

Background

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Countering Iran's Oil Weapon

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Falling oil prices have brought welcome relief to American consumers, but lower oil prices should not lead to complacency about U.S. energy security. Growing global demand for oil, particularly from China and India, and declining spare oil production capacity have increased the global oil market's vulnerability to sudden shocks. Natural disasters (Hurricane Katrina), political instability within oil-producing countries (Nigeria), violent insurgencies (Iraq), or a regional war (the 1973 Arab–Israeli war) could trigger an oil supply crisis.

The Islamic Republic of Iran poses one of the most troubling threats to energy security. Because of its recent military buildup, Iran now has a much greater ability to interdict the flow of Persian Gulf oil exports than it had during the Iran–Iraq War. Iran's arsenal now includes sophisticated mines, anti-ship missiles, submarines, and aircraft procured from China, Russia, and North Korea that will make defending the Persian Gulf a much more difficult task for the U.S. military.

If the growing crisis over Iran's nuclear program leads Iran to interfere again in the flow of Persian Gulf oil as Tehran has openly threatened, the resulting disruption could severely damage the global economy. The price of oil could easily double from current levels (about \$60 per barrel), threatening global security and prosperity.

While the Bush Administration fashions a strategy to escalate international pressures on Iran to halt its suspicious nuclear activities, it is crucial to under-

Talking Points

- To have any chance of diplomatically halting Iran's pursuit of a full nuclear fuel cycle, the U.S. must demonstrate that it can counter a potential Iranian disruption of Persian Gulf oil exports.
- Ayatollah Khamenei, the Iranian Supreme Leader, has warned that "If the Americans make a wrong move toward Iran, the shipment of energy will definitely face danger, and the Americans would not be able to protect energy supply in the region."
- Oil tankers passing through the Strait of Hormuz account for roughly 40 percent of the world's traded oil on any given day.
- The U.S. should prepare to neutralize the Iranian oil weapon by maintaining a strong military presence in the Persian Gulf, improving the Navy's countermine capabilities, and creating contingency plans to minimize the effects of any disruption in the flow of oil.

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stand that Iran's "oil weapon" is a significant piece of leverage in the confrontation. To have any chance of diplomatically halting Iran's pursuit of a full nuclear fuel cycle, the U.S. must demonstrate that it can counter a potential Iranian disruption of Persian Gulf oil exports.

The Washington Outlook: Gauging Iranian Motivations

Historically, Iran has sought to establish hegemony over the Persian Gulf. This goal became a higher priority after the 1979 Iranian revolution put Tehran at odds with all of its neighbors, and it became more attainable with Saddam Hussein's removal from power in 2003. With Iraq no longer balancing Iranian power, the United States is now the chief obstacle to Iranian ambitions in the Gulf. Iran has avoided a direct clash with U.S. military forces in the region but has been willing to challenge U.S. forces indirectly.

Iran's pursuit of a full nuclear fuel cycle has spurred many in the U.S. to warn that the Islamic Republic must not be allowed to have a nuclear weapon. President George W. Bush has repeatedly said that he is committed to a "diplomatic solution" to the Iranian nuclear issue. This is, of course, the preferred method of eliminating the nuclear threat, provided that an agreement is ironclad and verifiable to preclude Iranian cheating. Subterfuge remains an option, as North Korea has demonstrated. So far, Tehran has rejected an acceptable diplomatic resolution of the problem.

In response to Iranian intransigence, some are recommending U.S. military action to prevent Iran from manufacturing the materials for a nuclear weapon. Although few would rule out this option, it is important that the Bush Administration lay out the potential consequences of such an action, even if the potential benefits outweigh the dangers.

Among the consequences, one of the most troubling is the increased likelihood that Iran will target

oil exports from the Persian Gulf, specifically oil tankers passing through the Strait of Hormuz, which accounts for roughly two-fifths of the world's traded oil on any given day.¹ The threat of the oil weapon created quite a stir among New York traders during the summer, driving the price up near the record high of \$80 per barrel.

However, the Bush Administration has played down Iranian energy threats to bolster the chances of cobbling together a solid international coalition to pressure Iran. In July 2006, Secretary of State Condoleezza Rice said:

Well, I think that we shouldn't place too much emphasis on a threat of this kind. After all, Iran is also very dependent on oil revenue. I think something like 80 percent of Iran's budget comes from oil revenue, and so obviously it would be a very serious problem for Iran if oil were disrupted on the market.

