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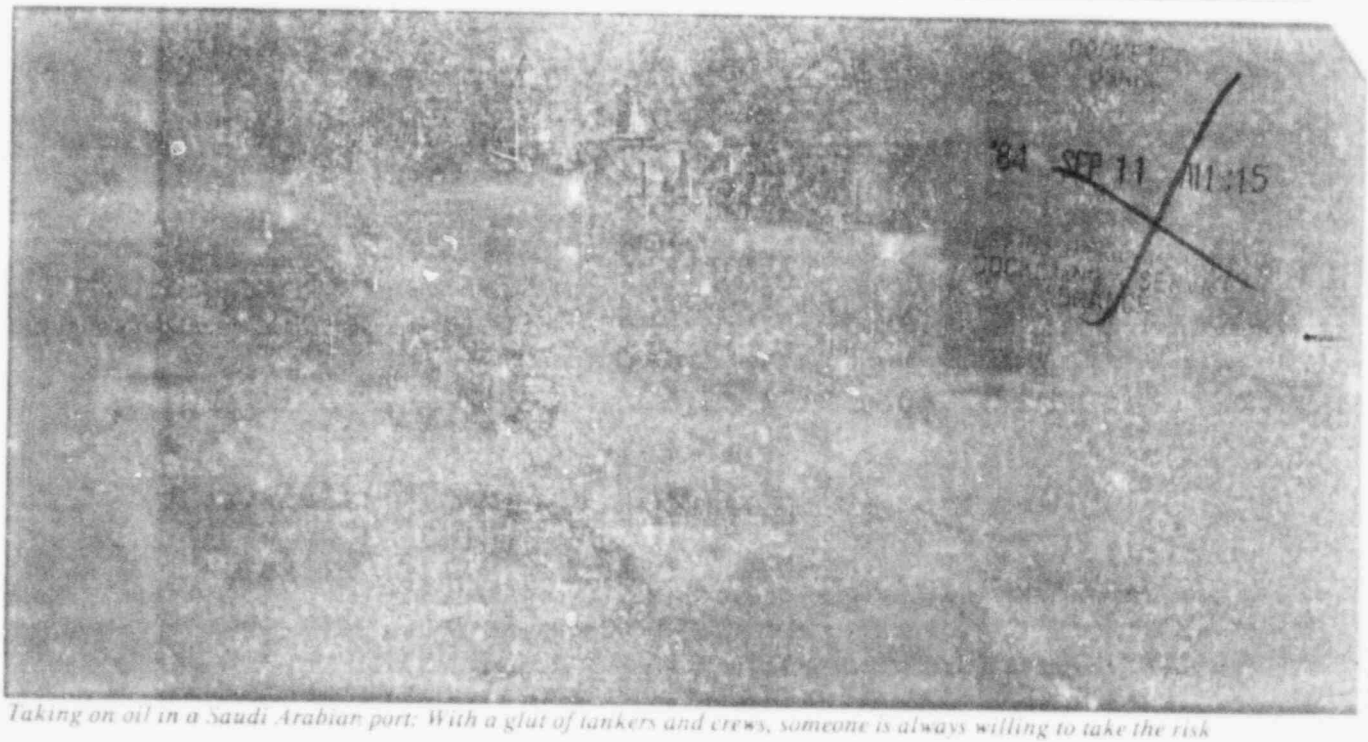

Taking on oil in a Saudi Arabian port: With a glut of tankers and crews, someone is always willing to take the risk

Would a Cutoff Hurt?

Suppose a heated-up war did cut off the supply of oil from the Persian Gulf: would the world's economy be forced to its knees? Not likely. To begin with, oil production from the area is not as important as it was five years ago, when shortages caused by the Iranian revolution panicked the oil markets. The region's producers now account for 20 percent of world output, down from 33 percent in 1979. And the world is awash with a surplus of oil, largely because oil-thirsty nations have learned to conserve. Given the changed circumstances, experts say that the United States and its industrial allies could survive a total loss of Persian Gulf crude for as long as 300 days.

The optimists present a fairly convincing case. Total war in the area would deprive the global supply line of about 8 million barrels of crude a day. But increased production from other sources would quickly cut that shortfall by half. Other producers such as Nigeria, Venezuela, Indonesia and Mexico would eagerly turn on surplus capacity, and Saudi Arabia might be able to increase its daily run of crude through its pipeline to the Red Sea by 1 million barrels. The Saudis have also shrewdly prepared for an emergency by mooring tankers holding as much as 70 million barrels of oil in berths outside the gulf.

This would still leave the world with a far greater shortage than at any time in the past. But its ability to finesse that shortage is also greater. Japan and Western Europe have enough oil in storage to last up to four months if they continue to use it at their current rates. The United States has 400 million barrels of oil in its strategic petroleum reserve, against only 75 million barrels in 1979. By one estimate, the industrial countries would not run out of oil for 26 days even if all global production should cease. The outlook is probably even rosier than these numbers suggest: presumably each nation would launch a renewed conservation effort, reducing its daily needs.

In truth, the West will probably never be put to such an all-out test. Rather than escalate to all-out war, the Iranians may continue sporadic attacks on tankers and perhaps strafe a Saudi or gulf-state terminal. In that case, the experts are betting that the oil would still continue to flow at something close to present rates. While the major oil companies might not risk their ships in the gulf, there are plenty of independent tankers that will run the crude if the price is right—just as they have continued to stop at Iran's Kharg Island despite the danger of attack from Iraqi planes.

That outlook prevailed in the industry last week. "The world market has been reacting in only a very ho-hum fashion to this," said one oil executive. The short-lived market run-up was speculative, concentrated in oil futures, or "video barrels" that exist only on traders' computer screens—rather than in existing, or "wet," oil, a more realistic market indicator.

But some think the experts are far too complacent. Oil economist M. A. Adelman of MIT says that if a couple of tankers actually get sunk, motorists and oil executives alike could panic, buy every gallon and barrel in sight and create shortages. Adelman says this is a threat "more serious than the Strait of Hormuz being closed or the Iranians attacking Saudi Arabia." To prevent an outbreak of frantic hoarding, Adelman says that the United States should immediately begin selling oil out of its strategic reserve. Adelman isn't the only one worried by such a possibility. Another oil analyst says he figures there's a crisis whenever he gets a flurry of phone calls from government officials—and last week his phone rang incessantly.

DAVID PAULY with WILLIAM J. COOK in Washington and ANN HUGHEY in New York

THE MARGIN OF COMFORT

With stockpiles high and Middle Eastern oil less vital, petroleum-importing nations might survive a Persian Gulf blockade for almost a year.

In millions of barrels per day

How much the gulf exports:

Iran 1.6	Iraq .85	Kuwait .8
U.A.E. 1.0	Qatar .28	Saudi Arabia 3.5

How much gulf oil the West consumes:

Japan 2.9	Western Europe 4.3	U.S. .5

Total oil reserves: Japan 90 days; Western Europe 120 days; U.S. 70 days

Sources: Petroleum Intelligence Weekly, American Petroleum Institute

Mukluk Oil Field Starts to Look Like a Bust As 3 Partners Say Test Well Appears Dry

12/6/83

By Roger Lowenstein
And Gregory Stricharchuk
Staff Reporters of The Wall Street Journal

The Mukluk field offshore Alaska—considered the U.S.'s brightest oil prospect in 15 years—is starting to look like one of the biggest busts in the industry's history.

Just a day after Standard Oil Co. (Ohio), operator of the first test well, said the well is "probably water bearing," another partner in the drilling, Diamond Shamrock Corp., said preliminary data "indicate that the well is dry and it is likely we will write off the investment."

"Moreover, another of the partners, Shell Oil Co., said the results from the first well could doom the entire project, which has already cost the industry $1.6 billion in lease acquisitions and $140 million in drilling the first well. "This well evaluates the entire prospect," said Mike Forrest, exploration manager for Shell's Pacific Frontier Division. "If this is dry the whole thing could be dry. It's a big blow."

"This ranks right at the top with Destin Dome," an expensive and unsuccessful oil search in Florida in the mid-1970s, said Paul Leibman, an analyst with Paine Webber Mitchell Hutchins Inc. "It took about a half-dozen dry holes to bust that one. For one well this could be the biggest disappointment ever."

When they started the Mukluk project, the 17 companies with a share of the prospect predicted that the field, 14 miles off the coast of northern Alaska, could hold 1.5 billion barrels of crude oil and possibly as much as five billion barrels. Even with the smaller figure it would have been the largest American oil discovery since nearby Prudhoe Bay's nine-billion barrel field was found in 1968.

Because of its proximity to Prudhoe Bay and other geological factors, Mukluk was considered "the largest unexplored low-risk prospect in the U.S.," said Lawrence Funkhouser, vice president, exploration and production for Standard Oil Co. of California. "It's a great shame for the companies and for the country."

The news is particularly bad for Sohio and Diamond Shamrock. Sohio has been desperately looking for another big oil reserve. production at Prudhoe Bay, which accounts for 97% of its production, is expected to begin dropping sharply in 1986 or 1987.

Diamond Shamrock, a medium-sized oil company, had visions of becoming a major oil company overnight if Mukluk were successful. Its stock plummeted $3.25 a share to $20.50 in composite trading on the New York Stock Exchange yesterday, and Sohio's fell $2.125 to $43.625.

Besides Sohio, which holds 31.4% of the first well, and Diamond Shamrock, which has 10.4%, the other partners are Mobil Corp. with 15.8%; Shell, 14%; Texaco Inc., 10.7%; British Petroleum Co., 7%; Placid Oil Co., 4.2%; Amerada Hess Corp., 2.8%; Gulf Oil Corp., 1.8%; Koch Industries Inc., 1.5%; and Societe Nationale Elf Aquitaine Inc., 0.3%.

The partners in the well seemed to differ on the prospect's remaining chances. Sohio and Texaco, both of which have planned to drill wells in 1984, said it's too early to comment on whether that drilling will be carried out, and stressed that Sohio has only preliminary evidence. Mobil said "there isn't sufficient data to make definitive determination of the well's status."

However, J.L. Jackson, president of Diamond Shamrock, said "There is a high degree of likelihood that the whole prospect will be unproductive." Socal, which has a small stake in the field, agreed with that view, as did several analysts and industry executives.

The well data are based on information from electronic instruments inserted into the well, and from 14 rock samples brought to the surface. Actual testing of well fluids won't be undertaken for two or three weeks, after the well, which measures to a depth of 8,145 feet, is completed to 9,700 feet.

Mr. Jackson said, "There is a very slim chance that the lower sector will be producing," but even then, he said, "it's questionable whether it would be commercial."

Drilling in the Beaufort Sea is done from artificially built islands. The costs are so high that only very large fields are economic.

Mr. Jackson, of Diamond Shamrock, said there was evidence from oil-stained rock samples brought to the surface that the area had once contained oil, "but that leaked out a long time ago," he said. "The trapping mechanism"—or the layer of rock which seals in oil reserves—"failed. Otherwise we would have been successful." Mr. Jackson said the fact that oil had once been present in the well area "augurs well for future hunting on the North Slope."

Sohio plans a well about 45 miles northwest of Mukluk next year, and Gulf is currently drilling at the Cross Island prospect. "The companies are going to go scrambling back to their naps and try and figure out where the oil leaked to," Mr. Leibman of Paine Webber said. Once oil leaks out of a trap it's hard to recover, Mr. Funkhouser of Socal cautioned. "It can even disappear in the form of oil seeps into the ocean."

Sohio, which was touting the prospect before it was drilled, was secretive yesterday. A company scientist said employees have been told to avoid commenting about Mukluk to outsiders. "It's very sensitive, as you can imagine, and we've been told to say nothing at all," said the scientist. The company also told its Alaska officials to steer clear of reporters.

Sun Co. Stays Limit... Clears North Sea Project

By a Wall Street Journal Staff Reporter

RADNOR, Pa.—Sun Co. said it received final regulatory approval from the British Department of Energy to begin developing two blocks of the Balmoral field in the North Sea.

The energy company said it and its partners will take three years to develop the property at a... lion. The block... east coast of... Sun estimated... are recoverab... that the peak... barrels a da... start in early...

A Sun unit... 57% interest... operator.

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Iranian Push Delayed by Lack Of Arms, Planes

Tehran Military Also Said To Balk at Costly Use Of Revolutionary Guard

6/18/84

By PETER TRUELL

Staff Reporter of THE WALL STREET JOURNAL

RIYADH, Saudi Arabia – Chronic equipment shortages appear to be delaying Iran's long-awaited land offensive against Iraq.

A shortage of artillery shells, armor and aircraft in particular means that any Iranian offensive could quickly falter, officers who have defected to Arab countries recently have told diplomatic sources.

In fact, diplomatic and intelligence sources say that the offensive may never take place because of the deficiencies.

For other major international news, please see:

–U.S., Soviet exchange on possible summit may signal start of thaw in relations, page 2.

–Pressure grows for Argentina to set pact with the International Monetary Fund, page 2.

–Chrysler to buy 5% of Maserati, page 6.

In Washington, State Department officials agree that severe logistical problems have limited Iran's ability to mount a major offensive, but they still believe a massive assault may be possible. One official notes that, rather than disband their large assault force, estimated at up to 500,000 men, the Iranians recently increased its readiness.

Another problem facing Iran, the defectors have disclosed, is a lack of commitment by Iran's own military to the costly offensive strategy advocated by the country's revolutionary guard, which forms a separate, irregular army. While the military hasn't in the past played a big part in Iranian offensives, its help may now be needed to bolster the revolutionary guard, intelligence sources say.

U.S. officials also say they have heard "speculative" information suggesting a split within the Iranian leadership over whether to press ahead with the offensive. But U.S. and European diplomats believe that the top leadership in Iran remains united and isn't yet ready to make major concessions to halt the fighting.

Still, equipment shortages and differences over tactics already appear to be affecting Iran's strategy in its nearly four-year border war with Iraq. Iran, for example, recently agreed for the first time to a truce with Iraq on the shelling of civilian targets. In the weeks up to the truce, Iran had suffered much heavier shelling and casualties than Iraq in those exchanges. Analysts say Iran's shortages of artillery ammunition played an important part in agreeing to the limited truce.

And on Friday, Hashemi Rafsanjani, speaker of Iran's Parliament, said during a prayer congregation at Tehran University that Iran is ready to agree to a halt to attacks on tankers in the Persian Gulf if Iraq does the same.

