b/d. Even this figure may be high. And there is no evidence that the Saudis are gearing up to meet such demand. As they take over production responsibility from Aramco, the Saudis will naturally move somewhat cautiously; the technical constraints on production are great.

In the meantime, the Saudis will probably continue to exert a moderating force on prices within OPEC, though slightly less so than in the past. To avoid another energy crisis, they will probably support a gradual rise in oil prices, slightly higher than the rise in global inflation. "Unless oil prices are permitted to grow gradually in real terms throughout the rest of the century," Yamani stated in an address to the Canadian Society of Petroleum Geologists in June 1978, "another sharp price increase is inevitable by the end of the 1980s."