But I don't think we should really place much emphasis on this at this point in time.²

To a degree, this mirrors thinking around Washington. Prominent Iran expert Ilan Berman observed:

Given these realities, the rhetoric emanating from the Islamic Republic looks more than a little bit like bluster. So far, though, this strategy appears to be succeeding; investor jitters over a looming confrontation with Tehran are directly responsible for the recent spike in crude oil prices—and the attendant chorus of voices warning about the dire consequences of seriously bringing Iran to account.

In their planning, the Bush administration and its international partners would do well to take doomsday predictions about Iranian energy leverage with a grain of salt.³

While "investor jitters" may indeed be affecting the price of oil, some of those jitters are justified

1. U.S. Department of Energy, Energy Information Agency, "Persian Gulf Oil and Gas Exports Fact Sheet," September 8, 2004, at www.eia.doe.gov/emeu/cabs/pgulf.html (October 31, 2006).
2. Condoleezza Rice, "Interview on Fox News Sunday with Chris Wallace," U.S. Department of State, June 4, 2006, at www.state.gov/secretary/rm/2006/67502.htm (October 31, 2006).

given past Iranian behavior. As tensions with Iran build, the U.S. would be prudent to take very seriously Iranian threats to attack oil and gas tankers in the Persian Gulf if Iran's oil exports are blocked or the U.S. attacks its nuclear facilities.

Iran's Oil Weapon

An Iranian attempt to interdict oil exports from the Persian Gulf has a precedent. Tehran attempted to do just that during the Iran–Iraq war. Following Iran's Islamic Revolution in 1979, Iran sought to export its revolution to Iraq's large Shiite population, which provoked Saddam Hussein to invade Iran in September 1980. The Iran–Iraq War (1980–1988) involved indiscriminate artillery, missile, and aerial bombardments and the use of illegal chemical weapons by both sides. An estimated 1,000,000 people were killed or wounded in the war.

Early in the war, the Iraqi military attacked Iranian oil facilities and ports to undermine the Iranian economy. Iran retaliated by targeting Iraqi oil facilities and ports, and both sides targeted neutral ships that were transporting cargoes to or from the other country. Iran later expanded attacks to neutral Kuwaiti oil tankers and terminals and clandestinely laid mines in Persian Gulf shipping lanes while its ally Libya clandestinely laid mines in the Red Sea. The United States defeated Iran's tactics by reflagging Kuwaiti oil tankers, clearing the mines, and escorting ships through the Persian Gulf, but a large number of commercial vessels were damaged during the "Tanker War" from 1981 to 1987.

Iran's demonstrated willingness to disrupt oil traffic through the Persian Gulf to place economic pressure on Iraq is a red flag to U.S. military planners. The U.S. should take the Iranian leaders at their word when they warn against U.S. military

action and threaten to use the oil weapon. In June 2006, Iran's oil minister cautioned, "If the country's interests are attacked, we will use all our capabilities, and oil is one of them."⁴ Perhaps most alarming are the remarks of Iran's Supreme Leader Ayatollah Ali Khamenei in the same month: "If the Americans make a wrong move toward Iran, the shipment of energy will definitely face danger, and the Americans would not be able to protect energy supply in the region."⁵

Iran's New, More Dangerous Arsenal

During the 1980s Tanker War, Iran's ability to strike at Gulf shipping was limited by its aging and outdated weapons systems and the U.S. arms embargo imposed after the 1979 revolution. However, since the 1990s, Iran has been upgrading its military with a host of new weapons from China, Russia, and North Korea as well as with weapons manufactured domestically.

Today, Iran boasts an arsenal of Iranian-built missiles based on Russian and Chinese designs that are difficult to counter before and after launch. Of particular concern are reports that Iran has purchased the SS-N-22 Moskit/Sunburn anti-ship missile. The supersonic Sunburn is specifically designed "to reduce the target's time to deploy self-defense weapons" and "to strike ships with the Aegis command and weapon control system and the SM-2 surface-to-air missile."⁶ Iran is also well-stocked with older Chinese HY-1 Seersucker and HY-2 Silkworm missiles and the more modern C-802 anti-ship cruise missile (ASCM)—designs that Iran has successfully adapted into their own Ra'ad and Noor ASCMs.⁷

Iran has a large supply of anti-ship mines, including modern mines that are far superior to the

