



Gulf of Conflict

A History of U.S.-Iranian Confrontation at Sea

David B. Crist

Policy Focus #95 | June 2009

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Front cover: An Iranian oil platform burns following shelling by U.S. warships in retaliation for an attack on a U.S.- registered oil tanker, October 1987. (Department of Defense)

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About the Author

David B. Crist, a senior historian in the Joint History Office, Joint Chiefs of Staff, has written and spoken extensively about contemporary military history, especially on operations in the Middle East. He is a lieutenant colonel in the U.S. Marine Corps Reserve and has served tours in both Afghanistan and Iraq with Coalition Joint Special Operations Task Forces. This Policy Focus is an outgrowth of his dissertation research. The views expressed are his own and do not represent those of the Department of Defense.



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1 | U.S.-Iranian Military Clashes in the Persian Gulf in the 1980s

IN THE 1980s, the United States faced significant security challenges in the Persian Gulf. The Islamic Revolution in Iran had replaced Washington's ally, the shah, with a decidedly hostile regime in Tehran. In September 1980, Iraqi president Saddam Hussein seized upon the chaos in Iran by sending Iraqi forces to capture the oil resources located across the border in southern Iran. However, Iran fended off the assault and drove Saddam's forces back into Iraq, where the fighting bogged down. Despite repeated offensives costing hundreds of thousands of lives, the Iranians were unable to defeat Iraq, and the war stalemated into a bloody struggle, eerily reminiscent of the First World War.

Fearing an Iranian victory and the export of its Shiite revolution to Iraq, the pro-Western Gulf Cooperation Council (GCC) nations—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE)—provided Iraq with US\$25–\$65 billion in assistance. Kuwait allowed weapons destined for Iraq to transit its ports; in one week alone, ships arrived at Kuwaiti harbors delivering nearly a brigade's worth of T-72 tanks. In 1984, the Iran-Iraq War spilled into the Persian Gulf: In an attempt to force Iran to accept a ceasefire, Iraq initiated the so-called Tanker War by attacking Iranian oil tankers. Iran responded by attacking ships destined for Iraq's financial supporters, particularly Saudi Arabia and Kuwait. On May 13, 1984, an Iranian F-4E fighter-bomber attacked the 80,000-ton Kuwaiti tanker *Umm Casbah* as it steamed off the Saudi coast carrying a load of petroleum for the United Kingdom. These attacks marked a major escalation in the war: For the first time ever, Iran had deliberately targeted

neutral shipping. By the end of the Iran-Iraq War, Iranian forces had attacked 190 ships from 31 nations, killing at least 63 sailors.¹

The United States responded to the Iranian military threat by strengthening the military capabilities of the GCC nations, which established their own rapid deployment force called the Peninsula Shield Force, headquartered in Saudi Arabia. Washington tried to augment the new force with a Gulf-wide integrated air defense system. Early warning radars around the Gulf were linked with Hawk surface-to-air missiles in Kuwait and the UAE, and with Saudi Airborne Warning and Control System (AWACS) aircraft and F-15 fighters. "The idea then and now," Richard Armitage, then assistant secretary of defense for international security policy, said later, "was to create a GCC with some teeth in it."² But old antagonisms frustrated these efforts. The Gulf Arab states remained divided over long-standing disputes and were justifiably nervous about publicly cooperating with the United States against their powerful Iranian neighbor.³

The U.S. air defense system did have one notable success. In response to Iranian air attacks, the Saudis established an air defense zone (known as the "Fahd Line") over their offshore oil facilities in the northern Gulf. On June 5, 1984, a U.S. AWACS stationed in Saudi Arabia detected an Iranian F-4 fighter crossing the Fahd Line. Two Saudi F-15s intercepted and shot down the Iranian aircraft with a Sidewinder missile. Both sides scrambled nearly a dozen additional aircraft, and it looked as though a major dogfight was about to ensue over the Gulf. However, Iran recalled its aircraft, avoiding a major confrontation. This display of Saudi fortitude effectively eliminated the Iranian air threat in

1. Ted Hooton, "The Tanker War in the Gulf, 1984–1988," *Jane's Intelligence Review* (May 1992), p. 221; International Association of Independent Tanker Owners, "Iran/Iraq Conflict, The Tanker War—No End?" June 1988, p. 34.
2. Richard Armitage, interview with author, Arlington, VA, February 15, 2007.
3. Lt. Col. Ronald Smith, USAF, "Coalition Air Defense in the Persian Gulf," *Aerospace Power Journal* (Fall 1987), <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj87/smith.html> (accessed December 4, 2006). A 1982 Joint Staff study concluded that the chief threat to the Gulf oil facilities came from aircraft, and that an air defense arrangement would be an effective way of countering either Soviet or Iranian air attacks. Joint Staff Report, "A Regional Integrated Air Defense System for the Persian Gulf," January 25, 1982.
4. Lt. Gen. Charles Horner, USAF (Ret.), interview with author, Shalimar, FL, July 28, 1995.

the north, as Iran never again used its fixed-wing aircraft to attack shipping near Saudi Arabia.⁴

Reflagging Kuwaiti Tankers

In 1986, the growing conflict in the Persian Gulf forced Washington to intervene more directly. On January 12, 1986, Iranians stopped and briefly boarded the American President Lines ship *President Taylor* searching for military supplies headed for Iraq.⁵ With the hijacking of the Italian cruise ship *Achille Lauro* only three months earlier, in which an elderly American citizen was shot and killed, the Reagan administration was in no mood to risk another crisis with a country that had a track record of taking American hostages.⁶ In November, news broke of secret U.S. arms sales to Iran. This disclosure effectively ended a reconciliation effort by the administration with Iran through what current secretary of defense Robert Gates recently called “the search for the elusive Iranian moderate.”⁷

Meanwhile, the Iran-Iraq War reached new levels of violence. In February 1986, Iran amassed more than 100,000 men, crossed the Shatt al-Arab waterway, and captured the strategic al-Faw Peninsula. In response, Iraq escalated its attacks on Iranian shipping, and Iran retaliated in kind by attacking tankers headed to the Gulf states, including one tanker waiting to take on a cargo of crude oil in Dubai. In September 1986, Iran’s fury shifted again to Kuwait, with twenty-eight of the next thirty-one attacks directed at Kuwait-bound shipping.⁸

The potential protection offered by the U.S. Navy against Iran was not lost on Kuwaiti leaders, particularly Oil Minister Shaikh Ali Khalifa, who was becoming increasingly concerned by Iranian attacks

on Kuwaiti shipping. On December 23, 1986, Kuwait made a formal inquiry to the U.S. embassy about registering some of its tankers as American, specifically asking whether such tankers reflagged under the Stars and Stripes would receive U.S. Navy protection. To Secretary of Defense Caspar Weinberger, Kuwait’s request offered a golden opportunity to solve many security dilemmas: to reestablish American credibility in the eyes of Gulf allies after the Iran-Contra disclosures, to establish a strong military presence in the volatile Persian Gulf, and to contain Iranian expansionism.⁹

The Kuwaiti proposal was not universally supported in Washington. Kuwait had diplomatic ties with Moscow and had displayed an anti-American bias in its foreign policy. Even those supporting the reflagging idea, such as Assistant Secretary of State for Near Eastern Affairs Richard Murphy, believed that the United States needed to move methodically and first build supportive coalitions with the GCC and European countries rather than to commit to unilateral action to protect Kuwait.¹⁰ The strongest opposition came from the U.S. Navy itself, which objected to the diversion of resources away from the Atlantic and Pacific fleets and balked at the increased tempo needed to operate in the Persian Gulf. Secretary of the Navy James Webb questioned the wisdom of deploying U.S. warships to the Gulf and getting directly involved in the Iran-Iraq War—an argument that later gained credence following the inadvertent May 17, 1987, attack by Iraq on the USS *Stark*.¹¹

When Kuwait threatened to turn to the Soviet Union for protection of its tankers, President Ronald Reagan approved the escort operation. In March 1987, the United States agreed to protect eleven Kuwaiti

5. Bernard Gwertzman, “Iran’s Navy Stops U.S. Ship in Search near Persian Gulf,” *New York Times*, January 13, 1986; Gwertzman, “U.S. Says Halting of Vessels by Iran May Be Justified,” *New York Times*, January 14, 1986.

6. John Poindexter, “Memorandum for Major General Colin Powell, Subj: Visit and Search of U.S. Flagged Vessels in the Persian Gulf,” August 7, 1984; USCINCPAC message, “Subj: Visit and Search of U.S. Flagged Vessels in the Persian Gulf,” May 29, 1985, pp. 3–4.

7. Secretary of Defense Robert Gates, National Defense University, September 19, 2008.

8. USCINCCENT message to Joint Chiefs of Staff, “Subj: Protection of U.S. Flagged Vessels,” May 27, 1987, p. 2. Another source fixes the number of attacks directed at Kuwait from September 1986 to July 1987 at thirty out of forty-four; see Janet G. Stein, “The Wrong Strategy in the Right Place,” *International Security* (Winter 1987–1988), p. 148.

9. Caspar Weinberger, interview with author, Washington, DC, December 15, 1994.

10. Ambassador Richard Murphy, interview with author, Washington, DC, December 21, 1994.

11. Caspar Weinberger, *Fighting for Peace: Seven Critical Years in the Pentagon* (New York: Warner Books, 1990), pp. 398–402; Gen. Robert Herres, message to Adm. William Crowe, “Subj: Escort Planning,” March 14, 1987, p. 3.

tankers. For legal reasons, the vessels needed to be American owned, and Kuwait established an American front company, Chesapeake Shipping, Inc., headquartered in Delaware, to serve as its American “owner” for the tankers. The first tanker was reregistered by the end of June: the 400,000-ton *al-Rekkab*, now renamed the *Bridgeton*.¹²

U.S. Assumptions about Deterrence

Executing the escort mission—named Operation Earnest Will—fell to U.S. Central Command (CENTCOM), which planned a conventional escort operation based upon deterrence. A key planning assumption was that Iran would not risk war by directly challenging the escort operations. As the CENTCOM commander, Marine Gen. George Crist wrote to the chairman of the Joint Chiefs, Adm. William Crowe, “It appears unlikely that Iran will intentionally attack a U.S. combatant or a Kuwait-owned tanker under U.S. escort.”¹³ Crowe agreed with this assessment—as did the U.S. intelligence community, which predicted Iran’s response to Operation Earnest Will in order of probability: (1) increased attacks on unescorted shipping, (2) harassment mining, (3) increased terrorism against potential U.S. and Kuwaiti targets in the region, (4) attacks on escorted ships, and (5) attacks on U.S. warships.¹⁴ CENTCOM had contingency plans should Iran attack a convoy, but U.S. military leaders remained convinced that the presence of a U.S. aircraft carrier in the region would discourage an Iranian attack on U.S. convoys.¹⁵

On May 16, 1987, the 68,000-ton Soviet tanker *Marshall Chuykov* struck an Iranian-laid mine as it entered the Mina al-Ahmadi channel—the main deep-water entrance to Kuwait. Over the next thirty-three days, three more ships hit mines. Though mining was a predicted Iranian course of action, U.S. planners

failed to appreciate the scale and effectiveness of such asymmetrical attacks. In response, the U.S. military dispatched a mine countermeasures team and placed a helicopter mine countermeasure squadron (HM-14, based in Norfolk, Virginia) on a seventy-two-hour alert for possible deployment to the Persian Gulf.¹⁶ CENTCOM assumed that this mining would be limited to intimidating Kuwait. Once the convoys began, CENTCOM assessed, Iran would be forced to accept their reality.