For its part, the Reagan administration says it is placing its hope in a United Nations peace effort that has already yielded the agreement by both sides to stop attacking civilian targets. Iran's proposal for a broader truce that would stop attacks on gulf shipping adds to what one U.S. official describes as "guarded" optimism.

Iraq's attacks on tankers heading for Kharg Island – the major Iranian oil-shipping terminal – have proved quite effective in reducing traffic. A continued air war against tankers could deplete Iran's small number of serviceable aircraft if it leads to dogfights with fighter jets of other nations bent on protecting gulf traffic.

Iraq isn't willing yet to give up its campaign to block Iran's oil trade. Iraq said Saturday it would halt its attacks on shipping traffic headed toward Iranian ports only if its own ports could open. The main Iraqi port, Basra, has been closed since the Iran-Iraq war began in September 1980.

Both Saudi Arabia and Kuwait, which have supported Iraq with money and oil, cautiously welcomed the Iranian proposal, according to reports yesterday. It is mainly tankers visiting their ports that have suffered Iranian air attacks. But Saudi Arabia and Kuwait's statements probably won't persuade Iraq to agree to any truce on tanker attacks.

The Iran-Iraq war has been termed a war of attrition because neither side has managed to overwhelm the other. Often, observers have looked at the vastly bigger Iranian population, more than 40 million compared to Iraq's 14 million, and concluded Iran must eventually wear down Iraq's manpower reserves. But arms, aircraft and equipment are just as important, and Iran hasn't been able to get nearly as many new arms as Iraq, whose major suppliers include the Soviet Union and

Banks in Pakistan to Stop Paying Interest in 1985

ISLAMABAD, Pakistan (Reuter) – Banks in Pakistan, including foreign banks, will stop paying interest to depositors next year to conform with Islamic law, Finance Minister Ghulam Ishaq Khan said.

More than a dozen foreign banks operating in Pakistan have welcomed the decision and given assurance they will cooperate, Mr. Ishaq Khan said.

Interest payments are forbidden by the Koran, the sacred book of Moslems. The alternative is a profit-sharing and loss-sharing system and both methods are now used by banks in Pakistan.

Sudan and Iran are also moving toward a totally Islamic banking system, and Islamic commercial banks are spreading in the Persian Gulf.

Argentine Mistrust of IMF Spurred It to Issue Its Own

USNRC

'84 SEP 11 A11:16

By LYNDA SCHUSTER

Staff Reporter of THE WALL STREET JOURNAL

BUENOS AIRES, Argentina – In a quiet office deep within the government's maze of ministries, an Argentine official gave his assessment of the recent bargaining with the International Monetary Fund over an austerity plan: "They just aren't serious about us."

This perception of the IMF seems to have shaped Argentina's recent negotiations with the fund as much of the economic specifics at issue. From the Argentine perspective, the fund was seemingly impervious toward the country's position. In the end, Argentina decided it had to prove its seriousness – and did so with its unorthodox "letter of intent," sent to IMF headquarters without the approval of the fund's negotiators.

This is the Argentine official's picture of the talks. Because he is still involved in the negotiations, he asked not to be identified. It is only the Argentine view; an IMF official said the fund wouldn't comment on negotiations.

Nonetheless, it is important because it gives a glimpse of the mistrust and suspicion with which Argentina has come to view the IMF. This mistrust is likely to have a big effect when discussions with the fund resume in Washington, presumably this week. People here figure the experience will convince Argentina to stand even more firm in its demand for 6% to 8% wage increases and for economic growth – demands that will probably be unacceptable to the IMF.

Down to Wire

The next round of talks will take Argentina down to the wire on a June 30 deadline to pay overdue interest on its roughly $43 billion foreign debt. Banks are insisting Argentina have an IMF accord before they will provide loans to help the country pay the interest, now estimated at some $450 million, down from $500 million. Otherwise, Argentina will have to pay the interest itself. In addition, without such an arrangement, some U.S. banks may have to put some loans on "nonaccrual" status, subtracting from earnings the interest income they previously recorded but didn't collect.

The turning point in the talks seemed to come on Friday, June 8. Having been chastised in the previous day's meeting for pushing unacceptably lenient economic policies, the Argentines had come up with a new proposal. Overnight, they reduced their proposed budget deficit as a percentage of gross national product to 9.1% from 10.1% and they found a way to increase the expected trade surplus by $500 million – adjustments they figured the IMF couldn't refuse, the official said.

Nonetheless, the IMF team seemed unimpressed, according to the Argentine official. The official said one of the IMF nego-

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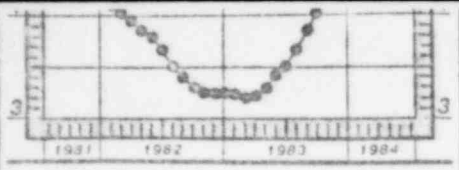

ALUMINUM PRODUCTION in the U.S. rose to an annual rate of 4,671,758 tons in April from a revised 4,551,334 tons in March, the Aluminum Association reports.

Idi Amin Is Without His Entourage Now But Says He Is Well

* * *

Former Tyrant Lives Quietly In Jidda, Saudi Arabia, And Minds His Manners

By PETER TRUELL
Staff Reporter of THE WALL STREET JOURNAL

JIDDA, Saudi Arabia — Eyebrows are raised in the lobby of the Alsalam Meridien Hotel. There's the usual commingling of white-robed Arabs and somber-suited Europeans, but even in this polyglot crowd the huge African stands out, dressed in orange from head to foot.

It is Idi Amin Dada, over in the bookshop looking for sports magazines.

Five years after he was chased out of Uganda by Tanzanian troops, the former field marshal, president-for-life, "Conqueror of the British Empire" and self-styled "Big Daddy" looks like a befuddled tourist in a gaudy leisure suit, searching for something to fill his time.

Time, and a large family, are about all he has left. He has lost his weapons-crammed estates, his entourage, his murderous police force (known as the State Research Bureau). And he seems to have lost the bizarre drive that made him an object of international horror and fascination.

"I'm very happy," he says placidly. "Much happier now than when I am president of Uganda."

Mr. Amin lives on Jidda's Medina Road with four of his wives and numerous children, supported by a stipend from the Saudis. They have given him a car; they used to assign a bodyguard, but now he doesn't even rate that. There was a time when he traveled with 250 bodyguards.

Amnesty International estimates that at least 100,000 Ugandans, and perhaps five times that number, died under Mr. Amin's eight-year rule. He expelled Uganda's Asian community and erected a memorial to Adolph Hitler. When Tanzanian troops rolled into Kampala in 1979, they found grotesquely mutilated corpses in the dungeons beneath the police headquarters, reportedly linked by tunnel to the presidential palace.

For all his brutality, he [illegible] remembered almost as much for his a[illegible] He once explained to the Queen of En[illegible] that he had made an unannounced visit [illegible] London because "in Uganda, Your Majesty, it is very difficult to buy a pair of size-14 brown shoes." He sent Richard Nixon a telegram in 1974 saying "Get well soon from Watergate." A former boxing champion, he once offered to fight Muhammad Ali for $2 mil-

"FED-BASHING" FADES for now as a White House strategy against high rates.

Recent administration blasts against the Fed's tight credit policy "made the point," one Reaganite says, though he predicts the attacks will resume if interest rates continue to rise. Others say the message was poorly delivered and risked reviving inflation fears. Reagan sets the new tone by praising the Fed's policy as "right on target."

Administration monetarists cheer the pullback. "Reagan's fundamental belief is that inflation comes from too much money growth," asserts one. The change upsets supply-siders, who fear that the Fed will wound the recovery. They hoped the president would press the central bank to bring down short-term interest rates.

Moans one supply-sider: "The ghost of Milton Friedman haunts the White House."

WSJ 5/25/84

TERRORIST ATTACKS from Iran are a new worry in the Persian Gulf.

U.S. officials note a "deep concern" among gulf states that terrorism will be the next step in widening the conflict. U.S. intelligence reports show that Iran has training camps for dissident Shiite Moslems from Saudi Arabia, Kuwait and Bahrain. The dissidents include the leader of a group that plotted an unsuccessful coup in Bahrain in 1981.

The attacks "could happen anytime," one U.S. official warns. Concern about Iran was a major impetus behind the administration's recently announced plan to toughen U.S. anti-terrorist tactics. Meantime, security assistance for the jittery gulf states could come from an unlikely source: Yasser Arafat's wing of the PLO.

REAGANITES PREPARE plans to remove much support for farming.

They will push a free-market policy in 1985 legislation, if Reagan is reelected. Budget chief Stockman gets ready to lead the drive to cut farm aid; Agriculture Secretary Block goes along. Federal officials say a free market and low prices are needed so U.S. farmers can compete in world markets.

No decisions will be made until after the elections. But one Agriculture Department official suggests that there may be no crop-reduction program, and accompanying payments to farmers, next year. A Senate aide predicts that Reagan, at a minimum, would veto any bill continuing current multibillion-dollar farm aid.

But the aide figures the administration would have to swallow some sweeteners, like continued aid to small farmers, to win support for a new policy.

ECONOMIC ISSUES are the top concerns of voters in the presidential election, a Roper poll finds. Inflation and unemployment rank as the main issues voters say they will consider. Social issues, like abortion and school prayer, score low as voter influences.

TAXING DECISION: The pro-free-market Heritage Foundation seeks to preserve a tax break used to buy its headquarters building near Capitol Hill. The think tank may need an exemption from the Senate's tax-raising bill. The foundation's tax counsel says the request is simply "prudent."

And Stock Prices Fall

Latin-Loan Worries Affect Manufacturers Hanover; Bonds and Dollar Decline

'Very Undervalued' Shares

The big banks have taken another big hit.

Only a week and a half after a near fatal run at Continental Illinois National Bank & Trust Co. forced federal officials to devise a $7.5 billion bailout of the large Chicago institution, Manufacturers Hanover Trust Co., the nation's fourth-largest bank, came under a siege of rumors yesterday.

Amid the general lack of confidence in the financial system, the New York bank's stock plummeted, and it dragged down with it the shares of other money-center banks and various innocent bystanders. And the damage spread beyond the U.S. stock market. Bond prices fell sharply, the dollar plunged on foreign-exchange markets, and stocks skidded in London.

This article was prepared by Wall Street Journal staff reporters John Andrew, Daniel Hertzberg and Tim Carrington.

For other stories on the banking industry's problems, see page 6. For the impact on the stock, bond and foreign-exchange markets, see pages 57, 43 and 32.

Securities analysts, other Wall Street sources and the banks themselves seemed unanimous in attacking the rumors, which they viewed as significant only as further illustration of the bad case of nerves within the financial system. "It's paranoia," says one Wall Street analyst, whose phone was ringing off the hook with calls from worried institutional clients.

The 'Cap' Idea

But apart from paranoia, analysts concede that confidence has been eroded somewhat further by the continung rise in interest rates and the effect on Latin American borrowers. The governments of the heavily indebted countries decried the higher rates, and earlier this month, Anthony Solomon, the president of the Federal Reserve Bank of New York, suggested that their lenders might want to consider a cap on interest rates for those borrowers. Such a limit on the rates that the banks were charging would, during a period of climbing money costs for the lenders themselves, blight bank earnings for years to come.

Fritz Leutwiler, the president of the Bank of International Settlements in Basel, acknowledged yesterday that the rise in U.S. interest rates, the tensions in the Persian Gulf and the Continental Illinois crisis "haven't meant any improvemen[illegible]" in the international financial climate.

And many investors fear that, [illegible] Continental Illinois' problems, which [illegible] mainly from its huge portfolio of shak[illegible] mestic loans, the next crisis in the ba[illegible] system is likely to come from the inte[illegible] tional arena. Though analysts empha[illegible] that Manufacturers Hanover is financially

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what's happening in the United States

Laura J. Pankonien, Exploration Editor

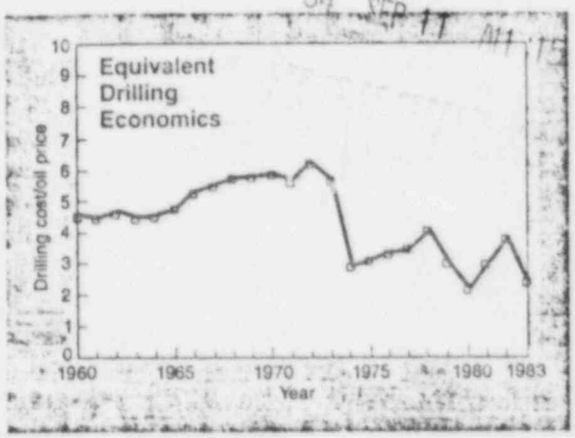
Innovative financing aids industry upturn. With several signs now pointing to an improved economic climate for oil and gas activity, investors and bankers alike have once again begun to commit funds to help the independent sector of the industry recover from its cash flow pinch. Further, the funds being made available to operators are often the result of new, innovative financing packages or acquisition programs. Such was the theme of a May presentation made by The RAM Group, Ltd., an Oklahoma-based consulting firm.

Pankonien

Supporting the Group's outlook for relatively stable industry activity in the near term are several key factors.

- Banks are recognizing their clients' cash flow problems and are working with trade creditors and debtors on payment plans that solve such cash flow problems and repay debt.
- Outside investors are participating in opportunity financing for the industry including equity injection and asset purchases, which is serving as a means to work many ailing firms out of bankruptcy. Further, drilling fund availability is substantially better, and innovative lease acquisition funding is available.
- Outside investments now appear more stable as investors are largely interested in return on investment and not just tax implications. Further, project assessment is now tied to stable and lower crude oil and natural gas prices, not to ever-escalating figures as during the early '80s.
- The shut-in gas situation is softening to ease operators' cash flow problems. This has been aided by innovative marketing plans between producers and end users.
- Drilling economics are at historically favorable levels, as shown by the accompanying chart, making 1984 an excellent year to find reserves.

In short, "industry is overcoming the damage done during the 1980-1982 'boom and bust' cycle and is gearing up for a period of relative stability," says The RAM Group. Over the next six to 12 mo the Group expects "to see a strengthening atural gas demand with resultant increases deliveries, continuation of innovative gas marketing to end users, increased cash flow from operations causing increased drilling activity, and the strengthening of independent producers by consolidation." However, as has been demonstrated by those companies that have successfully come through the recent hard times, it takes more than just the ability to find oil and gas to succeed in the current marketplace. Managers must exercise forward-thinking financial techniques and marketing skills in order to take advantage of today's available funding and drilling economics.