3. Ilan Berman, "Slipping Up," *National Review Online*, June 7, 2006, at article.nationalreview.com/?q=MDY5YjFjNDdiNmRjODlhMmY5ZTc1NzZiZmU1YWMyMjc= (October 31, 2006).
4. "Tehran Plays Oil Card in Nuclear Row," *Times of India*, June 26, 2006, at timesofindia.indiatimes.com/articleshow/1678964.cms (October 31, 2006).
5. Thom Shanker, "Rice Dismisses Iranian Cleric's Warning on Oil," *The New York Times*, June 5, 2006, at www.nytimes.com/2006/06/05/world/middleeast/05diplo.html (October 31, 2006; subscription required).
6. GlobalSecurity.org, "Moskit SS-N-22 Sunburn," at www.globalsecurity.org/military/world/russia/moskit.htm (October 31, 2006).
7. Robert Hewson, "Iran Ready to Field Maritime Cruise Missile," *Jane's Defence Weekly*, February 24, 2004, p. 13.

simple World War I–style contact mines that Iran used in the 1980s. They include the Chinese-designed EM-52 “rocket” mine, which remains stationary on the sea floor and fires a homing rocket when a ship passes overhead. In the deep waters in the Strait of Hormuz, such a weapon could destroy ships entering or exiting the Persian Gulf. According to one expert, Iran “can deploy mines or torpedoes from its Kilo-class submarines, which would be effectively immune to detection when running silent and remaining stationary on a shallow bottom just outside the Strait of Hormuz.”⁸ Iran could also deploy mines by helicopter or small boats disguised as fishing vessels.

Mines are only one of a host of potential Iranian threats to shipping in the Persian Gulf. Naval commandos of Iran’s Revolutionary Guards are trained to attack using fast attack boats, mini-submarines, and even jet skis. The Revolutionary Guards also have underwater demolition teams that are trained to attack offshore oil platforms and other facilities. Finally, Tehran could use its extensive terrorist network in the region to sabotage oil pipelines and other infrastructure or to strike oil tankers in port or at sea.

Consequences of a Supply Disruption in the Persian Gulf

With supplies growing ever higher and the price of oil falling, there has been a shortsighted tendency to underplay the threat posed by a major disruption in the Persian Gulf. In the runup to the Iranian revolution and the Iran–Iraq war, the price of oil doubled from nearly \$35 per barrel (inflation-adjusted) in 1978 to \$78 per barrel in 1981 based on the accurate perception that the Middle East was entering a period of turmoil and greater uncertainty.

Although oil prices fell precipitously after 1981, it is important to remember that global energy needs are much different today from what they were during the 1980s. Oil production is at record levels, but global demand, driven primarily by the

U.S., China, and India, has increased significantly in the past 15 years. Spare capacity is relatively low with “swing producer” Saudi Arabia at over 90 percent of capacity. Finally, geopolitical instability continues in oil-producing countries, including Iraq and Nigeria. As a result, the slightest disruption or even threat of disruption could drive oil prices back up toward historic levels.

For example, in the fall of 2005, the possibility that the Iranian nuclear crisis might spiral out of control was crucial in driving up the price of oil. Although prices have returned to a more palatable level of \$60 per barrel, an actual conflagration involving Iran that interrupted oil shipping in the Strait of Hormuz would likely push prices to new highs.

The U.S. Deterrent?

U.S. military forces in the Persian Gulf would quickly establish superiority over Iran’s conventional ground, air, and naval forces in any crisis, but Iranian mobile missiles, mines, commando attacks, unconventional warfare, and terrorist sabotage would pose more persistent threats that would be much harder to neutralize. The United States and its allies could eventually defeat Iranian attempts to close the Strait of Hormuz. As Persian Gulf military expert Michael Knights has noted, “The experience of anti-shipping attacks in the Iran–Iraq War suggests that no combination of attacks by aircraft, missiles, mines, submarines and naval special warfare forces could close the Gulf to all shipping for a sustained period.”⁹ Yet Iran could intensely threaten Gulf shipping for short periods, deter commercial ships from entering the Gulf, drive up insurance rates for Gulf shipping, and boost world oil prices on nervous markets.

Iran’s mine warfare capabilities may pose a more persistent challenge than is commonly accepted. In July 2006, a *Defense News* article questioned the effectiveness of U.S. minesweepers in the Persian Gulf:

8. Michael Knights, “Deterrence by Punishment Could Offer Last Resort Options for Iran,” *Jane’s Intelligence Review*, March 20, 2006.
9. Michael Knights, *Troubled Waters: Future U.S. Security Assistance in the Persian Gulf* (Washington, D.C.: Washington Institute for Near East Policy, 2006), p. 69.

If Iran had decided, earlier this summer, to close off the Arabian Gulf by placing mines in the Strait of Hormuz, the U.S. Navy's best mine warfare ships would have been unavailable to deal with the problem.