However, there was nothing to prevent Iran from expanding its mining. Although the Strait of Hormuz was too deep and swift for effective mining with Iran’s existing mines, Tehran was able to mine the shallower Gulf route used by the convoys. The Pentagon’s reliance on the regional deterrence doctrine, and CENTCOM’s assumption that Iran would not directly challenge the U.S. convoys, would prove to be embarrassingly wrong.

The first convoy began on July 22, 1987. Eight naval combatants were assigned to the Gulf for Operation Earnest Will, with three providing a close escort for two reflagged Kuwaiti tankers, the *Gas Prince* and the *Bridgeton*, along the entire five-hundred-mile sea-lane from the Gulf of Oman to Kuwait. U.S. Navy P-3 surveillance aircraft and carrier-based tactical aircraft provided cover around the Strait of Hormuz. The Saudis agreed to allow the basing of aerial surveillance aircraft from their airfields during the convoy operations and deployed their own F-15s to protect the convoys should the AWACS aircraft detect an approaching Iranian jet. To avoid any accidental attacks by Iran or Iraq, the convoy schedule was published in advance.¹⁷

On the night of July 23, a small Iranian logistics vessel departed Farsi Island and laid a string of nine SADAF-02 mines—a variant of a North Korean contact mine packed with 243 pounds of explosives—in

12. Adm. William Crowe letter to all CINCs, August 10, 1987, p. 2; Gen. George Crist, “Reflagging Kuwaiti Tankers,” Earnest Will Activation Briefing Book, pp. 1–3.

13. USCINCCENT message to CJCS, “Subj: Escort Regime,” May 27, 1987, p. 3.

14. USCINCCENT J-2, “Iranian Reactions to U.S. Escort Operations,” May 1987, p. 1.

15. Rear Adm. Harold Bernsen, interview with author, Virginia Beach, VA, February 22, 2007.

16. Helicopter Mine Counter Measures Squadron 14, *1987 Command History*, entry for June 16, 1987.

17. Weinberger, *Fighting for Peace*, pp. 406–407; COMMIDEASTFOR to TF109.6.1, “Subj: Operation EARNEST WILL Escort Order 87001,” July 21, 1987.

shallow waters directly across the path of the convoy. The next morning, the *Bridgeton* struck one these mines. That evening, the Middle East Force commander, Rear Adm. Harold Bernsen, wrote, “The events of this morning . . . represent a distinct and serious change in Iranian policy vis-à-vis U.S. military interests in the Gulf. There is no question that Iranian forces specially targeted the escort transit group and placed mines in the water with the intent to damage/sink as many ships as possible.”¹⁸

As Bernsen later noted, “The day we hit the mine was very important because it meant that deterrence would not succeed and the Iranian leadership had decided to take their chances by directly challenging the U.S. The threat of the carrier was not enough—deterrence failed.”¹⁹ The mining of the *Bridgeton* forced CENTCOM to radically change its approach to the convoy operations and ushered in a massive escalation in U.S. forces in the Persian Gulf.

Insurgency and Counterinsurgency at Sea

The force that was “directly challenging the U.S.,” however, was not the conventional Iranian military. The Defense Intelligence Agency (DIA) estimated that only about half of Iran’s aircraft were operational—perhaps little more than three dozen aircraft, most of which were committed to the Iraqi front.²⁰ These estimates of Iranian aircraft availability were in fact too low; however, in the three airfields known to operate attack aircraft over the Persian Gulf, U.S. intelligence consistently counted only thirteen F-4s and four F-14s. The most important of these airfields for the convoys passing Bandar Abbas, on Iran’s southern coast, had only four to six operational F-4s.²¹ In terms of sea power, the

vestiges of the shah’s once-impressive navy suffered from the U.S.-imposed arms embargo. By 1986, the fleet had only one functioning Harpoon antiship missile, which was on board the missile boat *Josban*.

To be sure, the chief problem for the U.S. military in the Gulf was unconventional: the swarms of Islamic Revolutionary Guard Corps Navy (IRGCN) small boats, a combination of fast Swedish-built Boghammers and “Boston Whaler”-type small boats armed with a hodgepodge of 107-millimeter rockets, rocket-propelled grenades, and machine guns. The highly maneuverable small boats could also function as improvised minelayers in numerous shallow choke-points along the five-hundred-mile convoy route. U.S. intelligence reports advised that Iran was committed to launching such indirect attacks to thwart the more powerful U.S. Navy.²² Thus Iran’s threat stemmed not from a traditional blue water naval operation but, rather, from a force that more closely resembled a land-based insurgency—a “guerilla war at sea,” as the CENTCOM commander called it.²³ Unfortunately, the U.S. Navy possessed neither the special plans nor the special equipment needed to deal with the unique challenges posed by the new Iranian threat.

Iran’s seaborne insurgency posed a particular problem in the northern Gulf, near where the *Bridgeton* met misfortune. The United States needed to maintain a permanent presence along the fifty- to seventy-mile tanker route running past Farsi Island. But with the threat of mines and the spillover of the Iran-Iraq War, CENTCOM did not want to station large U.S. warships in this hazardous area. The IRGCN had operated unhindered near Farsi Island, and U.S. military planners began referring to the area in briefings as “Indian country.”²⁴

On August 6, 1987, the Middle East Force commander, Admiral Bernsen, sent a concept-of-operations

18. Rear Adm. Harold Bernsen, message to Gen. George Crist, “Subj: Iranian Mines,” July 24, 1987, p. 1.

19. Bernsen interview.

20. United States Central Command, “United States Central Command: Lessons Learned Operation Earnest Will July 1987–Present,” Slides 3L, 3R.

21. USCINCCENT message to JCS, No subject on document 2705, May 15, 1987, p. 2; USCINCCENT, “Subj: Private Jewels Commander’s Estimate,” March 13, 1987, pp. 1–2.

22. Office of Naval Intelligence message, “Subj: Persian Gulf Threat Alert,” August 3, 1987, p. 2.

23. Gen. George Crist, “End of Tour Report,” USCENCOM, 1988; USCENCOM Lessons Learned, “Operation Earnest Will, July 1987–Present,” Draft Script Slides 5L and 5R.

24. Gen. George Crist, USMC (Ret.), draft note for public affairs officer, October 1988. This term originally appeared in a message sent by Bernsen to Crist on August 2, 1987.

report to CENTCOM with an imaginative solution: “In my view, to be successful in the northern Gulf we must establish intensive patrol operations to prevent the Iranians from laying mines. I believe we can achieve the desired results with a mix of relatively small patrol craft, boats, and [helicopters]. . . .”²⁵ Bernsen’s idea was to approach the problem as a land-based counterinsurgency operation rather than a traditional fleet-on-fleet operation. To be sure, the new Iranian threat drew more parallels with the U.S. experience in Vietnam or, indeed, with recent counterinsurgency operations in Iraq. Drawing on an operational concept in the Vietnam War—Sea Float—the United States would establish floating patrol bases and then control the northern Gulf through an armed presence and patrols. U.S. forces would maintain a full-time presence in the combat zone, presaging similar tactics used in current counterinsurgencies. As Gen. David Petraeus noted in April 2009 vis-à-vis Iraq and Afghanistan, “You can’t commute to the fight. You can’t clear and leave. You have to clear and hold, and then build.”²⁶

Admiral Bernsen recommended establishing waterborne patrol bases, or Mobile Sea Bases, and using U.S. patrol boats, helicopters, and Navy SEALs to conduct intensive patrols to prevent Iran from laying mines or using its IRGCN small boats to attack the convoys. CENTCOM’s General Crist liked the idea. It reminded him of a successful 1972 Vietnam operation called MARHUK (Marine Hunter Killer), in which Marine attack helicopters were stationed on board a Navy amphibious ship to interdict small boats ferrying supplies along the North Vietnamese coast.²⁷ But Admiral Bernsen’s proposal was not popular with the uniformed services, especially the navy, which argued strenuously that the sea bases would be highly vulnerable to Iranian air attack. Nevertheless, both the

chairman of the Joint Chiefs, Admiral Crowe, and Assistant Secretary of Defense Richard Armitage were familiar with Sea Float from their service in Vietnam. With their backing, Secretary of Defense Caspar Weinberger approved the Mobile Sea Base deployment.²⁸

Operational Results

With Kuwait funding the project, CENTCOM leased two large oil construction platforms to serve as waterborne patrol bases, the *Hercules* and *Wimbrown VII*. The *Hercules* was one of the largest construction barges in the world at 400 feet by 140 feet, with a large distinctive crane nicknamed “Clyde.” The *Hercules* had the added advantage of being surrounded by a floodable tank, which would provide excellent protection against a mine strike. CENTCOM stationed special operations forces on each barge, consisting of four sixty-five-foot Mark III patrol boats; three Army Special Forces “Seabat” helicopters; a SEAL platoon; and a reinforced Marine platoon. Additional assets such as an explosive ordnance team and a Marine radio reconnaissance linguist and communications element on the *Hercules* brought the total number of military personnel aboard to 177 for the *Hercules* and 132 for the *Wimbrown*.²⁹

These forces patrolled a fifty-mile stretch of the tanker route. The patrol boats maintained a twenty-four-hour presence on the water to prevent penetration by Iranian small craft; the helicopters provided a quick reaction force and nighttime surveillance. Should the Iranians get past the helicopters and U.S. patrol boats to attack the barges, each was reinforced with metal plating and 20,000 sandbags. The marines provided local security, manning a variety of weapons including heavy machine guns, grenade launchers, antiaircraft guns, mortars, and Stinger missiles. For additional protection, the barges were moved randomly every few days.³⁰

25. COMMIDEASTFOR message, “Subj: MEF Force Levels, 062107Z,” August 1987, p. 3.

26. For a recent formulation of this approach by Gen. David Petraeus, see Steve LeBlanc, “Petraeus: ‘Tough Months Ahead in Afghanistan,’” Associated Press, April 21, 2009.

27. Gen. George Crist, USMC (Ret.), Oral History, 1989, Marine Corps Historical Division, Quantico, VA.

28. Adm. William Crowe, *The Line of Fire: From Washington to the Gulf, the Politics and Battles of the New Military* (New York: Simon & Schuster, 1993), pp. 195–196.

29. Middle East Force/Joint Task Force Middle East, *Command History 1988*, Enclosure (5), p. 7.

30. John W. Parton, *Special Operations Forces in Operation Earnest Will/Prime Chance I* (Tampa, FL: U.S. Special Operations Command, April 1998), pp. 44–45.