When the U.S. average cost of drilling and completing wells on a $/ft basis (as reported by the Joint Assn. Survey) is divided by the U.S. average crude oil wellhead price, the bbl/ft drilled on an equivalent basis (2.39 BOE/ft) is near the 30-year low. The only year lower was 1980 when crude oil prices averaged $36/bbl. (Data from The RAM Group, Ltd.)

(Thanks to William W. Talley, II, Ph.D., President, The RAM Group, Ltd., and David L. Bole, Vice President, Alexander Energy Corp., and consultant to The RAM Group, for discussions and material leading to this item.)

A big one for Alaska. Shell Oil Co. is calling its Seal Island prospect discovery a giant oil field, meaning that it likely contains more than 100 million bbl of recoverable, commercial oil. While several more wells must be drilled to delineate the structure, company officials are now saying that production could begin within eight to 10 years.

The discovery well was completed in January and a second well was reportedly near TD during mid-May. The first well tested from 600 to 5,000 bopd (40°API) from four intervals of the Triassic Sadlerochit formation below 12,650 ft, as measured through the borehole. One interval also tested some 10 MMcfgd. True vertical depth on the first well is 12,461 ft.

Drilling is taking place from a gravel island about five miles offshore northern Alaska in the Beaufort Sea. Water depth at the location is about 40 ft.

This discovery is of significant news to industry, which was recently disappointed that the much-touted Mukluk prospect, located 50 miles west of Seal Island, was dry.

the case of Saudi Arabia, forcing term customers to take more oil than they want.

Spot oil markets have been slipping since August, but the decline has been much slower than last year and prices are not nearly as out of line with official levels. Spot crude markets are now about $1 a barrel below official prices compared to a $3 to $4 spread last December. Similarly, refined values of Opec crudes are $1 to $2 a barrel below official prices versus a $3 to $4 gap last year.

On the other hand, in addition to deteriorating spot prices, there are other key warning signals which would indicate that a repeat of the price slides of early 1982 and 1983 might be developing. First are cuts in contract prices by market-sensitive exporters like the USSR, which has already cut prices twice in the last two weeks (p.12). Another indicator is price cuts on US domestic crudes due to shrinking refinery margins. Some US observers believe smaller refiners might feel forced to cut crude postings as early as Jan.1. This in turn would put more pressure on North Sea oils, possibly leading to reduced UK prices. In early 1982 and 1983, US postings cracked when spot prices fell $1 to $2 below them, while for UK crudes pressure became extreme when spot prices were $2 to $3 under official levels. For Opec crudes the gap reached more than $5 before official prices were adjusted.

Perhaps one crucial similarity between this winter and last is Opec's vulnerability to a chain reaction of price cuts by non-Opec producers brought on by weak spot markets. Ultimately this linkage might lead to a drop in North Sea prices that could trigger reductions by Nigeria and other Opec members as it has the last two times around. Some pressure already is beginning to build on Britain's BNOC for a first-quarter price cut due to spot crude prices now as much as $1.25 below contract levels. However, for political reasons BNOC is likely to delay action on prices as long as it can—until Opec acts or market forces become irresistible.

"The question of a replay comes down to whether Opec has learned last year's lesson about overproduction," one economist argues. "If they can't defend a $29 marker, they will have even more trouble at $26 or $24."

Alaska Oil Failure May Aggravate US Import Dependence

Failure to find oil in the principal formation of Mukluk, the largest prospective structure offshore Alaska's North Slope, is likely to prolong and increase US reliance on oil imports. It certainly makes much tougher the task of maintaining the country's current two-thirds self-sufficiency in crude oil, let alone increasing it. Mukluk had been counted on heavily to sustain the Trans-Alaska Pipeline at a flow of 1.5-million b/d or better through the 1990s, after output from supergiant Prudhoe Bay begins to decline (PIW July 18,p.1). The Mukluk failure also deals a further blow to already receding hopes by Japan, Korea and Taiwan that the US Congress might ease its current ban on exporting Alaskan crude (PIW May 9,p.4). Alaska currently accounts for about one-fifth of all US oil production.

The Mukluk disappointment, however, won't end the industry's marked emphasis on Alaskan exploration, even though it could prove the costliest wildcat ever, potentially negating about an $835-million investment. Geologists remain convinced that about half of all the undiscovered US oil and gas lies in Alaska, and odds are better there for finding really big fields. At Mukluk, a 10-company group headed by Sohio spent $100-million to build an artificial island and a further $40-million for the test well on top of $696.5-million expended for leases alone (PIW Oct.18'82,p.12). But Sohio is already mapping plans to build another Beaufort Sea island. Gulf started a test hole near Cross Island in early November, and results should be known within five months. Exxon is drilling in the Flaxman Island/Point Thomson area. Texaco, however, is holding up a decision on building a Beaufort Sea island until it can study final test results from Mukluk.

Operator Sohio hasn't yet written off the Mukluk test as a dry hole, although some members of the group consider it highly unlikely they'll find anything commercially worthwhile in the giant structure. A further search could be stimulated for

oil once contained in Mukluk, as indicated by oil-stained sands, which may have migrated to another structural trap. But the main Ivishak formation (equivalent to prolific Sadlerochit in Prudhoe) apparently contains only water, based on preliminary logging and core samples. Sohio will drill ahead, however, into the deeper Lisburne layer (which is productive in Prudhoe) and test at a total depth of 9,700 feet. A decision won't be made until then on whether to drill a second test from the Mukluk island. "Mukluk is not dead, but it's certainly badly wounded," the president of Sohio's E & P subsidiary told the London Oil Analysts Group last week.

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Approaching Peak For UK Oil Output May Mollify Opec

Opec got a nasty surprise in 1983 when British North Sea oil production rose sharply, and a further climb is likely in first-half 1984. But Opec can take heart. Some analysts now are predicting that UK North Sea output will peak in 1984-85, and begin declining in 1986. It's expected to average about 2.4-million b/d for both 1984 and 1985, up from something over 2.2-million on average for all 1983. The current actual level is 2.35-million. It could drop back around 2.3-million again in 1986. That's because declining output in older fields is expected to begin offsetting further output coming on stream.

These forecasts could render largely academic whether Opec can persuade Britain to eventually impose production controls. The British government hasn't any intention of even considering such controversial action until at least 1985, UK Energy Secretary Walker told outgoing Opec president Otaiba in London recently. That means that even should output restrictions be brought in—and they're bound to face stiff opposition from the oil companies—they wouldn't take effect until total production is in natural decline anyway.

Opec's future concern about rising North Sea output could shift to Norway, rather than Britain. Some analysts expect Norwegian output by the early 1990s could more than double from the 1983 average of about 600,000 b/d.

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Opec Doubts Grow Over Saudis' True Oil Price Intentions

For all the wrangling in Geneva over shoring up Opec's $29 a barrel marker price, a number of oil ministers are privately still puzzling over Saudi Arabia's real pricing intentions. Some attendees at last week's conference are beginning to think the hitherto unthinkable—that the Saudis may be encouraging a growing market perception, wittingly or not, that another official price cut may be on the way. The Saudi behavior may well be no more than the traditional jockeying that accompanies most Opec sessions. However, the Saudi insistence that its oil output is not constrained by the group's overall ceiling is seen as inconsistent with its widely professed determination to defend the present marker price, according to an on-spot PIW report (PIW Dec.5,p.3).

The conference quickly reached agreement on the need for maintaining the 17.5-million b/d limit agreed last March. But ministers went into a third day's sessions on how that agreement should be expressed to give it real market impact. One of the sticking points was whether and how the Saudi swing role might be more precisely defined as being within the ceiling. The issue took center stage at the insistence of several members led by Iran and was one of several elements unresolved at PIW's press time. An expert committee will attempt to strengthen implementation of the London allocations agreement and enhance the capabilities of the four-minister market monitoring committee, which is supposed to oversee it.

Oil Minister Yamani reiterated Riyadh's traditional position that "there is no quota for the Saudis," and that it would continue as swing producer for the group. In the view of one minister, the Saudis can if necessary still raise output over their implied 5-million b/d allowable, but they should advise the market-watch committee and clarify any special circumstances.

Iran, which played a "spoiler" role at the meetings, finally dropped its deman for a marker price boost back to $34, in return for approval of a committee to

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MISSION IMPOSSIBLE

Even With All Their Fancy Western Weapons, The Saudis Will Be Hard-Pressed To Defend Oil Facilities Against Sneak Attack

Last week's emergency shipments of arms to Saudi Arabia were more than a political statement of the oil kingdom's strategic ties to the United States. The Stinger anti-aircraft missiles and tanker aircraft, along with other arms and spare parts, fill crucial gaps in the air defenses of the nation's Persian Gulf oil facilities, and may help deter attacks against ships laden with petroleum. But even with the speedy deliveries and the new style of Saudi operations that appears to be evolving—including wider patrols extending out over the Gulf's international waters—the region's Western-leaning nations still face a formidable and unpredictable threat from Iran, their neighbor across the narrow channel.

The potent weapons that have been shipped were designed for conventional hostilities between massive adversaries fighting for days on end. But this is not the kind of assault that is most feared from Iran, which is likely to husband its lame and depleted air force for the four-year-old war with Iraq.

Rather it is the single aberration, the suicide mission with a political motive, the limited assault, the sneak attack or the terrorist act that seems most likely to test the Saudi arms. And if the test comes, it may prove that even the recent steps to defend the oil fields were to no avail.

The latest arms deliveries are meant to allow the Saudis to mount round-the-clock patrols in emergencies. But the AWACS and the F-15s cannot stay aloft indefinitely, experts say.

Ever since AWACS and F-15 fighter planes became the linchpin of Saudi air defenses in 1981 it has been plain to military analysts that they were not a total solution to the nation's needs. The Senate Foreign Relations Committee and the Congressional Research Service both issued studies of the AWACS sale to Saudi Arabia approved that year, and while the studies showed the importance of the weapons now being relied upon, they also showed their weaknesses.

A Congressional analyst who worked on these reports said wryly last week that while the politics of the region have changed since then, the geography has not.

It is geography that counts in the Gulf. The key problem of Saudi air defense is that its most vital industrial assets, the marine terminals at Ras Tanura and Ju'aymah, lie at exactly the closest point to the Iranian air bases at Bushehr and Shiraz. These ports handle the bulk of Saudi Arabia's oil exports. Minutes inland is a multi-billion-dollar natural gas development project.

This assessment of the security of the Persian Gulf's oil facilities was prepared by Jack Cushman, a reporter with *Defense Week*, *The Energy Daily's* sister publication.

Iran, reasoning that Saudi and Kuwaiti financing has allowed Iraq to blockade the revolutionary Islamic republic's own oil shipments, has threatened to stop other Gulf states from exporting. It has been attacking ships headed toward Saudi and Kuwaiti ports. And late last week, Iraq claimed that its warplanes attacked an Iranian oil refinery at Tabriz (in northwest Iran) and Baghdad threatened to destroy Iran's Kharg Island oil terminal.

In response, the U.S. Administration last week shipped emergency supplies of Stinger missiles—200 shoulder-fired launchers and 400 heat-seeking short-range missiles—to the Saudis. They would be used, said Pentagon spokesman Michael Burch, to defend ports, docks, oil fields, and possibly naval vessels.

Although Kuwait is also under pressure and informally asked whether Stingers were available for its defense as well, the Pentagon and State Department agreed only to study Kuwait's needs. It would prefer the Saudis to help their neighbor to the north, which has in fact suffered direct attacks from Iranian aircraft in the past, including a bombing of an oil facility in 1980 which led to the dispatch of American AWACS to the Saudis. Kuwait might also seek arms from other nations.

To help broaden the sweep of the Saudi air force, the Administration also loaned a KC-10 aerial refueling tanker from which Saudi F-15s could refuel in flight. There are already three KC-135 tankers on duty there, although these have been used primarily to refuel the four AWACS early warning aircraft that have been on location since the breakout of the Iran-Iraq war four years ago. All of these large planes are owned and operated by Americans at Saudi expense; the Saudis have ordered their own AWACS and tankers, but they have not been delivered.

The Administration also agreed to send the Saudi air force conformal fuel tanks which extend the patrolling time of the F-15s. (Interestingly, some of the 32-foot tanks are made in Israel under a contract with McDonnell Douglas, builder of the F-15. Last week, Israel Aircraft Industries delivered the first of 58 pairs of tanks which improve the airplanes' range by 75 percent. Israel repeatedly has protested the delivery of the tanks to the Saudis, but will fulfill its contract. Additional tanks are made at McDonnell Douglas' plant in Tulsa.)

The F-15s are being armed (under previous agreements) with improved AIM-9L air-to-air missiles, capable of firing head-on at another aircraft.

The Pentagon is wary of describing exactly how the Saudis will deploy these new weapons. But it appears that in a crisis the kingdom would be able to protect itself and its immediate neighbors—such as Kuwait, Bahrain, and Qatar—for a short period of time with continuous flights of surveillance and fighter planes.

Last week the *Wall Street Journal* quoted Persian Gulf sources as saying the Saudis plan to establish a "protected zone" for shipping in the region. This would include both

(Continued on next page)

naval protection and air cover, the newspaper reported.

However, a detailed analysis shows that the vast distances concerned and Iranian use of surprise and deception could riddle this apparently powerful shield with holes.

"It must be understood that whatever benefits AWACS and F-15s can provide, the weapon systems are no panacea or complete solution in protecting Saudi Arabia," said a Senate Foreign Relations Committee staff report on the AWACS and F-15 sales published in 1981.

The extensive discussion published by the committee cited a myriad of problems for the Arabs:

- The AWACS are not capable of maintaining a continuous patrol for more than a week at a time.
- Without the AWACS aloft, ground radars are incapable of providing adequate warning of attack.
- Commercial air traffic over the Gulf is too heavy to be adequately patrolled.
- Hundreds of thousands of Shi'ites, a religious minority in Saudi Arabia but the majority in Iran, work in the oil fields.
- Low-flying, slow-moving aircraft—possibly helicopters—are less susceptible to detection by AWACS and F-15s and could end up in a missile duel, shooting up ports before Stinger missiles responded.