Instead the Ardent and Dextrous were in port at Bahrain, all but unable to get underway. Even if they had managed to cast off, the extensive mine warfare suites in each ship were not functioning, hampered by cracks and leaks in equipment, damaged wire cables, faulty indicators and exposed electrical wiring.¹⁰

Given the challenge already posed by Iran's anti-ship missiles, the U.S. Navy's apparent inability to quickly field an effective defense against Iranian mines could prove crucial to the amount of time it takes the U.S. to neutralize the Iranian threat in the Gulf.

Of course, none of this is lost on Tehran. In the context of the negotiation over its nuclear program, Tehran clearly views its oil weapon as fundamental leverage over the U.S. To be effective in pressuring the Iranians to end their pursuit of a capability to manufacture weapons-grade fissile material, the U.S. must be prepared to neutralize the Iranian oil weapon. To this end, the U.S. should:

- **Recognize and prepare for the threat.** The first step in solving any problem is recognizing that it exists. Although the Administration may publicly downplay the Iranian threat to oil traffic during the diplomatic maneuvering over Iran's nuclear program, it needs to take the threat seriously and prepare for the worst. Tehran is undoubtedly developing an array of naval, air, missile, and special operations capabilities to attack oil shipping, production, pipelines, and refining facilities in the Persian Gulf.
 - **Maintain a strong U.S. and allied naval presence in the Persian Gulf.** The U.S. Navy should
- maintain a formidable presence in the Persian Gulf to deter Iranian troublemaking and reassure jittery Gulf allies. Washington should also encourage its NATO allies, Japan, India, and Australia to deploy their naval forces periodically to the region. The Pentagon should frequently conduct naval, air, and ground exercises with the Gulf Cooperation Council (GCC) states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—particularly in the areas of minesweeping, port security, and missile defense—to demonstrate the capability and resolve to defeat potential Iranian threats.
 - **Improve U.S. naval capabilities, including minesweeping and anti-ship missile defense.** In particular, the U.S. Navy's mine warfare capability is potentially inadequate and underprepared for the increasingly sophisticated arsenal that Iran can deploy. The United States should begin immediately to improve this capability, not only to counter the Iranian oil weapon, but also to change Iran's cost-benefit risk analysis. The Navy should increase funding for countermine research and development and deploy these capabilities to the Gulf as quickly as they become available. Washington should also encourage the GCC countries to invest in their own naval minesweeping capabilities.
 - **Create a contingency plan for the domestic energy market.** Although completely neutralizing the consequences of a major oil disruption in the Persian Gulf would be impossible, the U.S. can offset the short-term damage by significantly expanding the strategic petroleum reserve from the current 688.5 million barrels of oil (about 59 days of oil imports)¹¹ to a three-months supply (over 1 billion barrels) and by expanding domestic drilling (both onshore and offshore) to place more petroleum on the market.

10. Christopher P. Cavas, "U.S. Minesweepers Fail Gulf Tests," *Defense News*, July 31, 2006.

11. U.S. Department of Energy, "Strategic Petroleum Reserve Inventory," October 27, 2006, at www2.spr.doe.gov/DIR/SilverStream/Pages/pgDailyInventoryReportViewDOE_new.html (November 1, 2006), and "Strategic Petroleum Reserve: Quick Facts and Frequently Asked Questions," updated October 23, 2006, at www.fe.doe.gov/programs/reserves/spr/spr-facts.html (November 7, 2006).

- **Work with allies to develop contingency plans.** The U.S. should encourage other nations to develop or increase their emergency oil reserves. Washington should also encourage Saudi Arabia and other Gulf oil producers to stockpile materials and equipment needed to rapidly repair damaged oil infrastructure and build new oil pipelines that bypass the Strait of Hormuz.¹² Any such efforts would take time to complete, which is why it is imperative to begin now.

Conclusion

To succeed in deterring Iran from developing a nuclear capability, the Bush Administration needs to maximize its leverage in this dispute. At present,

the U.S and its allies are insufficiently prepared to counter the Iranian oil weapon. With the proper focus and preparation, they can change this.

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12. Colonel Ed Badolato (USMC, Ret.) has proposed expanding the capacity of current “Gulf bypass” pipelines such as the Petroline and reopening the Iraqi Pipeline across Saudi Arabia, which runs from the Gulf to the Red Sea. Omani and United Arab Emirates pipelines could also be integrated with the cross-Saudi Petroline system by building relatively short spur lines, which could move oil supplies out of Oman and the UAE during an emergency. See Ed Badolato, “Maritime Transportation Terrorism: An Interview by Ed Badolato, President of Infrastructure Analysis, Inc. with the Japanese Broadcasting Network,” Japanese Broadcasting Network, September 7, 2006. Studies are also being performed to determine the feasibility of building new pipelines to the Arabian Sea.