CENTCOM was in charge of addressing the Iranian insurgency in the south and central Gulf along several concurrent lines of operation, focusing on mine countermeasures, surveillance, and intelligence. It formed a new operational headquarters—Joint Task Force Middle East (JTFME)—to control the expanded operations, and the Navy rushed additional warships to the Gulf. Nearly thirty ships were committed to the convoy effort at its operational peak in September 1987. The mission was to implement an aggressive surveillance and presence operation designed to prevent future Iranian mine-laying or small-boat attacks, and the force concept included the formation of hunter-killer teams of Army helicopters positioned on Navy warships that were capable of moving quickly to interdict a suspicious Iranian vessel. For operational purposes, the Gulf was divided into roughly eight zones of interest, each of which had served continuously as a station for U.S. combatant craft and helicopters. Additional surveillance and strike assets arrived in the Gulf, including Marine Cobra helicopters, P-3 Orion aircraft, and Navy Light Airborne Multipurpose System helicopters equipped with surface search radar. Surveillance craft concentrated on the natural chokepoints along the tanker route, especially around the Iranian island of Abu Musa and in the shallow waters near the Iranian oil platform complexes of Rostam, Sirri, and Sassan.³¹ U.S. Army Special Forces A-6 “Seabats” helicopters augmented the Navy’s regional helicopter fleet. Exceedingly quiet and designed to fly at night, the Seabats were outfitted with forward-looking infrared radar sensors, rockets, and 7.62-millimeter miniguns.

To support CENTCOM, the intelligence community devoted considerable resources to monitoring Iranian operations. The DIA established a special “fusion cell” in the region and began an intelligence-sharing program with British and Gulf Arab intelligence agencies specifically to exchange information on IRGCN

operations. SR-71 strategic reconnaissance aircraft flew missions to provide photographic intelligence on Silk-worm missile sites and Islamic Revolutionary Guard Corps (IRGC) bases. Navy P-3 aircraft, with their excellent surface search radar, were invaluable for monitoring the Iranian small boats. In a unique concept, the National Security Agency provided individual Navy ships near-real-time signals intelligence for tactical forces.³² The new surveillance effort achieved some immediate successes:

- In August 1987, U.S. intelligence learned of an Iranian plan to mine the UAE anchorage where the convoys formed. Although U.S. forces in the region lacked the mandate to prevent the mining, the Operation Earnest Will convoys changed their formation venues well away from the danger area.
- On September 19, U.S. intelligence detected the Iranian logistical vessel *Iran Ajr* getting under way for another mining operation.³³ The United States moved the USS *Jarrett* with two Army helicopters on board to monitor the Iranian ship. When Army pilots observed mines being pushed over the side, the helicopters opened fire with rockets and machine guns, killing at least three Iranian crewmen. The Iranians abandoned ship. The next morning, a SEAL platoon boarded and secured the *Iran Ajr* as U.S. patrol boats plucked the Iranians from the water. The capture of the *Iran Ajr* was a windfall for the United States. The next day, newspapers carried photos of the ship with her cargo of mines clearly visible on her open deck. “It did much to undermine [Iran’s] credibility in the eyes of the world and enhance international support for our endeavor,” Secretary Weinberger later said.³⁴
- On October 6, the commander of Mobile Sea Base *Hercules*, Lt. Cdr. Paul Evancoe, decided to launch

31. USCINCCENT message to JCS, “Subj: Arabian Gulf Sea Mobile Support Concept,” August 1987, pp. 1–3.

32. Paul Crickmore, *Lockheed SR-71: The Secret Missions Exposed* (London: Osprey, 1993), pp. 154–156; Harold Wise, *Inside the Danger Zone* (Annapolis, MD: U.S. Naval Institute, 2007), pp. 93–94; Weinberger, *Fighting for Peace*, p. 405.

33. Wise, *Inside the Danger Zone*, p. 95.

34. Weinberger interview; COMMIDEASTFOR message to NMCC, “Subj: Capture of Iranian Minelayer 220745Z,” September 1987, Box 10, Series III, JTFME Public Affairs, *Iran Ajr* Sept.–Oct. 1987, Operational Archives, Naval Historical Center, Washington DC.

his own mission to gather intelligence on Farsi Island. Two U.S. patrol boats were dispatched to a navigation buoy called the Middle Shoals Buoy, approximately fifteen miles west of Farsi Island and eight miles north-east of the *Hercules*. Three Army Seabats would fly a different route, arriving to scout out the buoy ahead of the slower-moving patrol boats.³⁵ At the Middle Shoals Buoy, the Army helicopters detected IRGCN small boats. As the helicopters closed in, an Iranian crew member opened fire with a heavy machine gun. The United States responded with a hail of rocket and machine-gun fire. The bombardment quickly dispatched the three boats, killing nine IRGCN sailors; four others were captured.³⁶

- Unwilling to attack the United States directly, Iran decided to target Kuwait again. On October 15, Iran launched two captured Iraqi Silkworm missiles from al-Faw toward Kuwait harbor. One missile hit the reflagged tanker *Sea Isle City*, injuring fifteen crewmen and permanently blinding a U.S. Navy captain. President Ronald Reagan ordered a limited retaliation by destroying the Rostam oil platform, which had been a key link in the IRGCN operations.

Escalation of Force in 1988

In February 1988, the United States began executing a more aggressive strategy against Iran to increase the pressure on the IRGCN. While the United States remained bound by strict rules of engagement that did not allow U.S. warships to come to the aid of neutral ships under attack, the new U.S. secretary of defense, Frank Carlucci, and Admiral Crowe agreed on the need to harass the Iranian fleet. Over the next two months, U.S. warships aggressively shadowed their Iranian counterparts. In one instance, the Iranian frigate *Saband* nearly collided and exchanged fire with the USS *Samuel B. Roberts* during a high-speed game

of chicken. Yet the aggressive tactic worked: Iranian attacks in the Gulf declined.³⁷

The IRGCN countered by launching another mining campaign against the U.S. naval forces in the region. On April 14, 1988, lookouts on the frigate USS *Samuel B. Roberts* sighted three mines directly ahead of the ship. As the *Roberts* reversed engines in an attempt to retrace its path and maneuver out of the minefield, it hit a fourth mine. The blast caused extensive fire and flooding, injuring ten sailors. A later examination revealed that the explosion had cracked the ship's entire hull; only the deck plate had held the ship together.

President Reagan ordered a military response: U.S. forces destroyed two Iranian oil platforms, Sassan and Sirri, both important IRGCN staging bases. Sassan was one of the largest Iranian offshore platforms and actually comprised seven interconnected platforms. A proposal was made to add air or cruise missile strikes against selected IRGCN targets at Bandar Abbas, but Washington rejected the idea of initiating any attack on the Iranian mainland. However, at Admiral Crowe's insistence, CENTCOM was also ordered to sink one Iranian naval combatant. To the Joint Chiefs chairman, Iran had deliberately attacked a U.S. warship; the U.S. response should be to put one of theirs "on the bottom." Crowe singled out the *Sabalan* because of its infamous reputation for deliberately attacking the crew quarters of neutral ships.³⁸

Operation Praying Mantis began on the morning of April 18. U.S. Marines and Navy SEALs simultaneously attacked Sassan and Sirri. A few dedicated defenders remained on both platforms, opening fire on U.S. warships from the Sirri with an Iranian twenty-three-millimeter antiaircraft gun. U.S. vessels returned fire, silencing the gun; one shell struck a compressed-gas tank, incinerating the remaining defenders, but the resulting fire prevented the boarding of Sirri by a U.S. SEAL platoon. Meanwhile, Marine Cobra helicopters

35. Lt. Cdr. Paul Evancoe, USN (Ret.), interview with author, May 22, 1995; Wise, *Inside the Danger Zone*, p. 126.

36. Capt. Peter Wikul, USN, interview with author, Arlington, VA, August 17, 1995, May 1, 1996.

37. Capt. Paul Rinn, USN (Ret.), interview with author, February 11, 2004.

38. Crowe, *Line of Fire*, p. 201.

and naval forces raked Sassan with gunfire. Marines fast-roped onto the burning structure. After securing it, the Marines withdrew and detonated 1,300 pounds of explosives.³⁹

The Iranian missile boat *Joshan* was ordered to head south and reinforce Sirri. Although relatively small, the *Joshan* packed a powerful punch, with the only working American-made Harpoon missile in the Iranian inventory. The cruiser USS *Wainwright* issued four separate warnings to the *Joshan* not to approach the U.S. warships. The Iranian vessel declared that it had no hostile intent and continued to close on the Americans. Now with the Iranian ship coming over the horizon, the *Wainwright* issued a final warning: “Stop and abandon ship; I intend to sink you.”⁴⁰ Thereupon, the Iranian captain decided to unleash his Harpoon missile. The *Wainwright* fired its chaff canisters and initiated electronic countermeasures. The missile passed down the starboard side of the *Wainwright*—no more than a hundred feet from the ship. The U.S. warships responded with six standard missiles (SM-1s) and a Harpoon of their own, reducing the *Joshan* to a hulk. The U.S. warships then closed and finished off the *Joshan* with their guns, leaving the few survivors, including the grievously injured captain, to be picked up by a nearby fishing boat.⁴¹ Next, an Iranian F-4 headed out into the Gulf, with its search radar active. The *Wainwright* fired two surface-to-air missiles. One hit the Iranian aircraft, blowing off part of its wing and peppering the fuselage with shrapnel. In a display of amazing flying prowess, the Iranian pilot managed to land his damaged airplane at Bandar Abbas.⁴²

The IRGCN then ordered five Boghammers out of Abu Musa Island to attack the neighboring UAE

Mubarak oil fields. After spraying several ships and a portable drilling rig with machine-gun fire and grenades (but causing no casualties), the Iranian ships returned to the island to celebrate and rearm. An hour later, the IRGCN boats ventured out again to attack UAE facilities. U.S. intelligence learned of the impending attack, and the Joint Task Force vectored in two A-6 aircraft. Swooping over the fast-moving boats, they dropped Rockeye bomblets and a five-hundred-pound bomb, sinking one boat and sending the remaining vessels back to Abu Musa Island, where the boats beached themselves.⁴³

While the Sassan and Sirri platforms were being destroyed, another U.S. Navy surface action group, made up of the warships *Jack Williams*, *Joseph Strauss*, and *O'Brien*, were transiting the Strait of Hormuz looking for the *Sabalan*.⁴⁴ Around noon, Iranian surface forces finally stirred from Bandar Abbas. The *Saband* was the first under way, heading due south to attack the UAE-owned Saleh oil field.⁴⁵ In order to obtain a positive identification of the Iranian ship, a Navy A-6 flew over the *Saband*. The Iranians responded by launching a shoulder-fired surface-to-air missile. The A-6 climbed away and launched one of its own Harpoon missiles. The USS *Strauss* fired another Harpoon at the Iranian frigate. Both missiles hit with devastating effect, destroying the *Saband's* bridge and command center. Additional U.S. aircraft arrived and rained thousand-pound bombs down on the helpless ship.⁴⁶ Reduced to a burning hulk, the *Saband* sank during the night, taking with it as many as fifty Iranian crewmen.