The Saudis' inability to keep continuous patrols aloft permanently is a dangerous fact of life for a regime that cannot know when or where it will face a swift and deadly incursion.

The Senate committee report noted that "to maintain 24-hour AWACS radar coverage constantly in peacetime, or for longer than seven days during a time of political tension, many more than five AWACS would be required." The Saudis now rely on four AWACS for early warning.

"Iran could bluff Saudi Arabia into mounting a continuous AWACS orbit, either by verbal threats or provocative aerial maneuvers, then wait for a week or more until the capabilities of the AWACS fleet had been degraded due to normal maintenance and logistics factors," the report suggested.

The Saudi decision to equip its fighter planes with fuel tanks that the Pentagon says "nearly double" range and combat radius, and to provide aerial refueling that can keep a fighter aloft for 15 hours, is clearly meant to allow a continuous air patrol by these planes, which would be armed with long-range AIM-7 missiles as well as the shorter-reach AIM-9s. An American F-15 with the tanks attached once flew across the Atlantic from Maine to England, a distance of just over 3,000 miles. That is roughly the equivalent of five round trips up and down the Saudi coastline facing Iran.

A continuous air patrol typically includes four fighter planes operating in pairs. The Saudi Air Force has ordered 60 F-15s but probably has closer to 40 in operation. Many are not based in the eastern part of the country, and not all can be devoted to sweeping the Gulf. The task would be more difficult if, as has been reported, Saudi Arabia plans to aid its allies in the Gulf Cooperation Council by patrolling their shores as well. Pentagon spokesman Burch said the U.S. would be willing to refuel Saudi planes for this purpose.

Aviation experts said last week that it might take two dozen planes to maintain a constant patrol of four aloft. That's roughly how many F-14s are used from aircraft carrier decks to do a similar job, circling at a radius of around 400 miles, they noted. But they said such a patrol would require five early warning aircraft to be truly effective.

Without the AWACS early warning aircraft in place, giving effective warning from the moment a hostile aircraft barrelled down its Iranian runway, the Saudis' chances of defending Ras Tanura would be dicey at best, according to attack scenarios laid out by the Senate committee.

"An Iranian F-4, flying at 200 feet and 480 knots, can bomb the Sea Island at Ras Tanura or the shore mooring stations at Ju'aymah only 16 minutes after taking off from Bushehr," said the report. "Should the enemy fighter loiter peacefully within Iranian air space over the Persian Gulf, then suddenly veer directly for Ras Tanura, Saudi reaction time would be reduced to perhaps eight or nine minutes."

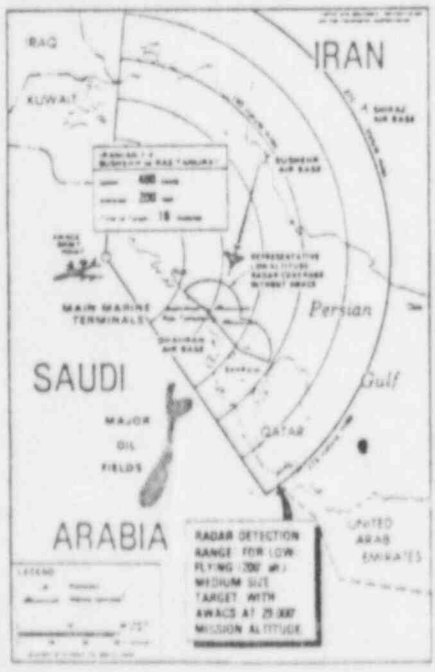
Within that brief time, the Saudi Air Force—well trained but inexperienced in combat and operating under unknown rules of engagement—would have to detect the plane, identify it, decide what to do, scramble (unless already aloft), and intercept it.

False alarms can be expected. The hundred-mile-wide gulf is the site of many air routes connecting Baghdad, Bahrain, Abu Dhabi, Tehran and other big cities. "Were the Saudis to order intercepts of any unidentified aircraft within, say, 100 miles of the oil fields, the Royal Saudi Air Force would be flying around the clock," said the Senate report.

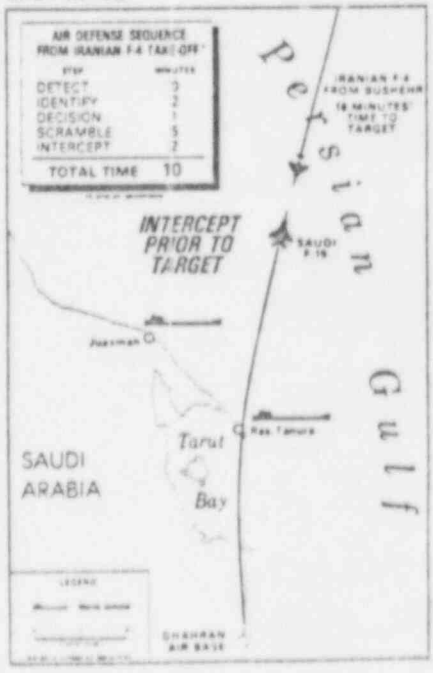
That might be advisable, it added.

(Continued on next page)

Iranian Air Attack Scenario



F-15 Intercept With AWACS and AIM-9L



Seabrook 1 And 2: Does New England Really Need Them?

Both of the unfinished 1,150-megawatt Seabrook nuclear plants could be cancelled without imperiling New England's electric power supply, according to a study released over the weekend by Rep. Edward Markey (D-Mass.). The study, which was prepared for Markey by the Congressional Research Service, argues that the cancellation of Unit 2 would cause few—if any—supply problems, while cancellation of Unit 1 as well would create a need for some 1,500 MW of power for the region. That power could be obtained, however, from increased conservation, alternative energy sources, imports of surplus Canadian electricity or from some combination of all these, says the CRS report.

Citing a 17 percent capacity reserve margin* as "adequate to assure reliability," CRS analysts Alvin Kaufman, Donald Dulchinos and Larry Parker note that the New England Power Pool expects regional peak demand to grow at 1.9 percent annually and anticipates that available resources (including both Seabrook units) will result in a 23 percent capacity margin. "Assuming a 17 percent margin to be adequate," says the study, "Seabrook Unit 2 would be unnecessary in 1992, as long as 200 MW of firm electricity is available from elsewhere. If both Seabrook units were cancelled, about 1,500 MW of additional firm capacity would be required. Considering that 690 MW are planned for importation from Canada, some of which is firm energy, and transmission capability is expandable to 2,000 MW, this may not be an insurmountable problem."

The study admits that there are problems with securing Canadian imports. "Although sufficient Canadian capacity appears to be under construction or planned to back out the Seabrook units, both sides must be willing to use this capacity," it notes. "So far, Hydro-Quebec has indicated its desire to eliminate its current surplus power before constructing a facility dedicated to the export market. This surplus is interruptible power and, therefore, would not meet New England's firm capacity needs. Thus, policy may limit the availability of Canadian imports to replace nuclear power under construction in New England."

Based on a number of assumptions, including cancellation of both Seabrook units and Northeast Utilities' 1,150-MW Millstone 3 nuclear plant, the report concludes, an additional 2,600 MW of capacity would be needed in the region if demand was not reduced. "About one half of the 2,600 MW could be met by reducing or eliminating the assumed retirement of older generating units," says CRS. "If one-half of the demand reduction potential were achieved, only one-fifth of the estimated retirements need be eliminated to meet capacity requirements."

The CRS study does not address the cost of cancelling both Seabrook units and the Millstone 3 plant. "From a financial viewpoint, this may not be the most cost-effective approach once the indebtedness incurred to build the units is considered," it comments drily, noting that some $4.4 billion (most of it borrowed) has been spent on construction at Seabrook. The study says that the cost of electricity from Seabrook Unit 1 could be as high as 10.4 cents per kilowatt-hour in real terms in the first year of operation and could result in 60-65 percent increases in utility bills. Depending upon assumptions and methodology, the levelized cost of electricity over the life of the plant, says the report, ranges between five and nine cents per kilowatt-hour.

"Clearly, the option of cancelling both [Seabrook] plants should not be ruled out, since that apparently could be accomplished without devastating consequences if careful planning is used," said Markey in a statement accompanying the study. The Massachusetts congressman is chairman of the House Interior Oversight and Investigations subcommittee.

—JOHN McCAUGHEY

*Capacity margin is calculated by CRS as capacity minus peak divided by capacity.

MISSION IMPOSSIBLE...

(Continued from preceding page)

An Iranian fighter could easily get within sight of the oil facilities by pretending to be a civilian plane following a duly filed flight plan.

In the worst case imaginable—with both AWACS and F-15s sitting on the ground at Saudi air bases—the Ayatollah's pilots could pull off an attack without gaining the reward of martyrdom. They could fly directly at the oil port for 13 minutes before ground-based radars discerned them. It would take another 13 minutes for fighters based at Dhahran, thirty miles away, to get to the scene—ten minutes too late.

This appears to be the time that the Stingers could come in handy. Ras Tanura, Ju'aymah, and Dhahran all are defended by army air defense units using improved Hawk surface-to-air missiles, Crotale air defense missiles, and 35mm Oerlikon guns. The Hawks need about 10 minutes warning to fire effectively and the other weapons could only shoot down the fighters after the fact. The Stinger would stand a chance, since it can be fired at a target coming head-on.

But what is unpredictable in the Gulf exceeds what is foreseeable. Ground radars, for example, experience poor performance three quarters of the time because of atmospheric conditions known as "ducting" that occur where the hot desert air clashes with the cool Gulf breezes. If the Iranians chose their moment adroitly, it is hard to see how they could be prevented from striking a blow that would be politically, if not militarily, significant.

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Our Oil Allocation Army Smells Smoke

By J. Fred Singer

With the Iran-Iraq war heating up and oil tankers in the Gulf being attacked, oil-supply interruption has again become a fashionable topic. Accepted wisdom holds that a large Strategic Petroleum Reserve is vital to U.S. security in case of a supply cutoff. Many experts insist that it needs to be built up quickly to the magic figure of 750 million barrels set many years ago. The Harvard Energy Security Project wants an even larger SPR of 1.8 billion barrels. Other experts are less worried; they figure that the SPR is already up to 400 million barrels, our imports are way down (five million barrels a day vs. an earlier expected 12 million barrels a day), and Saudi Arabia, our erstwhile embargoer, now ranks No. 6 among our import suppliers. And if all else fails, they say—in case of a real catastrophe—we are to look to the oil-sharing plan of the International Energy Agency (IEA), Mr. Kissinger's memorable response to the OPEC cartel.

All of this is complete and utter rubbish. There is only one world oil market—provided we don't revert to price controls or impose import-export controls. With a single world price, the burden of higher insurance rates will fall on the Gulf producers and not on other producers or on consumers. Only in the case of a major supply shortfall—whether willful or accidental—that cannot be made up by excess production capacity somewhere else will the world price rise. And it must rise for everyone, including the U.S.—no matter what our level of imports is and from whom. A continued supply interruption from the Gulf would affect the U.S. price about as much as Japan's. All those who gloat about the fact that our Saudi imports are negligible should be required to write one hundred times on a blackboard:

Oil is fungible.

That's why a selective oil embargo cannot work—and never did. Oil will be swapped out in the market by traders until the price is roughly equal everywhere.

The IEA oil-sharing agreement to "equalize shortages" among the industrialized nations that are its members is of course either useless or ridiculous. The choice between these unattractive alternatives depends on the price level at which the sharing takes place. This subject—like sex among the Victorians—is not discussed in the polite circles of the IEA. It stands to reason, however, that if the sharing of oil among member nations takes place at the actual world price, i.e., the spot price existing during the emergency, then the IEA scheme is not needed. Anyone can buy oil at the high spot price; that's the significance of a spot price. But if the sharing is to be done at the much lower pre-emergency price, then the scheme becomes a clear subsidy to whoever receives oil. It's a safe political assumption that the U.S. Congress won't allow this. Sen. Howard Metzenbaum (D., Ohio), for example, has even questioned membership in the IEA.

A further problem is that the international bureaucrats, as well as many IEA member countries, believe in price controls and non-market allocations during emergencies. They are not alone. We have folks here, conservatives no less, who swear by the free market—except during emergencies. Our Energy Department used to be populated with such people. But it is during emergencies that the market can avoid the crises that we experienced in 1974 and 1979, when oil prices were held fixed and free markets, i.e. allocation by price, weren't permitted to work.

The federal bureaucracy that created these memorable crises has now metastasized into numerous state oil emergency offices, all staffed with eager civil servants waiting for the next crisis. They still remember that the feds gave each state governor a percentage of the state allocation "for hardship cases." Guess who got this price-controlled gasoline. The poor? Guess again. Allocation of goodies through political channels does have many advantages for an incumbent governor that would not be available if prices were free.

It's no wonder that the Energy Department was jumped on by an unholy alliance of the IEA, the State Department and state emergency types when it refused to play the price-control game during an IEA oil-sharing exercise last year. The Washington Post obligingly publicized a leaked, lower-level State Department memo criticizing the Energy Department; the IEA promised to send a task force "to determine where the Reagan administration's free-market policies fit in with those of the other 20 nations, which have standby regulations to restrain demand and prices and allocate supply in crises"; state officials made suitable clucking noises; and Rep. Mike Synar (D., Okla.) opened hearings with the comment, "I believe in the free market, but I am a pragmatist."

Having taken two vital steps, namely to decontrol oil prices and then to veto standby oil allocation, President Reagan still faces several important tasks to avoid a return to price controls. He must: (1) Persuade our allies to dump the IEA agreement; (2) put in place an income-recycling scheme to prevent real hardship to the poor during an oil price rise; (3) abolish the Energy Department, or any bureaucracy that could administer price controls; (4) persuade Congress to permit the export of Alaskan oil and natural gas; (5) address the SPR management problem.

It goes without saying that the SPR must be tested, not only physically, but all the way through the selling, transporting and refining of oil. Otherwise, we have a $15 billion white elephant, soon to grow to more than $25 billion. Pumping alone does not count. Let's see the actual 1.7 million barrels a day of SPR oil (the target maximum) flow all the way through the U.S. refinery system, for at least a few days.

But would this oil really flow? There is a longstanding debate within the government about whether there ought to be a pre-determined trigger (which should, of course, be a price trigger), and whether such a trigger should be announced ahead of time. Bureaucrats (of either party) resist facing these problems. They talk about physical supply shortfalls (which are difficult to measure) rather than price (which are not). They don't like rules that limit their actions. They much prefer to use their "judgment" during an emergency rather than trust the market.

Now that we have a governmental stockpile, we should privatize it. The most direct way is to sell options on all or part of the oil. Each month, options with various strike prices and expiration dates could be auctioned off to the highest bidders. Once in private hands, a market for these options would be established. Selling such options would provide revenue to the government and also get some of the oil flowing. Since it is likely to be auctioned off to refineries eventually, why not experiment with a scheme that amounts to an advance auction?

Privatizing the SPR by selling options also avoids the sticky problem of coordinating drawdowns of various national SPRs—a useless scheme that would likely cause mischief. Doing away with coordination, however, will disappoint bureaucrats who relish that sort of thing and hate to see the market do this job for them.

Once the SPR is privatized, it may actually become useful. It does serve as a psychological barrier to current, misguided congressional efforts to reestablish price controls and political allocation systems during "emergencies."

Mr. Singer is affiliated with the Energy Policy Studies Center of the University of Virginia in Charlottesville.

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LILCO 3F

company to turn back exploration acreage, after finding nothing in its portion of Bohai Bay, although the Chinese would have liked Elf to continue looking (PIW April 9,p.7).

CFP's new "pre-development" agreement calls for drilling two rounds of three wells each, and a further three only if these give promising results. Drilling will start some time next year. First, a seafloor template must be built and bids will be invited soon. One member of the group, Kuwait-supported Malaysian Promet (with a 4.9% share) would be interested in the job. But so would some of the Japanese in the five-company Idemitsu-led BOODC group (with 9.8%). But since China's Nanhai West Offshore Co. pays 51% of the investment (its holding in the group), it will seek the best offer. CFP is operator and has 24.5%, while Elf has 9.8%.

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Saudi Swing Role Being Strengthened By Gas Projects

Sometime this summer Saudi Arabia's domestic natural gas needs will cease to pose any serious practical constraints for crude oil export levels. New, diverse sources of gas are providing increased flexibility that will strengthen Saudi Arabia's position as Opec's swing supplier, allowing it to cut back oil production sharply if needed to 4-million b/d or less, even during periods of peak gas demand. Scarce domestic gas supplies last June, caused by a drop in Aramco production to 4.4-million b/d, created severe electrical power shortages, and helped encourage the start-up of oil sales through the Norbec marketing channel (PIW Aug.15,p.1). The need to produce enough associated natural gas was also the main reason given for high crude oil production levels during the last half of 1983 (PIW Feb.13,p.6).

Not only will the added flexibility give Saudi Arabia more freedom in setting the level of its crude production, it will also let it adjust the mix of its crude exports almost at will. Soon it should be able to achieve the long sought policy goal of aligning light and heavy exports with its reserve base (PIW Feb.27'78,p.3). With light crudes the preponderant source of associated gas in the past, it has had to maintain a high level of light crude sales to produce enough gas, but newly connected associated gas from heavier grade oil fields will remove this constraint. The current export mix is already close to the goal, at 60% Arabian Light, 20% Medium and 20% Heavy. Saudi reserves are roughly 7% extra-light Berri, 49% Light and 22% each for Medium and Heavy (PIW April 23'79, Supplement).

Although some analysts believe that peak gas requirements in June and July this year might still influence Saudi crude production policy somewhat, an accelerated development program for both associated and non-associated gas supplies has already increased flexibility significantly above last year. Saudi Arabia seems to have added as much as 500-million cubic feet per day of raw gas production since last summer. This compares with peak domestic demand at the height of the air-conditioning season of about 1.6-billion cf/d. This is mostly for power generation, but also for water desalination plants and the Jubail industrial complex.

New supplies of non-associated gas coming on stream this year are the key to Saudi Arabia's flexibility. When complete in 1985, they would allow Saudi Arabia to reduce crude production to a mere 2-million b/d if necessary. Gas output capacity of 1-billion cf/d is now planned from the Khuff formation that lies below the huge Ghawar oil field, which produces Arabian Light. Most of the 27 Khuff production wells are due to be completed by August, and some 150-million cf/d of this output was believed to be on stream in late April. These supplies are only expected to be produced as needed to supplement associated gas, which has until now been the exclusive source of gas supply.

Saudi Arabia is boosting its supplies of associated gas by gathering production from the offshore medium and heavy oil fields in the north, thereby supplementing existing associated gas from its light crude fields. These new supplies are starting to become available but the system won't be fully operational until late 1985. By

then the heavier crude fields will have gas output capacity of 1.9-billion cf/d at an oil production rate of 4-million b/d—twice the current level. This marks the final phase of the so-called Master Gas System (which was designed when oil output was targeted around 10-million b/d). It has gas plant processing capacity of 3-billion cubic feet of raw gas per day, but total gas production capacity could be close to 5-billion cf/d at high rates of crude output. The light fields can potentially produce about 3-billion cf/d of gas at 6-million b/d, also twice the current rate.

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There's Oil Enough In Theory Even If Upper Gulf Closes

While Western government uneasiness is increasing at the oil supply implications of the Gulf war, the basic "worst case" scenario now being painted by industry analysts is far less cataclysmic than nine months ago when closure of the Hormuz Strait seemed an imminent possibility (PIW Oct.3,p.1). Total blockage could pose a loss of 8- to 9-million b/d of exports, with barely half replaceable from shut-in capacity in other producing countries. But now, closure of Hormuz is seen as neither feasible militarily nor in Iran's strategic interests, which it apparently believes are better served by retaliatory attacks on ships calling at Saudi, Kuwaiti and Neutral Zone ports.

Escalating attacks, however, have prompted consumer governments to contemplate concerted action to counter any cutback in the flow of oil from the Gulf. Japan—the industrialized country most dependent on Middle East oil—is seeking a commitment from other governments to coordinate the release of oil from national stockpiles in the event of a serious cutoff and may raise the issue at this week's seven-nation summit (p.8). The evident fear is that unless other governments like the US and West Germany follow suit, any drawdown of Japan's strategic reserve would prove inadequate.

Despite the uneasy reaction of some Western governments, Arab tanker authorities say the recent attacks are only a "minor irritant" with little impact on the longer-term flow of their oil. Regardless of high insurance rates, replacements have so far been easy to find for any ships declining to go into the upper Gulf, they say.

Today's simple arithmetic suggests that even a total cessation of exports through the Gulf by Iran, Kuwait and Saudi Arabia—amounting to some 6- to 6.5-million b/d—could be made up by other exporters and use of the US strategic stockpile. In fact, a gradual reduction in these supplies, rather than a total halt, is seen as a more likely outcome of renewed attacks. Most crucial, in contrast with the "Hormuz closure" scenario, the UAE and Qatar likely would remain open to shipping. Their joint 1.5-million b/d production would be available and a further 1.5-million of shut-in capacity could be activated. Nigeria could pump 1-million b/d more, Venezuela 500,000 b/d, Libya and Algeria an extra 1-million b/d with perhaps 500,000 b/d more coming from Indonesia, Mexico, the North Sea and other smaller producers. To top this off, a 2-million b/d drawdown, now officially envisaged as the initial US strategic reserves response to supply disruptions, would yield a theoretical alternate flow of 6.5-million b/d.

Other factors are also contributing to the more relaxed attitude of major oil companies in the latest flare-up as compared with last fall:

- **The approach of summer has lopped some 2-million b/d off world demand.**
- **Official willingness of the US administration to use its 400-million barrel SPR quickly (heavily in doubt until this March) should reduce temptations for companies to hoard oil to cash in on soaring spot market prices.**
- **Saudi Arabia's floating stockpile of 60-million barrels is also seen as a significant reserve of short-haul crude.** However, senior Middle East oil officials privately doubt that releasing Norbec oil to dampen speculation in world oil markets would actually figure as a Saudi priority, should the Gulf war heat up so badly as to shut off that country's major export terminals.

LILCO 3G

Sea Raid by Iran On Gulf States Is Seen Possible

Tehran Being Pressured By Drop in Oil Exports, Dwindling Arms Supply

6/8/84

By PETER TRUELL
Staff Reporter of THE WALL STREET JOURNAL

JIDDA, Saudi Arabia – Iran, stung by its loss of two warplanes to Saudi Arabian F-15 fighters earlier this week, may soon resort to seaborne attacks against Saudi Arabia and other Persian Gulf states – aiming at ships or even the mainland itself – diplomatic sources say.

Officials in Washington share the concern that Iran may switch to terrorist tactics. U.S. analysts say Iran has trained dissidents from several Persian Gulf states for terrorist activities, and worry about seaborne terrorist operations was one reason the Reagan administration has started replacing older Awacs planes on duty in Saudi Arabia with newer versions that can detect vessels as well as aircraft.

The Saudis and other allies of Iraq in the 3½-year war against Iran have various reasons to nervously look to the sea for the next Iranian attack.

Tehran is under increasing pressure to strike back. According to oil industry sources and Western diplomats, Iraq's blockade of Kharg Island, the key Iranian oil port that is located in the northern Persian Gulf, is proving more successful than even the Iraqis have claimed so far. Iranian oil exports through that terminal have dropped to less than 600,000 barrels a day from about 1.8 million barrels a day before the Iraqi blockade began.

While Iran does have oil ports farther south, out of the range of Iraqi fighters, the capacity of those pumping and pipeline facilities isn't sufficient, gulf sources say.

Drop in Arms Supplies

Iran also needs some way to find a victory because it isn't on close terms with any major arms-producing country, and can't easily replace its aging, mainly U.S.-manufactured air force, diplomats contend. It has a maximum of about 90 serviceable jet fighters, and has so far been reluctant to engage Iraqi planes that attack ships visiting Kharg. One analyst says that one reason Iranian attacks on ships in the P[illegible] Gulf haven't succeeded is that Iran [illegible] ng missiles designed for use against ta[illegible] not vessels.

Some analysts say that a much-expected land offensive against Iraq has run into military opposition. According to one recent report, several Iranian army officers have been jailed for opposing a new offensive. In [illegible]

Economic Summit Opens; Leaders Seen Stressing Need for Dialogue With Soviets

84 SEP 11

By PETER NORMAN
And RICH JAROSLOVSKY
Staff Reporters of THE WALL STREET JOURNAL

LONDON – The 10th economic summit got under way with a dinner discussion of East-West relations, and the leaders of the world's major industrial nations are expected today to stress the need to maintain dialogue with the Soviet bloc.

After a meeting between President Reagan and West German Chancellor Helmut Kohl, a German spokesman said both men agreed that "it is now up to the U.S.S.R. to respond" to President Reagan's speech in Dublin last week, in which he recommitted the U.S. to the principle of arms control. trol.

But during a number of bilateral meetings, the president heard many of the economic concerns likely to dominate the remaining two days of the summit. These include the European belief that high U.S. interest rates are caused by the big U.S. budget deficit, worries about Third World debt, and Japanese concerns about the effect of the Iran-Iraq war on oil supplies.

The meeting is also likely to "open the door" for a new round of trade-liberalization talks, according to the German spokesman. But officials from other nations cautioned that the formal launching of a new round of talks, under the auspices of the General Agreement on Tariffs and Trade, won't happen here.

The U.S. Treasury secretary, Donald Regan, said Japanese Prime Minister Yasuhiro Nakasone told the president that the Japanese intended to propose that a new round of trade talks be prepared next year, to begin in 1986. "The president said he would strongly back the prime minister in that endeavor," Mr. Regan said.

Mr. Regan also dismissed suggestions from Martin Feldstein, the soon-to-depart chairman of the president's Council of Economic Advisers, that the U.S. may be facing rising short-term interest rates and a possible recession. "That's what makes a market – differences of opinion – and I differ with that," said Mr. Regan. He added that he still saw "interest rates trending down," as the rate of U.S. growth slows.

But Chancellor Kohl reiterated Europe's concern over U.S. interest rates and the budget deficit. While recognizing that strong U.S. economic growth had helped European trade with the U.S., he pointed out that rising U.S. interest rates restricted Europe's growth by raising the cost of borrowing.

French President Francois Mitterrand told Mr. Reagan that high interest rates exacerbated the Third World debt crisis, although he endorsed the U.S. position that the debtor nations should put their own economic houses in order.

Mr. Mitterrand added, however, that recent food riots in countries like Tunisia and Morocco showed the political limits of the [illegible] But Treasury Secretary [illegible]

tary Regan reaffirmed the administration's policy of treating debtor nations as individual cies. He said Argentina, for example, which has submitted an austerity program to the International Monetary Fund, now hopes to sign a letter of intent before June 15, leading to IMF loans.

On energy, Mr. Nakasone was concerned that the Iran-Iraq war could threaten Japan's oil supplies, and advocated new contingency plans to share the West's oil reserves. But both American and British sources said specific contingency plans, beyond those already existing through the International Energy Agency, weren't likely to be discussed.

While the heads of government were dining last night, German sources reported that political officials from the U.S., West Germany, France, Italy, Great Britain, Canada and Japan would be drafting the possible joint statement encouraging a thaw in relations with the Soviet Union.

Last night, American officials were denying any plans for the summit conferees to issue a statement on noneconomic matters. But prior to Mr. Reagan's European trip, White House sources said they wouldn't mind such a statement. The proposed East-West statement, in particular, could help portray Mr. Reagan as a man of peace as he prepares for the November presidential election.

The U.S. election campaign makes it unlikely that the summit will either propose

Latin Am[illegible] Plan to [illegible]

A WALL STREET [illegible]

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major arms-producing country, and can't easily replace its aging, mainly U.S.-manufactured air force, diplomats contend. It has a maximum of about 90 serviceable jet fighters, and has so far been reluctant to engage Iraqi planes that attack ships visiting Kharg. One analyst says that one reason Iranian attacks on ships in the Persian Gulf haven't succeeded is that Iran is using missiles designed for use against tanks, not vessels.

Some analysts say that a much-expected land offensive against Iraq has run into military opposition. According to one recent report, several Iranian army officers have been jailed for opposing a new offensive. In the past, some army officers have argued against the costly human-wave strategy used by the country's revolutionary guard.

Less-orthodox counterstrikes such as sea raids, subversion and guerrilla attacks may be among the few options open to Iran, the analysts say.