Late in the afternoon, the *Sabalan* finally steamed out of Bandar Abbas. The Iranian vessel fired three missiles at the nearby U.S. Navy A-6 attack aircraft. The

39. Michael Palmer, *Guardians of the Gulf: A History of America's Expanding Role in the Persian Gulf, 1833–1992* (New York: Free Press, 1992), p. 141; MEF-NSWTULANT message to CJTFME, “After Action Report at Sirri,” May 7, 1988.

40. CJTFME message to USS *Wainwright*, “Subj: SAG Instruction,” 180728Z, April 1988, JTFME/MEF Gen. Attorney Files, JTFME/MEF Messages 1985 and 20 January–19 April 1988, Box 14, Series IV, Naval Historical Center; USS *Wainwright* message to CJTFME, “Subj: Operation Praying Mantis First Impressions/Chronology,” April 20, 1988, Praying Mantis Messages, Box 20, Series VI, Naval Historical Center.

41. Craig Symonds, *Decision at Sea: Five Naval Battles That Shaped American History* (New York: Oxford University Press, 2005), pp. 307–308.

42. CTG 800.1 message to CJTFME, “Subj: Praying Mantis Ops—Summary of Lessons Learned,” April 25, 1988, p. 2.

43. Symonds, *Decision at Sea*, pp. 311–312.

44. CT801.1 message to USCINCCENT, “Subj: Praying Mantis OPREP-3 Feeder 002,” April 18, 1988.

45. COMDESRON 22 message to CJTFME, “Subj: Operation Praying Mantis—Post Timeline,” April 21, 1988, Praying Mantis Messages, April 20–22, 1988, File 11, Box 20, Series VI, Naval Historical Center.

46. CTG 800.1 message to CJTFME, “Subj: Ordnance Delivery Summary,” April 19, 1988, Folder 15, Box 20, Series VI, Naval Historical Center.

U.S. planes veered to avoid the missiles, and retaliated by dropping a single five-hundred-pound laser-guided bomb, which went straight down the *Sabalan's* smoke-stack and exploded in the ship's engineering spaces. The on-scene commander wanted to launch another air strike to finish off the *Sabalan*, a request that was relayed to Washington. When Defense Secretary Carlucci asked Admiral Crowe what he thought. Crowe responded, "Sir, I think we've shed enough blood today."⁴⁷ Carlucci agreed and the United States allowed the *Sabalan* to be towed back into port. With the first two ships to venture from Bandar Abbas sunk or incapacitated, no further Iranian ships ventured forth to do battle.

The daylong fight had been a disaster for Iran. Although the United States lost one helicopter to non-hostile causes, the Iranian military had committed its air and naval forces piecemeal into the Gulf. With its platforms destroyed and unable to get any air surveillance over the Gulf, Iran operated in the blind against the U.S. Navy. The outcome was never in doubt.

After Operation Praying Mantis, Iran backed off from engaging the U.S. military. Having lost its most capable ships, the Islamic Republic of Iran Navy kept its remaining combatants in port for most of the remainder of the Iran-Iraq War. Even the IRGCN's enthusiasm was diminished. Attacks by small boats dropped dramatically over the next two months. In June 1988, Iraqi counterattacks drove Iranian forces back to the border. One more clash occurred between IRGCN small boats and U.S. warships on July 3, an engagement largely instigated by the overaggressive captain of the USS *Vincennes*. During an exchange of gunfire with small boats, the U.S. cruiser accidentally shot down Iran Air Flight 655, killing 290 civilians. Defeated by Iraq and now convinced that the United States had deliberately shot down the plane to force Iran to end the war, Ayatollah Ruhollah Khomeini finally agreed to a ceasefire, ending the eight-year conflict. With the Iran-Iraq War over, Operation Earnest Will formally ended the following year.⁴⁸

47. Crowe, *Line of Fire*, p. 202.

48. John Bullock and Harvey Morris, *The Gulf War: Its Origins, History, and Consequences* (London: Michelin House, 1989), p. 248.

2 | Iranian Strategy, Operations, and Tactics

THE FOLLOWING SECTIONS of this report will thematically explore the nature of Iran's military approach in its clashes with the United States. Beginning at the political-military level, this analysis attempts to show that Iran had a simple objective in opposing the U.S. escort of Kuwait's tankers: in essence, to force the U.S. Navy out of the Persian Gulf. Iran's leaders viewed the U.S. decision to safeguard the Kuwaiti tankers as a direct intervention in their war with Iraq. It was a common belief in Tehran at the time that the Iraqi invasion had been carried out at the behest of Washington to undermine the Islamic Revolution. With Iran's dramatic seizure of the al-Faw Peninsula in February 1986, the United States had intervened to support Baghdad. According to U.S. intelligence, one Iranian commander at Bandar Abbas stated that the United States seemed intent on doing everything to "protect" Iraqi president Saddam Hussein's war machine. And since Kuwait was one of Iraq's chief financial supporters, safeguarding the emirate's oil tankers was tantamount to aiding Baghdad's war effort.¹

Iranian Caution and Restraint

To achieve its immediate war goal, Tehran moved cautiously. While a few Iranian Revolutionary Guard Corps (IRGC) officers advocated a direct confrontation with the "Great Satan," Iranian leaders did not want to take overt action that might produce a significant military response for which they were unprepared, or an action that would undermine their standing in the international community as the victim of Iraqi aggression. One of the first indications of this policy occurred after Saudi Arabia shot down an Iranian F-4 in June 1984. Privately, the Saudi government feared the downing of the Iranian fighter would lead to an escalation of Iranian attacks on Saudi shipping,

yet the Iranians drew a very different lesson from the incident: They never again challenged the Fahd Line or used their aviation resources to attack shipping in the northern Persian Gulf.²

Iranian officials also showed great prudence in taking overt military actions against the United States. A good example of this was the decision not to use their recently acquired Chinese Silkworm cruise missiles against U.S. forces. While guided by relatively unsophisticated radar systems, Silkworms carried a thousand-pound warhead. Beginning in February 1987, Iran constructed a series of nine Silkworm missile sites ringing the Strait of Hormuz, on Qeshm Island, and near Kishk outside the Gulf. Any ship entering the Gulf had to pass through the Silkworm missile envelope, and the Pentagon regarded these missiles as the most potent conventional threat to convoy operations.³

According to then National Security Agency director Lt. Gen. William Odom, the Iranian government viewed these missiles as a strategic asset: The control of the missiles was highly centralized, and their use required release authority from Supreme Leader Ayatollah Khomeini. In June 1987, the United States relayed a stern warning to Tehran via the Swiss embassy against using Silkworm missiles. Washington viewed use of the Silkworms against the Kuwaiti convoys as a serious matter—tantamount to a declaration of war.⁴ While Iran never responded to the U.S. demarche, it understood the message. Despite all the hostility between the two nations over the coming year, Iran never fired a single Silkworm missile from its sites around the Strait of Hormuz. Although there were reports of Silkworm missiles being used during Operation Praying Mantis, the after-action review revealed no evidence of a Silkworm missile being used around the Strait of Hormuz, although

1. Mohsen Sazegara, interview with author, Arlington, VA, April 3, 2009; retired intelligence officer, interview with author, December 2007.
2. Lt. Gen. Charles Horner, USAF (Ret.), interview with author, Shalimar, FL, July 28, 1995.
3. Central Intelligence Agency, "Iran: Characters and Capabilities of the Silkworm Missile," FOIA F-1991-01605, April 16, 1987; USCENTCOM message, "Subj: Intelligence Estimate to Operation EARNEST WILL," September 14, 1987, pp. 1-2.
4. Lt. Gen. William Odom, USA (Ret.), interview with author, August 28, 2007.

Iran may have modified a Maverick missile for surface-to-surface use.⁵ The threshold warnings against the use of Silkworms appeared to be somewhat lower in the northern Gulf, especially in Iran's attacks against Kuwaiti ships and port facilities. In response to the firefight a week earlier between U.S. helicopters and an Iranian Revolutionary Guard Corps Navy (IRGCN) speedboat, Iran fired two captured Iraqi Silkworms at Kuwait on October 15 and 16, 1987, with each striking a tanker—one the reflagged Kuwaiti tanker *Sea Isle City*. During Operation Praying Mantis, Iran launched another Silkworm from al-Faw in the general direction of the Mobile Sea Bases, just before Iraqi forces overran the missile position.⁶

Iran's selective use of the Silkworms was part of its overall attempt to perform a balancing act in regional policy: inflict enough damage and casualties to rouse a skeptical U.S. Congress to demand a withdrawal from the Gulf, while maintaining plausible deniability to avoid international retribution. In Tehran's eyes, Washington appeared unwilling to pay a high price for its involvement in the Middle East. The bombing of the Marine barracks in Beirut by the Iranian-backed Hizballah had forced the U.S. withdrawal from Beirut. Despite vows of retribution by President Ronald Reagan, Washington never retaliated militarily. The Iranian government noticed the outcry in Congress and even within the U.S. Navy to reduce the military presence in the Gulf following the inadvertent Iraqi attack on the USS *Stark* in May 1987, which killed thirty-seven sailors. Both of these incidents reinforced Tehran's view that America was unwilling to accept casualties for a presence in the region.

However, after seven years of war and revolution, Iran had limited conventional military capability to threaten the U.S. convoys. A combination of spare parts shortages and combat losses greatly diminished its fleet of fixed-wing combat aircraft. Iran's once impressive navy under the shah was also in disrepair: By 1986, the

Islamic Republic of Iran Navy (IRIN) had 15,000 men and eighteen surface combatants. Spare parts shortages effectively reduced this number of combat vessels by half. At any given time, only 10 percent of the Iranian fleet was at sea; Iran had only one functioning Harpoon antiship missile. The bulk of IRIN operations fell to four 1,500-ton British Vosper-built frigates, each armed with small Sea Killer antiship missiles and a 4.5-inch rapid-fire main gun.⁷

The most substantial force available to combat the United States was the newly formed IRGCN. In July 1985, the IRGCN executed one of its first naval operations by seizing and briefly holding the Kuwaiti freighter *al-Muharraq*. The IRGCN quickly grew and by early 1987, became the primary means of attacking Gulf shipping. The backbone of the IRGCN was an improvised fleet of a hundred small boats, a combination of "Boston Whaler"-type boats and fast Swedish-built Boghammers.⁸ In 1984, over American objections, the Swedish government allowed the sale of nearly forty of these so-called cabin cruisers to Iran, and the IRGCN impressed every boat. Forty-one feet long and powered by twin Volvo engines, they could reach a speed of forty-five knots. Armed with 107-millimeter rockets, RPG-7s, and 12.7-millimeter machine guns, this "mosquito fleet" lacked the firepower to sink an oil tanker, but could inflict serious damage and kill its crewmen.