Key Backers of Iraq

Saudi Arabia and Kuwait are likely targets of fresh Iranian attacks because of substantial financial assistance the two Arab states are giving Iraq's war effort.

Iran's attacks on shipping offshore Saudi Arabia and Kuwait are believed to be in retaliation against Iraqi raids on shippping near Kharg. The Saudis downed two Iranian jets on Tuesday when the F-4s appeared to be searching for tanker targets about 40 miles off the Saudi coast. Two Saudi F-15s on patrol in the area shot down the older F-4s with two air-to-air missiles.

It was Saudi Arabia's first such use of its superior arsenal since the Iran-Iraq war began. Both the F-15 and F-4 are American-made.

The possibility of a switch in Iranian tactics has spurred a meeting Tuesday of foreign ministers from the six Arab members of the Gulf Cooperation Council in Taif, Saudi Arabia's summer capital. The six are Saudi Arabia, Kuwait, Oman, the United Arab Emirates, Bahrain and Qatar.

The ministers are expected to discuss internal security and measures to guard against Iranian subversion or raids.

Iran has tried such tactics before. In December 1981 Bahrain officials reported an Iranian plot to overthrow the government. And Tehran radio customarily pours out invective against moderate gulf regimes, trying to incite listeners against their governments.

The Iranians have particularly aimed their propaganda and subversion attempts at Shiite Moslems, who make up a substantial part of the population of Bahrain, Kuwait, Iraq and Saudi Arabia's eastern province. Iran's ruling mullahs and the great majority of its population are Shiites, whereas the governments and most of the population of the Arab states are from the Sunni sect.

Spain's Iberia Airlines Criticizes Journal Story About Atlantic Flights

Special to THE WALL STREET JOURNAL

MADRID, Spain – Spain's Iberia airlines said a Wall Street Journal article that raised questions about the safety of the air carrier's transatlantic flights was misleading

But Chancellor Kohl reiterated Europe's concern over U.S. interest rates and the budget deficit. While recognizing that strong U.S. economic growth had helped European trade with the U.S., he pointed out that rising U.S. interest rates restricted Europe's growth by raising the cost of borrowing.

French President Francois Mitterrand told Mr. Reagan that high interest rates exacerbated the Third World debt crisis, although he endorsed the U.S. position that the debtor nations should put their own economic houses in order.

Mr. Mitterrand added, however, that recent food riots in countries like Tunisia and Morocco showed the political limits of the West's debt strategy. But Treasury Secre-

Dollar Strengthens Despite M1 Decline; Gold Falls $2.50

By STEPHEN GROVER
Staff Reporter of THE WALL STREET JOURNAL

The U.S. dollar strengthened against most major foreign currencies yesterday despite an unexpected decline of $2.4 billion in M1, the basic U.S. money supply measure. The market had expected an increase of about $500 million.

The M1 decline caused a temporary dip in the dollar and long-term U.S. interest

CURRENCY RATES

	New York Thurs.	Home Mkt. Thurs.	New York Wed.
(In U.S. dollars)			
British pound	1.3963	1.3970	1.3962
Canadian dollar	0.7695	0.7692	0.7688
(In foreign units to U.S. dollar)			
French franc	8.3100	8.2650	8.2650
Japanese yen	231.60	230.65	231.00
Swiss franc	2.2495	2.2293	2.2405
West German mark	2.7010	2.6849	2.6905

Based on average of late buying and selling rates.
Home markets: London, Toronto, Paris, Tokyo, Zurich and Frankfurt.

GOLD PRICES
(In U.S. dollars per troy ounce)

Comex Thurs.	London PM Thurs.	London AM Thurs.	Comex Wed.
390.20	392.20	392.00	392.70

Comex based on settlement price for gold for delivery in the nearest month on Commodity Exchange in New York.
London based on morning and afternoon price fixings of five major dealers.

rates. But within minutes, both the dollar and the long-term interest rates recovered all the ground they had lost.

Foreign-exchange traders said a number of factors accounted for the dollar's strength yesterday, including the lack of apparent headway in a settlement of the West German metalworkers strike. The result was that the dollar rose to more than 2.7 marks in late New York trading yesterday for the first time in a week.

Gold declined $2.50 an ounce in thin trading.

Elaine Clifford, an assistant vice president of Irving Trust Co., New York, said another factor that contributed to a strong dollar yesterday was "a feeling that the U.S. Federal Reserve may not be so ready to move in and hold down (U.S.) interest rates as we'd believed early this week." It was trader speculation that the Fed would provide liquidity to the market that led to a sizable selloff of dollars last Friday and Monday.

Lower U.S. interest rates weaken the dollar by making dollar-denominated investments look less attractive.

For the month of the weekend [illegible]

LILCO 3J

output has risen by almost 10,000 b/d to 47,000 b/d at the Isfahan refinery where processing is now reported running 45% over original installed capacity at 290,000 b/d.

Elsewhere, the Shiraz petrochemical complex will start up next March, providing 460,000 tons of urea; 320,000 tons of ammonium nitrate; 2,600 tons of ammonium hydroxide and 11,000 tons of nitric acid.

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IRAQ—Despite heightened Gulf war tensions, Iraqi crude oil exports through the trans-Turkey pipeline dropped to 780,000 b/d in May, PIW learns, or 9% below its recently increased capacity. April throughput had been a record 860,000 b/d (PIW May 14, p.6). The Oapec-sponsored Apicorp Arab investment agency is lead-managing a $120-million loan to Iraq to increase pipeline capacity further, to 1-million b/d.

Yugoslavia was the principal lifter in May at the Ceyhan terminal on the Mediterranean, with the equivalent of 158,000 b/d. Brazil dropped to second place with 132,600 b/d, followed by Greece with 120,900 and Italy with 105,300 b/d. Other purchasers were Spain 62,400 b/d, Turkey 60,400, Morocco 48,700, France 41,800, Netherlands 35,100, East Germany 11,700 and Cyprus 3,900 b/d. Cargoes were handled by 35 tankers.

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KUWAIT—The government is on target for its aim of putting primary emphasis on refined products, despite a strong recovery in crude oil exports last year. Product output rose 13% in 1983 to 531,000 b/d, while crude exports soared 48% to 544,000. That's nearly a 50-50 split of total crude output, which climbed 28% to 1,065,000 b/d. Kuwait's long-term goal is to sell about 60% of its oil production as products (PIW May 25'81,p.4).

Product exports rose 9% to 386,000 b/d, with 41% going to Europe. Asia and the Far East took 34% of products besides 70% of crude shipments and 57% of LPG. Total exports of LPG gained 35% to 1.34-million tons.

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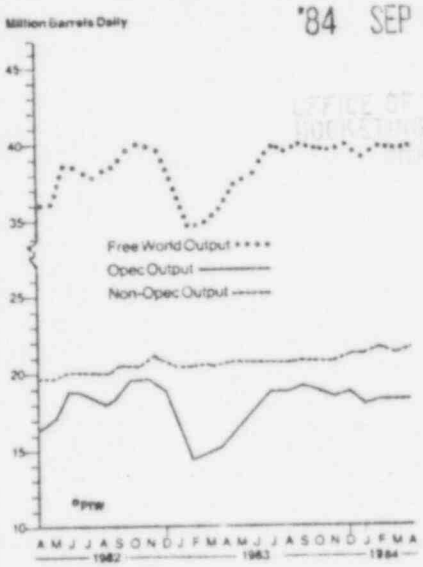
NORWAY—Parliamentary approval for development of the large North Sea Oseberg oil field will provide further crude marketing flexibility by the end of the decade (PIW Oct.17,p.1). Like the nearby Gullfaks field coming on stream in 1987, Oseberg will be linked by pipeline to the mainland, near Mongstad. That will open

Opec Output Steadying After Recent Upsets



Current Opec production has slipped slightly further to under 17.9-million b/d in response to reduced seasonal demand and marginally curtailed liftings due to the Iraq-Iran war. Despite the decline, output is still above the group's agreed 17.5-million b/d ceiling (PIW May 21,p.7), although volumes are fluctuating almost daily with war conditions.

PIW's more detailed monthly assessment meanwhile shows April Opec output levels were down 160,000 b/d to 18.1-million b/d. Saudi Arabia registered a 300,000 b/d April gain, and seems to be the only major Mideast producer showing an output rise. Outside the Gulf, Nigeria dropped 160,000 b/d and has been producing at quota since April.

Opec:	April	March	Feb.	—Jan.-April—		§Output
Mideast Opec:	Volumes in 1,000 Barrels Daily			Vol.	% Chg	Capacity
Saudi Arabia†	4,900	4,600	4,800	4,799	+21.4	11,000
Iran	2,300	2,400	2,350	2,261	-2.8	3,000
Iraq	1,200	1,200	1,000	1,139	+28.3	1,500
Kuwait†	900	1,050	1,000	950	+28.2	2,500
UAE, Abu Dhabi	800	800	800	800	+10.3	2,500
UAE, Dubai	350	350	350	350	+11.2	370
UAE, Sharjah	55	55	50	53	+52.1	50
Qatar	325	380	340	372	+67.7	650
Neutral Zone‡	435	482	474	463	+67.1	600
Mideast Opec	**11,265**	**11,317**	**11,164**	**11,186**	**+18.0**	**22,170**
Other Opec:						
Venezuela*	1,815	r1,815	1,815	1,814	-5.5	2,500
Nigeria	1,300	1,460	1,563	1,419	+56.6	2,400
Libya	1,100	1,100	1,100	1,100	+12.6	2,000
Indonesia*	1,600	1,560	1,575	1,550	+28.4	1,600
Algeria	600	600	600	613	-5.8	1,100
Gabon	150	150	150	150	-4.7	200
Ecuador	256	245	240	245	+7.6	250
Total Opec	**18,086**	**18,247**	**18,207**	**18,078**	**+16.4**	**32,220**
Non Opec:						
United States	8,717	8,510	8,662	8,640	-0.6	...
North Sea	3,225	3,189	3,354	3,256	+14.4	...
Mexico	2,771	2,711	2,757	2,726	+5.0	...
Oman	400	399	403	400	+12.0	...
Others	6,390	6,390	6,385	6,350	+10.2	...
Total Non-Opec	**21,503**	**21,199**	**21,561**	**21,373**	**+5.5**	...
Opec NGL	1,060	1,060	1,060	1,060	+31.9	...
Non-Opec NGL	2,450	2,450	2,450	2,450	+2.1	...
Total Free World	**43,099**	**r42,956**	**43,278**	**42,960**	**+10.2**	...
Others:						
Soviet Union	11,700	11,700	11,700	11,713	-0.9	...
Other East Europe	420	420	420	420	0.0	...
China	2,107	2,100	2,100	2,102	+0.8	...
Total World	**57,326**	**r57,176**	**57,498**	**57,195**	**+7.3**	...

§PIW's assessment of maximum production sustainable for several months without regard to government ceilings. †Excluding share of Neutral Zone, shown separately. ‡Capacity and production shared about equally between Saudi Arabia and Kuwait. r Revised
*Includes condensates, at about 105,000 b/d for Venezuela and 130,000 b/d for Indones

year. The latest increases decreed by the National Petroleum Council average 21% and took effect April 18. They follow increases of 27% to 31% on Jan.26.

The Brazilian cruzeiro has declined 47% against the US dollar this year through early May, raising costs of imported crude oil the same amount. Brazil imports about half its oil needs.

Gasoline has been increased 19.2% to $1.83 a US gallon at the pump. Fuel alcohol has gone up 19.3% to $1.08, and diesel fuel by 21.2% to $1.28.

Fuel oils are up an average of 21% and LPG by 23.8%.

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CHINA—Virtually no growth is expected in China's energy sector this year, while output increases in other areas of the economy will be halved from 1983 levels. State Planning Minister Song Ping reports crude oil output is expected to be 108-million tons, up 2-million; coal 720-million, up 10-million; and electricity output 360-billion kilowatts, up 8.6-billion.

Industrial growth is forecast at 5% against 10.5% last year, while agricultural production will rise by 4% versus 9.5% in 1983.

The government is planning a $10-billion or 28% boost to $45-billion this year on capital construction and equipment and imports of technology, with the heavy emphasis on improving energy capacity and distribution, and the transportation sector.

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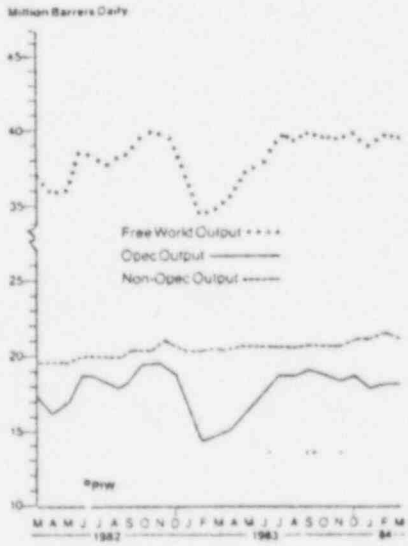
FRANCE—A "sizable" reduction requested by France in Russia's Siberian gas price or its equivalent under current negotiations would be retroactive to early 1984, when deliveries started, Gaz de France hopes. A reaction to the French approach for a market-based adjustment is expected soon.

Soviet gas officials may prefer to compromise between granting GDF's price cut bid and easing offtake obligations by slowing down the volume build-up. Or they could increase flexibility beyond the minus 20% to plus 5% range in the original 8-billion cu m contract (PIW April 23,p.3).

In a general review, GDF chief Delaporte also indicated there "will be room" for currently-known gas supplies potentially available for Europe, with Nigerian and Cameroon first, but not for 10 years or more. Longer term, Europe is interested in the Canadian Arctic. Gaz de France and German Ruhrgas each have a 25% interest alongside Petro-Canada's

Opec Output Remains Surprisingly Strong



Current Opec crude oil production is sliding from first-quarter levels but not nearly as quickly as expected. Present output is estimated at around 17.9-million b/d, down slightly from a first-quarter average of 18.1-million b/d. A more detailed PIW assessment shows Opec March production at 18.3-million b/d, some 800,000 b/d above the group's agreed 17.5-million b/d "ceiling" (PIW April 16,p.11).

Month-on-month, March declines in Saudi Arabia and Nigeria were offset by gains in Iraq, Iran and Kuwait. Saudi output fell 200,000 b/d largely due to a fall-off early in the month.

Non-Opec output fell 360,000 b/d to 21.2-million b/d. Both the North Sea and US had sharp declines from a month earlier.

Opec:	March	Feb.	Jan.	—Jan.-March—		§Output
Mideast Opec:	Volumes in 1,000 Barrels Daily			Vol.	% Chg	Capacity
Saudi Arabia†	4,600	4,800	4,900	4,766	+18.6	11,000
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Iraq	1,200	1,000	1,150	1,119	+29.1	1,500
Kuwait†	1,050	1,000	r850	966	+28.1	2,500
UAE, Abu Dhabi	800	800	800	800	+14.3	2,500
UAE, Dubai	350	350	350	350	+10.6	370
UAE, Sharjah	55	50	50	52	+50.4	50
Qatar	380	r340	440	388	+85.6	650
Neutral Zone‡	482	r474	459	472	+89.4	600
Mideast Opec	11,317	r11,164	r10,999	11,161	+16.4	22,170
Other Opec:						
Venezuela*	1,830	1,815	1,810	1,818	-8.5	2,500
Nigeria	1,460	1,563	1,360	1,459	+76.9	2,400
Libya	1,100	1,100	1,100	1,100	+13.5	2,000
Indonesia*	1,560	r1,575	1,470	1,534	+34.2	1,600
Algeria	600	600	650	617	-2.7	1,100
Gabon	150	150	150	150	-1.0	200
Ecuador	245	240	240	242	+4.9	250
Total Opec	18,262	r18,207	r17,779	18,081	+16.5	32,220
Non Opec:						
United States	8,510	8,562	8,675	8,615	-0.8	...
North Sea	3,189	3,354	3,263	3,267	+14.6	...
Mexico	2,711	2,757	2,668	2,711	+5.4	...
Oman	399	403	397	400	+12.0	...
Others	6,390	r6,385	r6,240	6,337	+10.2	...
Total Non-Opec	21,199	r21,561	r21,244	21,330	-5.5	...
Opec NGL	1,060	1,060	1,060	1,060	-31.7	...
Non-Opec NGL	2,450	2,450	2,450	2,450	+2.1	...
Total Free World	42,971	r43,278	r42,533	42,921	+10.2	...
Others:						
Soviet Union	11,700	11,700	11,750	11,717	-0.7	...
Other East Europe	420	420	420	420	0.0	...
China	2,100	2,100	2,100	2,100	+0.7	...
Total World	57,191	r57,498	r56,803	57,158	+7.3	...

§PIW's assessment of maximum production sustainable for several months without regard to government ceilings. †Excluding share of Neutral Zone, shown separately. ‡Capacity and production shared about equally between Saudi Arabia and Kuwait. r Revised. *Includes condensates: at about 105,000 b/d for Venezuela and 130,000 b/d for Indonesia.

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The Energy Daily

Energy Daily

Date: JUN 14 1984

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Tuesday, June 12, 1984

The Middle East

Inexorable Escalation

The escalating "tanker war" in the Gulf is the logical adjunct to both belligerents' overall military strategies and, for Iran, just the prelude to more comprehensive attacks upon Kuwaiti and Saudi land installations. The mix of geography, available military strike capacity, and Iran's limited economic resilience all but dictates that this newest economic dimension to the war must escalate still further.

For both Iran and Iraq the newest wave of attacks on oil tankers is perceived as the only way to break the costly stalemate on the ground. The armies have bogged down in the marshes of the South and ensnarled themselves in the mountain passes of the North, so that both parties again are targeting their adversary's economic bases in their last hopes of tipping the balance in the four-year-old war.

The same logic, unfortunately, decrees no less inexorably that Iran must seek out more sensitive and more prominent targets in both Kuwait and Saudi Arabia, because its attacks on their shipping cannot wreak the same economic hardship as Iraq's attack on Iran's oil export terminal on Kharg Island. Given that asymmetry, Iran can be expected to extend its air raids to power plants, refineries, or vital and vulnerable water desalination plants.

BY THOMAS STAUFFER
VIENNA

New Balance Of Terror. The Exocet missiles are the key factor. Iraq's acquisition of these long-range, airborne missiles and the Super Etendard fighters from France triggered the newest escalation by enabling Iraq for the first time to reach Iran's economic lifeline at Kharg. Hitherto Kharg had been beyond the reach of Iraq's MiGs, based west or north of Baghdad.

These French weapons now equalize the balance of economic terror, permitting Iraq to wreak the same damage upon Iran's oil export capability, which Iran much earlier had successfully done to Iraq. The geography and technology in phase one of the war favored Iran: its airfields were closer to Iraq's vulnerable economic facilities—oil terminals and ports—while its own principal installations were well out of range of Iraq's aircraft.

Iran's Trump. Saudi Arabia and Kuwait have become targets thanks to the devastatingly effective success which Iran had in the first stage of the war of attrition, so that Iraq was rescued only by massive support from Saudi Arabia and Kuwait, which have become Iraq's "lifeline" in the most literal sense.

Very early in the war Iran destroyed the key Iraqi export terminal at Khor al-Amaya, together

(Continued on page 4)

Snagged

BY BURT SOLOMON

The U.S.-China nuclear cooperative agreement, initialled on the last day of April, is still stuck in the State Department, and may well not be sent to Congress until it's too late for it to go into effect this year.

When President Reagan announced the bilateral pact during his journey to China, State Department officials thought the Administration would deliver the text to Capitol Hill by late May, in time for it to reside there for the requisite 60 legislative days and take effect before Congress adjourns for the year. As of yesterday the document was still at the State Department, an official said. And once it leaves there—the official wouldn't predict when—it must be "staffed out" at the White House and then be formally signed before it's ready for its trip down Pennsylvania Avenue. For the Swedish nuclear agreement—considerably sparser in political pizzazz than the China pact—those steps took a long time (it was initialled last June, sent to the White House in September, signed in December, then delivered to Congress in January). If Congress adjourns before the 60 days transpire, the clock starts once again when the pact is resubmitted next year.

This delay has prompted conjecture in Washington that the President's campaign strategists think the agreement is too controversial for election year consumption. The Administration hasn't decided yet whether to submit the pact to Congress—and unveil its [illegible]ads-controversial text—if tim[illegible]ows too short for it to take ef[illegible] this year absent a lameduck sess[illegible], but the State Department offici[illegible] thinks

(Continued on next page)

Middle East: Inexorable Escalation...

(Continued from page one)

with some field facilities in Ruamilah. This wiped out almost 2.5 million barrels per day of exports or three-quarters of Iraq's oil export capacity.

Simultaneously, Iran also closed Iraq's sole ports, Basrah and Fao, leaving only the road links between Baghdad and the outside world. Moreover, Syria, allied with Iran in the crazyquilt of Middle Eastern rivalries and coalitions, played a key role in complementing Iran's attacks: Syria closed the oil pipeline to Tripoli and Banias, eliminating that outlet for Iraq's shut-in oil capacity; it also blocked the major roads from Lattakia and Beirut to Baghdad and, lastly, interrupted service on the railroad linking Baghdad with Europe.

On the other hand, Iraq harmed Iran but little. The export refinery in Abadan was destroyed, but little damage was done to the oil fields themselves, and the key pipelines were not hit. Khorramshahr, Iran's biggest port was closed, lying, like Basrah, on the common waterway, the Shatt al-Arab.

However, Iran diverted traffic to Bandar Khomeini and to its large, new port at Bandar Abbas; these were supplemented by increased truck traffic through Turkey and rail shipments through the USSR, so Iran emerged from the first phase of war much better positioned to wage war than Iraq.

Kuwait and Saudi Arabia were forced to fill the breach, relieving Iraq with money and with infrastructural backup, thereby setting themselves up as prime Iranian targets in this newest round of sanctions and counter-sanctions.

First, the two countries offset part of Iraq's lost oil revenues by producing extra oil of their own—at negligible cash cost—and permitting this to be sold for Iraq's account. Notionally, the roughly 300,000 b/d of offshore production from the Japanese concession in the former Neutral Zone are dedicated to Iraq. Officially, these "sales" are loans, but repayment is not seriously expected. But on the other hand, given both countries' huge oil reserves and the fact that the extra liftings are supposed to be included within Iraq's share of the total OPEC production quota, the opportunity cost of the deliveries is close to nil, while vital for Iraq, so that the value very much exceeds the real cost.

Second, several million tonnes per year of freight, destined for Iraq, transit Kuwait and the Saudi port of Dammam. In particular, two piers at Shuaikh, south of Kuwait city, are dedicated to Russian ships, delivering largely military cargo which moves in nightly convoys north to Baghdad.

In these ports, as in Aqaba, certain facilities are dedicated to Iraq's use, and berthings are scheduled directly by Iraqi authorities. The logistical support is critical and is only supplemented by the more fragile truck routes across Turkey or through Jordan via Aqaba.

The financial and logistic contributions of Saudi Arabia and Kuwait effectively offset both Iraq's lost oil revenues and its lost port access.

Path To Escalation. Iraq can now regularly hit at Iran's economic lifeline, using the new missiles, but Iran—although resupplied via Israel with spares for its U.S.-made aircraft—cannot yet extend its operating range to reach new Iraqi targets, beyond those already destroyed.

Iraq's attacks on Kharg have already taken their toll; although only two ships were actually hit, many tankers have cancelled liftings from Iran, and Iran's exports have dropped dangerously—possibly to 300,000-500,000 b/d—much less than needed to sustain the war and essential imports.

Iran cannot long sustain this economic strangulation. Yet, given the geography and the technical limitations of its remaining aircraft, the only comparable economic sanctions it can further inflict upon Iraq are indirect, *i.e.*, by hitting Saudi and Kuwaiti ships or land installations, in the hopes of cutting Iraq's lifeline via its allies.

Limited escalation—in which Iran counters any attack on shipping from Kharg with attacks on Kuwait- or Saudi-bound vessels—cannot be expected to work; so Iran, if not forced to the negotiating table (as Iraq so fervently wishes), must direct its attacks against land installations.

The sanction value of attacks on Saudi Arabia and Kuwait is limited. Both can endure an export cutoff or reduction much longer and much better than Iran, so symmetrical counter-attacks by Iran cannot be effective.

Kuwait's portfolio income alone covers about two-thirds of its needs, and it could draw upon financial reserves for the remainder; readily marketable "live" assets exceed $25 billion. Moreover, it prudently installed dual or tri-fuel capacity at all power plants and thus is independent of associated gas.

Saudi Arabia can dispose of one-third of its production via the pipeline to the Red Sea, and *in extremis*, it too could make up any further shortfall in exports with its portfolio income and by judiciously drawing down its even larger financial assets invested abroad. The Saudis, however, are much more dependent upon associated gas and deeper cutbacks could force electricity rationing and curtailed water deliveries.

The Ominous Balance. The newest round is particularly dangerous because Iraq can effectively strangle Iran's oil exports, but Iran, if it confines its attacks only to Saudi or Kuwait shipping, cannot exercise comparable leverage. To force the Saudis and Kuwaitis to cut their vital support for Iraq, Iran must target more vulnerable facilities and, indeed, must do so before its own economic hemorrhage becomes acute. The prospects for an early, further escalation are thus ominous.

The Iranians have limited reserves and will feel the financial pinch both sooner and more deeply.

Thomas Stauffer is a visiting professor at the Diplomatische Akademie in Vienna, a consultant to the Organization of Petroleum Exporting Countries and an occasional contributor to **The Energy Daily.**

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WASHINGTON: Burt Solomon (editor), Kennedy Maize. LONDON: David Fishlock. CALGARY: David Hatter. *BUSINESS STAFF:* Jane Connolly (business manager), Ann Wood, Betty Thomas, Ruth Frazier, Richard McCormack. *Promotion/Production:* Donna Lomangino, Susan Stevenson.

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U.S. Steps Up Planning For Possible Oil Cutoff

6/14/84

By ROBERT D. HERSHEY Jr.

Special to The New York Times

WASHINGTON, June 13 — The Government and the oil industry, prompted by intensified fighting in the Persian Gulf, have stepped up efforts to determine how to respond to a possible cutoff of oil shipments through the gulf.

Although the complete loss of the seven million barrels a day that flow through the Strait of Hormuz is regarded as unlikely, and four million barrels a day could quickly be made up by other producers, the situation is so volatile and uncertain that it has prompted the Reagan Administration and Congress to review the adequacy of preparedness plans.

So far, the intensified fighting in the gulf has caused virtually no reduction in the flow of oil to the West and Japan. The markets, with oil in abundant supply, have generally remained calm. Insurance premiums on cargoes and hulls have soared, but that has largely been offset by equivalent price-cutting by gulf producers eager to sell their oil.

Nevertheless the Administration seems to have concluded that a substantial price run-up or, far worse, a return of gasoline lines, could prove disastrous in the November election. An oil shortage would almost certainly prompt Democrats to try to exploit President Reagan's 1982 veto of a bill that would have extended his specific authority to impose price and allocation controls on oil.

Even the loss of millions of barrels a day of Persian Gulf oil might well cause no immediate supply problem. No one really knows, but business executives and various energy analysts say a cutoff of Persian Gulf oil could touch off a spurt in prices, the husbanding of inventories and a scramble by oil users to insure supplies.

While much was learned from coping with the two previous Middle East oil crises, the 1973-74 embargo by Arab members of the Organization of Petroleum Exporting Countries and the disruption that accompanied the revolution in Iran five years later, many analysts say they lack confidence that the lessons would, in fact, be applied.

The pre-eminent lesson, it is widely agreed, is that major government interventions in the market, such as by legislating that prices remain low or

Continued on Page D17

U.S. Steps Up Planning for a Possible Oil Cutoff

Continued From First Business Page

by directing the flow of supplies, are almost certain to make the problem worse. Nonetheless, President Reagan would come under intense political pressure to do just that.

This time, a chief aim of United States emergency planners is to prevent panicky hoarding by industry and the public that would drive oil prices sharply higher. That strategy may be hard to bring off, given the psychological and factual unknowns about any disruption.

The Treasury Department is said to have conducted a recent study showing that the price of oil could rise about $10 a barrel from current levels, to $39 a barrel, within weeks of a total loss of gulf oil. If passed through to the gasoline pump, that would raise prices nearly 25 cents a gallon.

A Treasury spokesman, saying the matter was "classified," declined comment.