Asymmetric Attacks: U.S. Fears and Iranian Realities

Two indirect, or asymmetrical, methods were available for Iran to attack U.S. forces—namely, terrorism and mining. Tehran actively employed terrorism to strike and intimidate the Islamic Republic's enemies, while maintaining the outward appearance of comity within the region. As with its shipping attacks, Tehran's terrorism centered on Iraq's supporters, particularly Kuwait. On December 12, 1983, a series of car

5. Rear Adm. Donald Dyer, USN, interview with author, Norfolk, VA, December 19, 1994.

6. Ibid.

7. USCINCCENT message, "Subj: Protection of U.S. Flagged Vessels," May 27, 1987, pp. 2–4.

8. Weinberger, *Fighting for Peace*, pp. 418–419.

and truck bombings rocked Kuwait City and nearby industrial areas, targeting the U.S. and French embassies, the airport, the main oil refinery, and the Shuaiba petrochemical plant. Those responsible turned out to belong to a terrorist group called al-Dawa (“The Call”), an Iranian-backed Shiite group headquartered in downtown Tehran. On March 27, 1984, a joint CIA–Defense Intelligence Agency estimate warned of further Iranian terrorist attacks, and the warnings were validated when Iranian-sponsored bombings took place in Kuwait in June 1986 and January 1987.

The U.S. Navy worried about Iranian suicide boats or saboteurs attacking the convoys or ships in port—a fate that later befell the USS *Cole* in Yemen in October 2000. To counter possible Iranian commando assaults, the Navy deployed proximity sensors, underwater strobe lights, and antiswimmer nets around the U.S. anchorage at Mina al-Suleiman Pier. At one point, even specially trained dolphins were sent to Bahrain to detect Iranian frogmen.⁹ Tragically, on the evening of November 1, 1987, the frigate *Carr* was escorting a U.S. merchant ship when it opened fire with its heavy machine gun on a suspected suicide vessel, which a subsequent investigation revealed to be a small craft smuggling goods to Iran.¹⁰

Despite these concerns, there is no evidence that Iran ever attempted either a suicide attack or a commando operation against U.S. forces. Suicide bombing was not in the IRGCN’s operational playbook in the 1980s, and as one retired intelligence officer has noted, Iranians have preferred to use surrogates to commit suicide attacks. However, the IRGCN did at least consider using swimmers to plant mines on the hulls of anchored U.S. warships, but Iran lacked both the trained personnel and the means to effectively deliver their swimmers to Bahrain.¹¹

Plausible Deniability

In August 1984, a Libyan ship laid mines in the Red Sea, playing havoc with Western shipping in the Suez Canal. Although U.S. intelligence soon uncovered Libyan leader Muammar Qadhafi’s culpability, the incident remained mysterious enough that Libya suffered no consequences from its mining of international waters.¹² Such plausible deniability afforded by naval mines strongly appealed to the Iranian leadership: It provided a low-risk means of striking at the United States and ran a minimal risk of retaliation. Unless an Iranian vessel was caught in the act of laying mines, Iranian officials believed, it would be difficult for Washington to justify a military response.

In 1981, in order to blockade Iraq, the Islamic Republic purchased stocks of two different types of unsophisticated moored contact mines from North Korea: the small Myam (SADAF-01) mine with only a forty-four-pound explosive charge and the much larger M-08 (SADAF-02). The latter was a pre-World War I, Russian-designed mine, packing an explosive charge of nearly 250 pounds. Neither mine could be used in deep water, such as the Strait of Hormuz, but both could be laid throughout the shallower Arab side of the Persian Gulf. The IRGC reverse-engineered the North Korean mines and began producing an Iranian version of these two mines. By July 1985, the first of the Iranian-designated SADAF-01 and SADAF-02 mines began rolling off the production lines at an ammunition plant north of Tehran; about twenty SADAFs were produced each week.¹³

There was general agreement among the various factions in the Iranian government on using mines. Iran publicly praised those responsible for laying the mines as “God’s angels that descend and do what is necessary.”¹⁴ From the first authorized mining of Kuwait

9. USCENTCOM message to CNO, “Subj: Harbor Security Initiatives,” February 17, 1988, p. 2.

10. JTFME message to USCINCENT, “Subj: USS *Carr* Incident,” November 2, 1987.

11. Retired intelligence officer, interview.

12. Scott C. Truver, “Mines of August: An International Whodunit,” U.S. Naval Institute *Proceedings*, May 1985.

13. Gen. George Crist, notebook, details from early October 1987 briefing on Iranian mining; Retired naval officer, comments to the author, Washington, DC, July 16, 1995.

14. Foreign Broadcast Information Service, “Hashemi-Rafsanjani Political Sermon,” July 24, 1987, Exhibit 50, Counter-Memorial and Counter-Claim Submitted by the United States of America, International Court of Justice, Case Concerning Oil Platforms (*Islamic Republic of Iran v. United States of America*) June 23, 1997, p. 2.

harbor in May 1987 until April 1988, Iran laid ninety-one mines in six separate attacks directed at the American convoy operation.¹⁵

Initial success emboldened Iran in using mines. The IRGCN cautiously employed mines in its first operation, using simple local dhows (small boats) to lay fourteen mines at night at the entrance to Kuwait's main shipping channel. Despite damaging four ships, Iran faced no recriminations. Tehran's next operation was more audacious, with the IRGCN laying a string of mines directly across the path of the first U.S. convoy during Operation Earnest Will, one of which was struck by the tanker *Bridgeton*. The IRGCN came back later to lay another row of shallower SADAFA-01 mines, deliberately targeting the U.S. countermine vessels deployed to clear the first mine line.¹⁶ Washington failed to retaliate despite positive proof obtained by U.S. and British intelligence that mines used in both the *Bridgeton* and Kuwaiti attacks had been produced in Iran. The next month, Iran employed a large IRIN logistics vessel to target the rendezvous of a convoy off the United Arab Emirates (UAE) coast. And when alerted of a scheduled deployment of the flagship of the U.S. naval force, the USS *LaSalle*, Iran brazenly decided to target it with the *Iran Ajr*.

The Iranian reaction following the U.S. capture of the *Iran Ajr* sheds significant light on Iran's operational calculations. The operation had backfired, prompting European nations to dispatch their own minesweepers to the Gulf and increasing Gulf Cooperation Council support for the U.S. military effort against Iran. For the next six months, Iran refrained from any further mining operations.

However, after eight years of war with Iraq, Iran's economic and military ability to continue the war was in question. Time was not on Iran's side: In early 1988, Iranian leaders debated the wisdom of renewing their mining campaign.¹⁷ The more truculent members of the Iranian leadership vocally argued that Iran needed

to deal a decisive blow. Others advocated avoiding a confrontation with the United States: Iran had enough trouble with Iraq, they argued, to embark on an action that would induce greater U.S. military commitment against Iran. But those demanding action won the debate. Once again, the IRGCN deliberately targeted U.S. ships, laying mines across the convoy route. One of these mines found the *Samuel B. Roberts*.

The drubbing experienced by the Iranian military during the subsequent Operation Praying Mantis, reinforced by the *Iran Ajr* fiasco, strengthened the more pragmatic factions within the government. According to both U.S. and British intelligence reports following the engagement, there were political recriminations in Tehran against those who had advocated the mine attack on the *Roberts*. For the next three months, until the ceasefire ended the Iran-Iraq War in July 1988, the IRGCN never again conducted a mining operation.

Additionally, the sparing of the *Sabalan* had a surprising effect on the Iranian leadership. Those leaders who understood the power of the U.S. military were surprised that Washington had spared the ship. "It was as if God himself had gently touched her with his little finger," a senior Iranian official remarked. In a meeting with an Arab counterpart, Iranian foreign minister Ali Akbar Velayati expressed amazement that the United States did not sink the ship: "I never expected the United States to show that kind of mercy."¹⁸ How much impact this had on Iranian politics is not known, but it appears that the power displayed by the United States undercut the hardliners' arguments for attacking U.S. forces. Such reluctance was maintained even after the *Vincennes*'s accidental downing of Iran Air Flight 655.

Mining Tactics

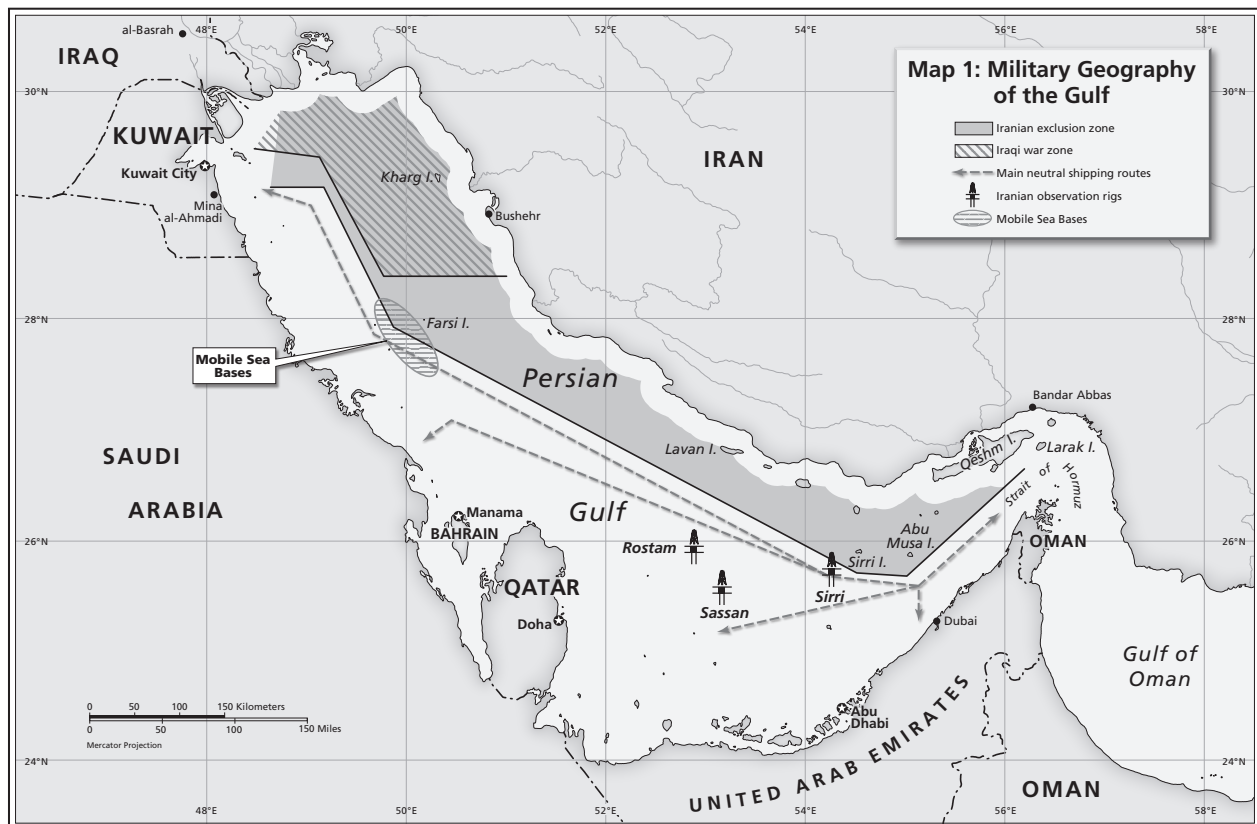
Iran employed conventional tactics in its mining operations. Initially it used large fishing dhows, which mingled with the normal fishing and smuggling traffic. Later, the IRGCN switched to using IRIN logistics

15. USCENTCOM briefing, "Summary of Iranian Mining," September 1988.

16. Capt. Howell Zeigler, USN (Ret.), interview with author, December 12, 2007.

17. Ibid.

18. Ambassador David Mack, interview with author, Washington, DC, May 26, 1995; Crist, notebook, late April or early May 1988.



or amphibious vessels with a large flat open deck for storing and dropping the mines. Despite the fact that the amphibious craft operated from IRIN vessels, the mining was always conducted and controlled by an IRGCN special missions unit.

Because the deepwater channels of the Persian Gulf were located in the Iranian exclusion zone, the U.S. convoys were forced to travel through the Gulf along a shallower southern route (see Map 1). This route offered the IRGCN a number of areas where the Iranian-produced mines, which were not suitable for use in deep water, could be deployed. Iran closely monitored the first convoy's progress, ascertaining its speed and location, and laid a line of mines over the shallow Shah Allum shoals, west of Farsi Island and directly in the convoy's path.¹⁹

Subsequent Iranian mining operations followed a similar modus operandi. Under the cover

of darkness—preferably with zero percent illumination—the minelayer would dim its navigation lights and maintain a consistent speed and heading, guiding from navigation buoys or fixed light on the horizon. One IRGCN officer held a stopwatch while other men methodically inserted detonators into the black spherical objects arranged on top of the flat open deck. Every ten or fifteen seconds (depending on the ship's speed and the desired distance between mines) the officer ordered a mine dropped, with each carefully rolled to the edge of a plank protruding off the side and pushed into the blackness below.

The IRGCN improved on its technique. The first mining operation off Kuwait in May 1987 was conducted by two large Iranian dhows from Bushehr. Each laid seven mines in two parallel rows that radiated from one of the navigation buoys. The mines were only thirty meters apart, meaning that they were pushed off

19. COMMIDEASTFOR message to USCINCENT, "Subj: After Action Report on Earnest Will Escort," 87001, July 22–24, 1987.

one after the other. The *Bridgeton* mine line was evenly spaced to cover the entire tanker track and was supported by another small line of Myams targeted at the U.S. countermine vessels. The April 1988 mining that damaged the *Roberts* was conducted by a much larger ship: the 200-foot *Charak*. Twelve mines were arrayed in a circular pattern, where shoals forced the tanker route into a natural deepwater channel, intending to saturate the area and increase the chances of finding a target. Either that night or the next, another ship (probably the *Charak*'s sister, the *Souru*) undertook a similar mission some sixty miles to the southeast, along an early Operation Earnest Will tanker track that had not been used for several convoys.²⁰

To minimize interference with their own fishing and smuggling boats, the Iranians set the mines' depth to at least fifteen to twenty feet, well below the depth of a dhow, but high enough to strike a large oil tanker.²¹ But because of the poor quality of the SADAF-02 design, the mines often failed to deploy at the correct height, with some deploying at such a shallow depth that they were clearly visible bobbing on the surface of the water.

Command and Control

The Iranian military struggled to conduct joint operations. A significant part of the problem stemmed from the decision to operate two independent navies: the regular navy and the IRGCN. The two forces operated from some of the same bases, particularly Bandar Abbas and Bushehr, but the IRGCN maintained a parallel and independent command. Both the regular navy and IRGCN were (and still are) divided into four district commands. Each had the same designations, so the First Naval District in Bandar Abbas or the Second Naval District in Bushehr was the same headquarters' name for both the regular navy and IRGCN. Nevertheless, other than the title, the two commands operated separately. In 1987, the Iranians attempted to

form a joint headquarters to coordinate IRGCN and regular naval operations, but the effort failed when the IRGCN refused to cooperate and subordinate its operations under a single command. As a result, coordinating joint operations—even from the same port—proved problematic with the two separate chains of command.

As the conflict with the United States escalated, the regime began to question the loyalty of the IRIN. The naval wing of the IRGC was formed much later than its land counterpart to augment its depleted conventional air and naval capabilities. Yet it also served as somewhat of a check against an IRIN whose many officers still harbored affection for their former ally, the United States.²² As a result, Tehran began to rely more on the IRGCN, which rapidly became the more powerful of the two navies. One of the first examples of the IRGCN's growing power occurred in June 1985, when the IRGCN forced the IRIN commander to resign over his opposition to the IRGCN's brief seizure of a Kuwaiti-flagged ship.

Not surprisingly, the relationship between the IRGCN and the regular navy was poor, but the contentious relationship went deeper than simply turf battles and influence: The IRIN was a professional force whose senior officers had been trained in the West; the IRGCN consisted of amateur officers who made up for their lack of training with revolutionary élan. IRGCN rank-and-file sailors were a blend of dedicated revolutionaries and impressed conscripts. One IRGCN sailor had been a deserter from the army, yet the IRGCN press-ganged him off the street.²³ Privately, many professional Iranian naval officers held the IRGCN in contempt, viewing its members as arrogant and undisciplined. The IRGCN saw the regular navy as too conservative and still too sympathetic to its former ally, the U.S. Navy.

At times, both forces showed a lack of discipline. Individual commanders disregarded orders from

20. JTFME message, "Subj: Mining Update," April 25, 1988.

21. Gen. George Crist, memorandum to Adm. William Crowe, "Subj: Kuwaiti Mining," June 13, 1987, p. 1.

22. Later, in 1989, Iranian security officials arrested and executed four naval officers for alleged espionage; see "Information Minister Names CIA Spies," Foreign Broadcast Information Service, April 27, 1989, pp. 43–44.

23. JTFME message, "Subj: Repatriation of Iranian Detainees/Interpreter Report," October 18, 1987, pp. 1–2.

their respective district headquarters. In July 1987, Ayatollah Ali Akbar Rafsanjani, then speaker of the Majlis, assured Japan's foreign minister that Iran would not attack Japanese shipping in the Gulf. But independent-minded IRGCN officers subsequently attacked two Japanese tankers.²⁴ The captain of the Navy frigate *Sabalan*, Lt. Cdr. Abdollah Manavi, who later rose to the rank of vice admiral and head of naval operations, earned the reputation of being a rogue commander. A zealot, Manavi on numerous occasions ignored orders from First Naval District headquarters in Bandar Abbas not to fire on specific merchant ships. In the Japanese tanker incident, Manavi acknowledged receipt of the order and then opened fire on the hapless tanker, reputedly aiming at the bridge and living quarters to kill as many of the crew members as possible. For this, Captain Manavi earned the apt nickname "Captain Nasty."²⁵

Coordination between the Islamic Republic of Iran Air Force (IRIAF) and the naval forces proved equally ad hoc. Iran never established a joint command to facilitate air and naval operations. Instead, the regime installed hotlines between the naval district headquarters and the IRIAF operation center at Bandar Abbas and Bushehr, respectively, which enabled the verbal sharing of intelligence and radar tracks on hostile aircraft or U.S. Navy warships. The two services loosely coordinated operations: IRIAF C-130s relayed tracking data to the naval forces on potential targets, and IRIAF jets responded to ongoing naval engagements with Iraq or the United States. Nevertheless, the lack of a unified command invariably led to uncoordinated air and naval attacks.²⁶

The strains of combat during Operation Praying Mantis revealed the serious deficiencies in Iranian combined operations. Iranian air, naval, and IRGCN operations were not coordinated, leading to a series of

piecemeal commitments of forces. When news of the U.S. attacks on Sirri and Sassan reached Capt. Amir Yeganeh, commander of the First Naval District in Bandar Abbas, he directed his surface forces to move against the Americans. However, the Iranian ships were at various levels of readiness. Rather than wait until all his ships were ready and able to be sent out en masse, Captain Yeganeh ordered each to move as it became available. What small chance of success Iran had evaporated as the Iranian fleet sortied piecemeal from Bandar Abbas, and the vastly superior U.S. forces dealt with each in turn.

Captain Yeganeh first directed the missile boat *Joshan*, returning from escorting a shuttle tanker to Kharg Island, to head south and reinforce Sirri. Commanded by Lt. Cdr. Abbas Mallek, the *Joshan* headed toward the powerful U.S. surface group without any support. Complicating Mallek's mission was the fact that the IRIN operated under strict rules of engagement, as did its U.S. counterpart. The Iranian Navy was specifically prohibited from firing first at a U.S. warship.²⁷ What Mallek was supposed to do once he confronted U.S. warships at Sirri remained ambiguous, but he brought his boat on a southerly course toward the overwhelmingly powerful U.S. force. Without any support it was suicide, and it is a testament to Mallek's courage and U.S. timidity that he came so close to nearly crippling a U.S. cruiser.

In addition to diverting the *Joshan* toward Sirri, Captain Yeganeh ordered the two frigates *Saband* and *Sabalan*, along with an older World War II-era destroyer, to get under way.²⁸ The *Saband* was the first out of Bandar Abbas, and it was quickly dispatched by U.S. air and naval forces. Four hours later, the *Sabalan* finally ventured out, and it was saved only by U.S. benevolence and strict adherence to the rules of engagement. The third destroyer struggled with

24. Kyodo News Service, "Iran Promised to Leave Japanese Shipping Alone, Khuranari Says," July 4, 1987.

25. Vice Adm. Anthony Less, U.S. Navy (Ret.), interview with author, Bethesda, MD, July 6, 2005.

26. Iranian Islamic Republic Navy, Persian Gulf and Gulf of Oman Fleet, Operations, "Instructions for Exchanging Radar Intelligence," May 26, 1987, Enclosure 1C, International Court of Justice, Counter-Memorial and Counter Claim, Exhibit 116.

27. Tom Cooper and Farzad Bishop, *Iran-Iraq War in the Air, 1980-1988* (Atglen, PA: Schiffer Military History, 2000), p. 270.

28. COMDESRON 22 message to CJTFME, "Subj: Operation Praying Mantis—Post Timeline 15, 21 April 1988," Praying Mantis Messages, 20-22 April 1988, File 11, Box 20, Series VI, Operation Archives, Naval Historical Center.

mechanical problems; by the time it was ready to sail, it was dark, and the Iranians prudently decided to keep the ship in port.

In between the *Sahand* and *Sabalan* sorties, the IRGCN conducted its own attacks on UAE oil fields. Its second attack came when the United States had only two strike aircraft aloft (the rest were being armed and refueled); had it been coordinated with the *Sabalan*'s movement, at least one effort might have succeeded. Instead, the two navies failed to coordinate operations and both were separated by enough time to allow the same two U.S. aircraft that stopped the Boghammer attacks to move north to attack the *Sabalan*.