"What you'll have people doing is bidding for the supplies available in the spot market," said Lawrence J. Goldstein, executive vice president of the Petroleum Industry Research Foundation, an industry group. Oil companies, he added, "would have to hold on to their inventories a little longer," which would have unpredictable effects on supplies and prices.

One sign of increased concern by large users was the briefing requested by the board of the Air Transport Association, an airline industry group whose members account for the bulk of the 1.1 million barrels a day of jet fuel that are consumed by the nation's airlines. Donald H. Pearlman, a senior Energy Department planner, met with the group last Thursday.

Mr. Reagan still has sweeping powers under the Defense Production Act to dictate new terms for commercial contracts and to impose virtually any kind of controls. To do this, he must declare a national emergency.

Officials insist, however, that the Administration will pursue a basic policy of relying on the market and on the early tapping of the Strategic Petroleum Reserve to deal with an emergency.

"This Administration is committed to the notion of a free market in times of short supplies as well as in times of plentiful supplies," said a top energy official who asked not to be named. "The market will be the most efficient and ultimately the most fair allocation mechanism."

But the official also said the Administration intended to use supplemental efforts to manage a crisis. Relying on the marketplace, this official added, "does not mean that the Federal Government sits around with its hands in its pockets," doing little. "We are fully aware of the fact," he said, "that the Government can play an appropriate role in attempting to cope with a major oil-supply disruption."

Among these efforts would be a public information campaign intended to reassure the industry, the markets and the public that lost supplies could be replaced from other producing countries — Nigeria, Venezuela, Mexico and perhaps Libya — and from strategic and commercial stockpiles around the world.

An analyst for a major oil company, who also requested anonymity, estimated there that governments owned or controlled about 1.25 billion barrels of oil in storage. He said it was enough to replace an oil shortfall of three to four million barrels a day for a year. The American reserve alone contains 404 million barrels, enough to replace all imports for nearly three months and all gulf imports for more than two years.

In addition, considerable quantities of oil, now about 40 days' supplies, are always in transit to the West, and Saudi Arabia has a "floating" storage of some 60 million barrels.

Plans for Oil Conservation

The Government would also encourage, but not require, such steps as turning down thermostats on hot water heaters and a switching to natural gas by industrial plants that now burn oil.

An Energy Department study has found that fuel-switching could save the United States from 400,000 to 1.2 million barrels a day without the installation of any new equipment.

Congress, meanwhile, has under consideration several further emergency preparedness actions, most supported at least in principle by the Reagan Administration.

One would clear the way for a corps of oil-industry executives to join the Government to help manage an emergency. Another, sponsored by Senator John H. Chafee, a Rhode Island Republican, would provide Federal pre-emption of state laws that might otherwise impede oil movements necessary to respond to a disruption.

And Senator Bill Bradley, Democrat of New Jersey, has a nine-point package that includes selling options on oil in the strategic reserve, a device seen as dampening prices by guaranteeing supplies to, say, independent oil companies that faced [illegible] oil.

Until recently, the inclinati was to regard the reserve a thing to tap only as a last res the R Administration, has presided over a more t pling of the reserve's size sinc office, insists it will move qu draw on it early in an emerg part of the effort to curb p creases.

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Nonetheless, some Americ cluding Mr. Goldstein of the leum foundation, remain sk that the United States would commit its reserve early in a tion, especially if other c failed to do the same. Sat summit communiqué cited for "mutually supportive act did not indicate that any ag had been reached for coor stockpile draw-downs.

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And Senator Bill Bradley, Democrat of New Jersey, has a nine-point package that includes selling options on oil in the strategic reserve, a device seen as dampening prices by guaranteeing supplies to, say, independent oil companies that faced shortages of crude oil.

But the Senate Energy Committee today failed for the second time in a week to approve any of the proposed legislation. The panel's chairman, Senator James A. McClure, Republican of Idaho, said he would try again next Wednesday.

Although its own oil position is relatively secure, the United States must be concerned about allies who are dependent on Middle East oil, as well as debt-ridden countries that, along with the international banking system, could not absorb the effects of a sharp price increase.

"We cannot focus on the United States as though it were in a vacuum," one Administration planner said.

A key element in the American response would be its strategic reserve housed in facilities along the Louisiana and Texas coasts. Some critics have questioned the physical ability to draw this oil, but Energy Department specialists say they are satisfied it is readily available.

Until recently, the inclination here was to regard the reserve as something to tap only as a last resort. But the Reagan Administration, which has presided over a more than tripling of the reserve's size since taking office, insists it will move quickly to draw on it early in an emergency as part of the effort to curb price increases.

President Reagan, in fact, asked allies to agree to a coordinated drawdown at the economic summit meeting in London. He is said to have met some resistance from Europeans.

Nonetheless, some Americans, including Mr. Goldstein of the petroleum foundation, remain skeptical that the United States would actually commit its reserve early in a disruption, especially if other countries failed to do the same. Saturday's summit communiqué cited the role for "mutually supportive action" but did not indicate that any agreement had been reached for coordinated stockpile draw-downs.

Oil Imports Up 21.5% for May

By The Associated Press

American imports of oil jumped 21.5 percent in May from a year earlier and accounted for more than one-third of the nation's oil use, the American Petroleum Institute reported yesterday.

Oil imports in the first five months of this year were up 30.2 percent, the trade group said. It attributed the rise in demand for oil to relative stability in prices and the broadening economic recovery.

Retail gasoline prices have fallen. Using the Oil and Gas Journal's figures for major-brand regular gasoline, the institute said the inflation-adjusted price at the pump dropped 5 percent between May 1983 and May 1984.

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ising Starts 10.5% in May, ,782,000 Rate

ner Spending Increased a Strong 1.1%, Again tpacing Gain in Income

By ALAN MURRAY
ff of THE WALL STREET JOURNAL

NGTON – Rising interest rates using starts in May, but they did w consumer spending, according rce Department reports.

second consecutive month, con- reased their spending at a faster heir savings rose, the department owed. Personal income increased ay, the same as in April, while onsumption rose a strong 1.1%, 1.6% jump in April.

arate report, the department said arts dropped 10.5% to a 1,782,000 in May, down from April's sur- ugh 1,990,000 rate (see chart on

conomic analysts didn't expect increase in consumption. A 0.2% il sales during the month, which ed last week, seemed to indicate mers had eased their spending in he personal consumption figures re believed to be a more reliable the retail sales numbers, which and subject to large revisions. dicates we still have quite a ro- conomy," said Allen Sinai, chief for Shearson Lehman/American e. "I think we are continuing to pacts and results of massive per- ne tax cuts" he added.

ong ing increasing ea rest rates may con- e, strong demand for consumer bined with rising business and t demand for credit means "the

Persian Gulf War Helps Depress Oil Prices On Spot Market Instead of Raising Them

6/20/84

By YOUSSEF M. IBRAHIM
Staff Reporter of THE WALL STREET JOURNAL

Instead of raising oil prices, the fighting in the Persian Gulf is indirectly putting downward pressure on them.

The pressure is coming in the short run from increased output by major producing countries. This is already helping depress prices on the spot market.

Also, oil companies in the U.S., Japan and Western Europe are stockpiling oil. International Energy Agency officials in Paris and U.S. oil industry sources said the buildup in inventories is running between one million and 1.5 million barrels a day for the second quarter, about three times the normal rate for similar periods in past years. As this oil comes back into the market it could further depress prices.

When Iraq and Iran recently began stepped-up attacks on oil tankers in the gulf, it was widely expected that the fighting would, if anything, put upward pressure on prices because of actual cutbacks in shipments and fear of larger ones to come.

That hasn't happened, largely because of the unexpected jump in oil production in recent weeks by the Organization of Petroleum Exporting Countries. Government and oil industry sources estimate OPEC output is more than 18 million barrels a day, with some estimates ranging as high as 18.5 million barrels. That's well above the 13-member cartel's self-imposed limit of 17.5 million barrels a day.

The fighting in the gulf, sources said, was the spark for the production increase. At various times oil shipments have been curtailed and that apparently spurred OPEC members that weren't affected by the fighting to increase production.

However, curtailments of shipments from the gulf have turned out to be relatively minor compared to the increase in OPEC output.

In addition, several OPEC members are reducing prices to sell more oil. "The world is awash in oil supplies," wrote Charles D. Maxwell, an oil analyst with Cyrus J. Lawrence Inc., in a recent report. "Suppliers seeking to sell their oil in competition with one another are having to discount prices by small fractions at every level of distribution."

Much of this oil is finding its way into the inventories of oil companies. Industry sources said these purchases were largely motivated by fear over the fighting in the Persian Gulf and the recent producer price cuts. Experts said this buildup will put further downward pressure on a weak spot market. Free-market prices have steadily dropped in the past three weeks on a worldwide basis despite the periodic alarm over the 45-month-long gulf war. They also said the implication of the buildup will become more evident in the next few weeks and into the third quarter, especially if the gulf war doesn't significantly reduce oil supplies.

"If inventories continue to be built up at anything like the present rate you will have weak spot prices for the next few months," noted Lawrence Goldstein, an energy analyst with the New York-based Petroleum Industry Research Foundation.

One of the major pressures that led to the 15% OPEC cut in oil prices in March 1983 was that oil companies loaded with inventories were dumping large quantities back on the market.

increased farmers' income by providing them with more crops, but most of that added income went into savings since farmers' in-kind income couldn't be spent quickly.

Inflation Measure

An inflation measure that is based on personal consumption and is reported with a one-month lag showed prices rose a slight 0.1% in April, compared with 0.4% in March.

The 10.5% drop in housing starts followed

Avon Retains Banker To Help Select Buyer For Its Tiffany Unit

By a WALL STREET JOURNAL Staff Reporter

NEW YORK – Avon products Inc. said it retained investment bankers Morgan Stanley & Co. to sell its Tiffany & Co. unit.

The company said the firm will "help select" a buyer from more than 25 companies and individuals that Avon said "have indicated an interest in buying Tiffany." Among possible buyers, an Avon spokesman said, is a group of the jewelry concern's executives that includes William R. Chaney, Tiffany chairman.

Avon wouldn't disclose terms it is seeking but said it hopes to identify a buyer within 30 days and close in 90 days. Daniel J. Meade, an analyst at First Boston Corp., said Avon is "likely to get" slightly more than Tiffany's $128 million book value. Avon purchased Tiffany in 1979 for stock valued at $104.5 million.

Avon said it wants to sell Tiffany to concentrate on its beauty, health care and direct-mail operations. Since acquiring Tiffany, Avon had tried to steer the concern toward a wider audience by expanding catalog operations and adding lower-priced merchandise. That strategy drew a mixed reaction and, in 1981, two longtime Tiffany exec-

utives – Walter Hoving and Plant – left.

In composite trading on Stock Exchange yesterday, $20.875, up 62.5 cents.

Avon said Tiffany's 1983 16% to $2.1 million from $2. earlier, on an 8.7% sales i million. Tiffany accounted Avon's profit and about 4%

LILCO 30

then the heavier crude fields will have gas output capacity of 1.9-billion cf/d at an oil production rate of 4-million b/d—twice the current level. This marks the final phase of the so-called Master Gas System (which was designed when oil output was targeted around 10-million b/d). It has gas plant processing capacity of 3-billion cubic feet of raw gas per day, but total gas production capacity could be close to 5-billion cf/d at high rates of crude output. The light fields can potentially produce about 3-billion cf/d of gas at 6-million b/d, also twice the current rate.

•

There's Oil Enough In Theory Even If Upper Gulf Closes

While Western government uneasiness is increasing at the oil supply implications of the Gulf war, the basic "worst case" scenario now being painted by industry analysts is far less cataclysmic than nine months ago when closure of the Hormuz Strait seemed an imminent possibility (PIW Oct.3,p.1). Total blockage could pose a loss of 8- to 9-million b/d of exports, with barely half replaceable from shut-in capacity in other producing countries. But now, closure of Hormuz is seen as neither feasible militarily nor in Iran's strategic interests, which it apparently believes are better served by retaliatory attacks on ships calling at Saudi, Kuwaiti and Neutral Zone ports.

Escalating attacks, however, have prompted consumer governments to contemplate concerted action to counter any cutback in the flow of oil from the Gulf. Japan—the industrialized country most dependent on Middle East oil—is seeking a commitment from other governments to coordinate the release of oil from national stockpiles in the event of a serious cutoff and may raise the issue at this week's seven-nation summit (p.8). The evident fear is that unless other governments like the US and West Germany follow suit, any drawdown of Japan's strategic reserve would prove inadequate.

Despite the uneasy reaction of some Western governments, Arab tanker authorities say the recent attacks are only a "minor irritant" with little impact on the longer-term flow of their oil. Regardless of high insurance rates, replacements have so far been easy to find for any ships declining to go into the upper Gulf, they say.

Today's simple arithmetic suggests that even a total cessation of exports through the Gulf by Iran, Kuwait and Saudi Arabia—amounting to some 6- to 6.5-million b/d—could be made up by other exporters and use of the US strategic stockpile. In fact, a gradual reduction in these supplies, rather than a total halt, is seen as a more likely outcome of renewed attacks. Most crucial, in contrast with the "Hormuz closure" scenario, the UAE and Qatar likely would remain open to shipping. Their joint 1.5-million b/d production would be available and a further 1.5-million of shut-in capacity could be activated. Nigeria could pump 1-million b/d more, Venezuela 500,000 b/d, Libya and Algeria an extra 1-million b/d with perhaps 500,000 b/d more coming from Indonesia, Mexico, the North Sea and other smaller producers. To top this off, a 2-million b/d drawdown, now officially envisaged as the initial US strategic reserves response to supply disruptions, would yield a theoretical alternate flow of 6.5-million b/d.

Other factors are also contributing to the more relaxed attitude of major oil companies in the latest flare-up as compared with last fall:

- The approach of summer has lopped some 2-million b/d off world demand.
- Official willingness of the US administration to use its 400-million barrel SPR quickly (heavily in doubt until this March) should reduce temptations for companies to hoard oil to cash in on soaring spot market prices.
- Saudi Arabia's floating stockpile of 60-million barrels is also seen as a significant reserve of short-haul crude. However, senior Middle East oil officials privately doubt that releasing Norbec oil to dampen speculation in world oil markets would actually figure as a Saudi priority, should the Gulf war heat up so badly as to shut off that country's major export terminals.