However, despite the Iranian government's concerns about the loyalty of the regular navy, the IRIN showed more fortitude than the IRGCN during Operation Praying Mantis. Senior U.S. commanders were greatly impressed by the courage of Commander Mallek in steaming his tiny missile boat directly toward a vastly superior U.S. force, including a cruiser thirty times the *Joshan*'s size. The *Sahand* commanding officer displayed equal aggressiveness—as did the *Sabalan*'s skipper, who headed out when ordered despite almost certainly knowing the fate that had befallen his sister ship a few hours earlier. In every case, the IRIN did not hesitate to open fire on the Americans: the *Joshan* when ordered to abandon ship, and the two frigates when menaced by low-flying U.S. aircraft.

However, unlike its regular navy counterparts, the IRGCN showed little stomach for the fight. The IRGCN had amassed more than sixty small boats at Abu Musa Island before Operation Praying Mantis. It intended to conduct a mass attack against both the UAE and the U.S. Navy, but it managed to conduct one small attack. After U.S. aircraft sank one of its boats, the remainder were beached, while the other IRGCN boats remained safely at pier for the duration of the fight.

The IRIAF suffered the same problems of disconnection. After the U.S. attacks on the Sassan and Sirri platforms, the Iranian air command in Bandar Abbas

remained ignorant of the ongoing American attacks or the order for the *Joshan* to close on Sirri. When Iranian air search radar detected a U.S. F-14 fighter only twelve miles from Iranian airspace, the IRIAF commander believed this was yet another provocative move and ordered his aircraft aloft to chase the U.S. plane away. Only five of his eleven F-4 fighters were functional, and his entire command was distracted by grief, having lost a number of airmen in a C-130 crash three days before.²⁹ U.S. F-14s immediately responded, supported by EA-6B electronic warfare aircraft that jammed both the Iranian F-4s and Iran's Hawk antiaircraft missiles that covered the Strait. The Iranian aircraft turned back toward the Iranian mainland, not wishing to tangle with the U.S. fighters. This cat-and-mouse game repeated itself several times, with the Iranians pilots refusing to leave the safety of Iranian airspace. When news of the U.S. attacks finally reached the IRIAF fighter command, a pair of F-4s was ordered southwest; one peeled off and headed out into the Gulf with its search radar active. The *Wainwright*, having already sunk the *Joshan*, had plenty of time to switch its focus to the new aerial threat, firing two surface-to-air missiles, one of which seriously damaged one of the Iranian F-4s.

Intelligence and Surveillance

The one area where Iran seemed to coordinate operations reasonably well was in surveillance and tactical intelligence collection. In order for Iran to prosecute attacks on shipping, it needed to monitor ships' movements in the Persian Gulf. A few aircraft remained in Iran's inventory for this mission, such as U.S.-made P-3s and C-130s. The P-3s were adept at monitoring U.S. convoys around the Strait of Hormuz and relaying their movements back to the First Naval District in Bandar Abbas. This helped Iran discover the gap in the U.S. surveillance coverage, allowing for the successful mining in April 1988 that nearly sank the *Samuel B. Roberts*. Iran kept a P-3 aloft during the mining operation and immediately afterward, presumably to ensure that there were no U.S. ships

29. Cooper and Bishop, *Iran-Iraq War in the Air*, p. 269.

nearby to intervene. In addition, IRIAF C-130s had been used to relay targeting data to the Silkworm missiles, which is why an Iranian C-130 was engaged during Operation Praying Mantis.

Iran showed surprising intelligence collection abilities. For instance, it frequently monitored unsecured radio communications with the reflagged tankers.³⁰ Several C-130s were outfitted with signals intelligence collection equipment before the fall of the shah, and they proved useful in monitoring U.S. and Iraqi ground and air forces and in ascertaining port destinations of neutral ships, relaying this information to the naval district headquarters.

But the key link in the Iranian monitoring scheme was the Iranian-held islands and oil platforms in the Persian Gulf, which sat astride the tanker routes. Under the command of the IRIN, these venues served as both command and control sites and as forward operating bases. They became staging bases, initially for helicopters and later for IRGCN small boats. They provided an important communications link between the land-based headquarters and naval forces operating in the Gulf some 100–200 miles away. With the exception of Farsi Island, which reported back to the Second Naval District in Bushehr, all of the platforms and islands reported back to the larger First Naval District command in Bandar Abbas.

In February 1986, the First Naval District headquarters published a detailed operations order for tracking and monitoring prospective targets, including U.S. Navy warships. The command divided the southern Gulf and Strait of Hormuz into eastern and western zones and formed subordinate headquarters on Larak, Abu Musa, and just outside the Gulf at the entrance to the Strait of Hormuz. These subordinates reported directly back to Bandar Abbas over a common radio

net to notify the Iranian command of any “suspicious” vessels. Additionally, the IRIN stationed four men on every platform. Operating undercover as employees of the National Iranian Oil Company, they were assigned the mission of monitoring all ships passing their respective platforms and relaying the information back to Bandar Abbas.³¹ If the district commander determined that a ship should be attacked, the order would be relayed to any one of the platforms or islands along the ship’s projected path, and IRIN vessels or IRGCN small boats would sally forth. More than one-third of all the Iranian attacks on shipping occurred within fifty nautical miles of the three key platforms of Sirri, Rostam, and Sassan (see Map 2).³²

IRGCN Small-Boat Operations

By 1987, the IRGCN had assumed the primary role of attacking both neutral ships and threatening U.S. convoys. While deployment of mines represented the most serious threat, small boats accounted for the majority of Iranian attacks. The first such attack occurred in April 1987, and forty-two other vessels met a similar fate that year.³³

The IRGCN developed simple procedures to attack ships. Operating in groups of three to five boats, they approached their intended target, then sprinted ahead and simply waited for the ship to go by and, from a stationary firing position, raked its bridge and superstructure with automatic weapons and rocket-propelled grenades. Later the IRGCN developed more sophisticated tactics: their boats approached a ship at high speed from opposite directions, spraying the ship with gunfire in repeated, coordinated passing attacks.

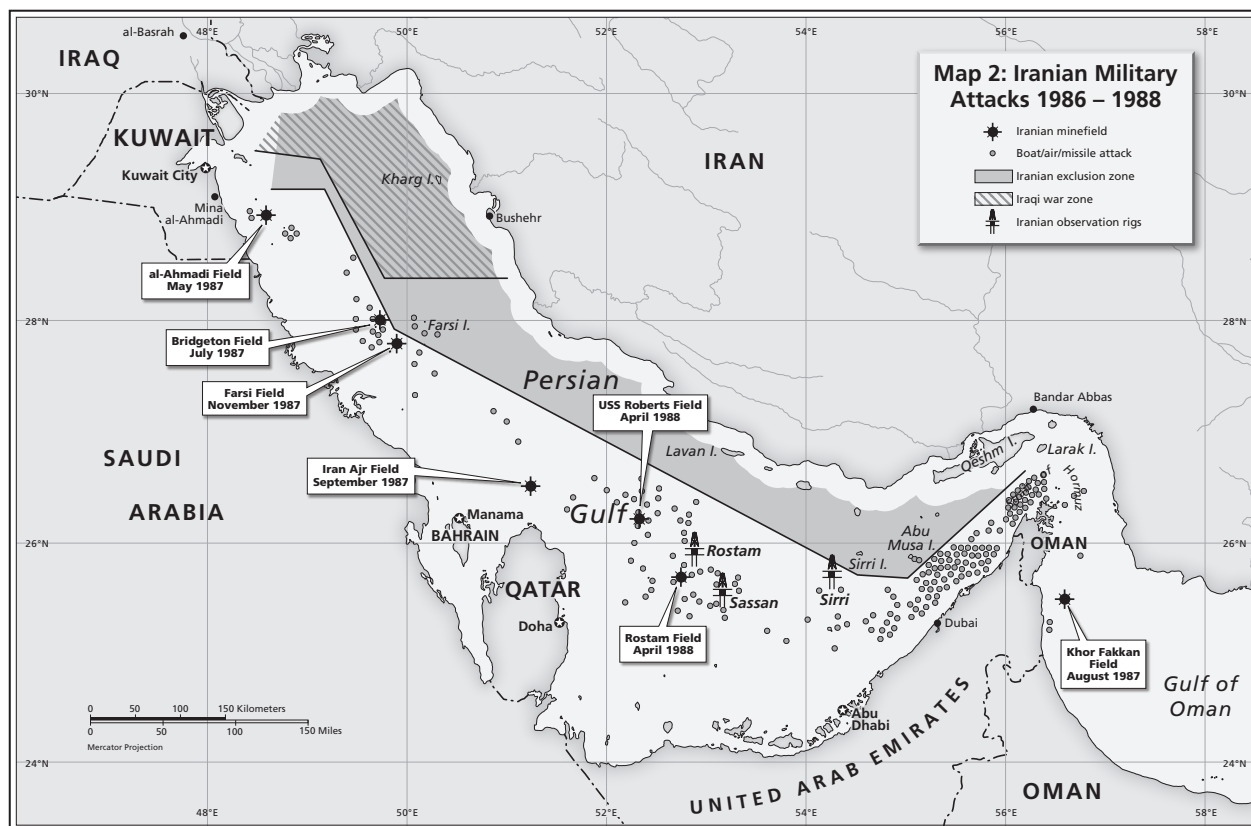
Offshore oil platforms served as important bases and staging areas for IRGCN small boats. While the IRIN ran the platforms’ operations, the IRGCN small

30. Capt. Stanley Carpenter, USNR (Ret.), interview with author, Tallahassee, FL, November 12, 1993.

31. Armed Force of the Islamic Republic of Iran, First Naval District Fleet (Intelligence), “Instructions for Radar Stations,” February 9, 1986, International Court of Justice, Counter-Memorial and Counter Claim, Exhibit 114; Armed Force of the Islamic Republic of Iran, First Naval District Fleet (Intelligence), “Instructions for the Deployment of Observers on Oil Platforms in the Persian Gulf,” October 1980, International Court of Justice, Counter-Memorial and Counter Claim, Exhibit 115; Archive of Incoming Messages, First Naval District, Command Post to Rostam Oil Platform, 1986–1987, International Court of Justice, Counter-Memorial and Counter Claim, Exhibits 118–119.

32. International Court of Justice, “Case Concerning Oil Platforms, Counter-Memorial and Counter Claim Submitted by the United States of America,” June 23, 1998, pp. 61–63.

33. General Council of British Shipping, “Iran/Iraq: The Situation in the Gulf, Guidance Notes for Shipping,” February 1988, pp. 30–40.



boats were required to use the platforms as staging bases, because they could not operate for any length of time out in the open water. On any given day, IRGCN small boats clustered around each platform, using the regular navy’s radios to relay commands back to IRGCN headquarters.

When the IRGCN began mine-laying operations, the platforms served as a staging base for these operations as well, with orders transmitted to the mine-laying vessel via the platforms. One study conducted by the British Royal Navy on Iranian mining operations stressed the importance of these oil platforms: “For successful tactical mining it is necessary for the minelayer to be able to respond at short notice to intelligence and surveillance information giving data of the potential target’s likely movements. . . . The minelayer would berth alongside an oil platform waiting for these

target details. When alerted, it would sortie out and lay a number of mines . . . across an area of water that would span the assessed track of the target.”³⁴

Despite CENTCOM’s fears of large-scale IRGCN “swarming” attacks against U.S. warships, the IRGCN attempted this on only two occasions. One was during Operation Praying Mantis, when Iran amassed nearly fifty small boats at Abu Musa Island. Despite this impressive congregation, during the day’s fighting the IRGCN attempted only two attacks using fewer than five boats; after U.S. aircraft sank one Boghammer, the boats remained safely ashore.

The other massing attack was more substantial. In early fall 1987, Iran amassed IRGCN small boats (with at least one Kaman-class patrol boat as a flagship) at Bushehr, perhaps intending to attack the Khafji oil field off the Saudi Arabian coast.³⁵ When the operation

34. Rear Adm. Richard Cobbold and Cdr. Michael Codner, “The Utility of Iranian Offshore Oil Platforms in the Conduct of Helicopter, Small Craft and Mine Attacks against Merchant Shipping during the Iran-Iraq War,” Royal United Services Institute for Defense Studies, May 1997, p. 20.

35. Central Intelligence Agency, “We Watched the Gulf,” *Studies in Intelligence* 33, no. 1 (Spring 1989), p.6.; COMMIDEASTFOR message, “Subj: Force

commenced on the evening of October 2, the missile boat serving as the command ship became disoriented in the dark and veered off course. High seas prevented IRGCN small boats from following, and Iranian commanders could not get the multitude of small boats moving together in any cohesive formation. At least one small boat sank in the rough water.³⁶

Iran tried again on October 8. The IRGCN divided its force into two pincers. The main task force would descend from the north, while a smaller force would approach Saudi Arabia from the east and Farsi Island. That morning, the eastern pincer, consisting of a Boghammer and two smaller boats, departed Bushehr. After stopping at Farsi Island, at nightfall the small flotilla, with a total of thirteen men aboard, headed west toward Middle Shoals Buoy. To the north, the Iranians staged their main force, a larger flotilla of perhaps 20–30 small boats.

It is not clear if the Iranians realized that the United States had deployed the Mobile Sea Base. The commanding officer of the *Hercules* reported that his barge had been under surveillance by an IRGCN dhow, which had reported his position back to Farsi Island. The Iranians took along several surface-to-air missiles in anticipation of a U.S. military response. However, it is unlikely the IRGCN fully understood the size and capabilities of the U.S. Special Forces deployed on the *Hercules*.³⁷

The IRGCN displayed good operational security, avoiding radio communications that would compromise the operation. In fact, neither Saudi nor U.S. intelligence knew of the impending attack, despite deploying additional surveillance assets only a week earlier, based on concerns of just such an attack. The first indication of an Iranian operation occurred when

U.S. Army Special Forces helicopters stumbled across the three IRGCN boats from Farsi, tied up alongside the Middle Shoals Buoy.

Although the IRGCN showed credible communications discipline, ultimately it proved tactically inept. For the most part, the boat crews consisted of untrained conscripts. When confronted by the U.S. helicopters, all three small boats were drawn alongside Middle Shoals Buoy, with their crews smoking and talking among themselves. Not a single weapon had been manned and no lookouts posted. As the helicopter closed to within forty feet, an Iranian leaped up to a heavy machine gun and opened fire on the U.S. helicopter, but lacking night vision goggles, he could only spray in the general direction of the chopper. Gasoline engines powered two of the boats, which immediately ignited when hit and incinerated their crews. The IRGCN crew on the Boghammer fought slightly better: It managed to launch two rockets (either SA-7s or RPGs) at the U.S. helicopters and managed to get up speed and maneuver to avoid incoming fire—a futile effort, it turned out, when a well-placed U.S. rocket sank the boat.³⁸

This brief skirmish effectively ended the IRGCN operations around Farsi Island. Instead, the Revolutionary Guard moved its small-boat operations further south, around Abu Musa Island. Occasionally, the IRGCN would test the barges' defenses by approaching at high speed, then withdrawing at the first challenge. But with the exception of one small engagement between U.S. helicopters and IRGCN small boats in July 1988, in which one IRGCN boat was damaged and its crew inadvertently blinded by a laser designator, aggressive patrolling by U.S. small boats and helicopters ended Iranian operations around Farsi Island.³⁹

Intel Advisory 187/87, Persian Gulf Threat Update," September 27, 1987, Files Intelligence Notebook I, 1985–1987, Box 18, Series VI, JTFME/MEF Operations.

36. Fariborz Haghshenass, *Iran's Asymmetric Naval Warfare*, Policy Focus 87 (Washington, DC: Washington Institute for Near East Policy, September 2008), p. 5, <http://www.washingtoninstitute.org/templateC04.php?CID=298>.

37. Wise, *Inside the Danger Zone*, pp. 125–127.

38. David B. Crist, "Joint Special Forces in Support of Earnest Will," *Joint Forces Quarterly* (Autumn/Winter 2001–2002), pp. 20–21.

39. Wikul interview.

3 | Impact on the Current Iranian Military

OPERATION EARNEST Will profoundly influenced the Iranian military and its military planning for a future conflict with the United States. Tehran came away from the confrontations with the United States in the 1980s convinced that Iran's strategic and tactical approach had been sound, but that its operations had been technologically flawed. In early 1990, Islamic Republic of Iran Navy (IRIN) and Islamic Revolutionary Guard Corps Navy (IRGCN) leaders met in Tehran and concluded that mining and IRGCN small boats provided an effective counter to the superiority of the U.S. Navy. For Tehran's naval officials, the disaster of Operation Praying Mantis revealed that they could not contend with the Americans in a conventional engagement, but that their asymmetrical operations had proven successful. Their mining campaign succeeded, with one mine in ten finding a target. The mines stopped the first convoy of the world's most powerful navy, and a \$1,500 SADAF-02 mine inflicted \$96 million in damage to the USS *Samuel B. Roberts*.¹

However, there was widespread recognition, reinforced by the impressive U.S. victory in Operation Desert Storm in 1991, that revolutionary zeal could not overcome superior weaponry. Iran needed to upgrade its technology and missile inventory to better execute its asymmetrical tactics against the U.S. military. Iranian officials correctly observed that during Operation Praying Mantis, a lone missile from the *Joshan* had nearly knocked out the largest U.S. warship in the Persian Gulf. More small boats and missiles, they surmised, would have made the battle a costly one for the U.S. Navy. While fiscal shortfalls, coupled with a reluctance by the IRIN and Islamic Republic of Iran Air Force (IRIAF) to wean themselves from American hardware, have prevented any quick modernization, Iran has attempted over the past fifteen years to address

the shortcomings revealed during Operation Earnest Will.²

Beginning in the mid-1990s, Iran purchased advanced Chinese-made C-801/802 antiship missiles for both its surface fleet and coastal defense forces. Originally based on the French-made Exocet, the C-801/802s are far less susceptible to jamming and, with a sixty-seven-nautical-mile range, can reach most of the Persian Gulf tanker routes. The coastal defense variant represents a major improvement over the older Silkworm missiles poised at U.S. forces during Operation Earnest Will. Rather than operating from fixed sites, they are mobile, truck-mounted, and guided by mobile radar stations. They require far less time to set up for launching, which decreases the amount of warning time of an impending launch. Recently, Iran has fielded its own newer missile, the Noor. Produced under license, it is an upgraded Chinese C-802, which is far less susceptible to electronic countermeasures such as those that diverted the *Joshan's* Harpoon missile twenty years ago.³

Iran has expanded the number of sites where it has deployed shore-based missiles. Missiles are located further up the Gulf to protect Bushehr and Kharg Island, while others are positioned on Abu Musa Island to extend their range well into the southern Gulf. The bulk, however, still remain deployed in the same areas as twenty years ago, arrayed in a crescent ringing the Strait of Hormuz.

The IRIN has opted for smaller boats and stealth to counter any assault from the United States. Unlike the approach under the shah, the Islamic Republic does not strive for a "blue water" capability, but one that dominates its littorals and controls passage through the Strait of Hormuz. The ease with which the U.S. Navy dispatched the *Saband* and *Sabalan* provided graphic

1. David Skinner, "The Underwater War," *Air Force Times*, undated, http://www.airforcetimes.com/community/opinion/navy_opinion_minewarfare_070813/, accessed April 20, 2009.
2. Michael Eisenstadt, "Déjà Vu All Over Again? An Assessment of Iran's Military Buildup," McNair Paper 29: *Iran's Strategic Intentions and Capabilities* (Washington, DC: Washington Institute for Near East Policy, 1994), p. 12.
3. Haghshenas, *Iran's Asymmetric Naval Warfare*, p. 15.

evidence of the vulnerability of the IRIN's capital ships. As a result, the Iranian regular navy's large-combatant surface fleet remains largely unchanged since 1988, save upgrading its armament with the Chinese missiles.

In 1999, Iran began building the 1,400-ton Mowj-class frigate, essentially an improved version of its Vosper-class frigates. The weapons capabilities of these two classes of ships are much the same, except that the newer frigates are sturdier, better constructed ships (most likely because of the experience with the *Sabalan*). However, it took eight years for the first ship to become operational, and while a second is under construction, production is proceeding at a glacial pace. These ships appear to be replacements for the aging British frigates rather than an augmentation of their conventional fleet.

To be sure, Tehran's priority in naval forces now is in submarines and missile boats. All carry enough missiles or torpedoes to sink any U.S. warship, and all have a greater capability of evading detection. The three Kilo-class submarines purchased from Russia in the 1990s are being augmented by the Ghadir class of Iranian-built midget submarines. Relying on the perceived near-success of the *Joshan* during Operation Praying Mantis, the IRIN embarked on building its own version of the Kaman-class missile boats. Four have been commissioned since 2003, including one renamed the *Joshan*. All carry C-802 missiles.

Since Operation Earnest Will, the IRGCN has supplanted the regular IRIN in terms of influence and resources, and it is now the larger (20,000 versus 13,000 personnel) and dominant maritime force for the Islamic Republic. For its surface force, the IRGCN adopted an approach similar to that of its regular navy counterpart by investing in missile boats. The IRGCN operates ten Houdong missile boats, each carrying four C-802 missiles. These missile boats are augmented by an array of smaller variants from China and North Korea, including five Chinese Cat-class catamaran missile boats capable of sustained speeds of fifty knots and carrying two smaller Iranian-

manufactured Kosar antiship missiles. In addition, the IRGCN has taken delivery of at least seven small North Korean IPS-16 modified Peykaap II-class missile boats, which can carry either homing torpedoes or surface-to-surface missiles. In all, these relatively new additions to the IRGCN's naval force provide it with as much firepower as the regular navy.

One of the most important legacies of the "Tanker War" was the IRGCN's retention of a robust flotilla of small boats, such as Boghammers. What started as an improvised effort has grown into the most significant—and most aggressive—arm of the IRGCN. Around three hundred boats are actively manned, but hundreds more are laid up in warehouses, capable of being outfitted on short notice. Some press reports have surmised the number to be as high as three thousand IRGCN boats, but based upon their history in Operation Earnest Will, as few as one-fourth of these may actually be operational.

A critical shortfall in the 1980s was a credible swimmer/frogmen capability akin to that of the U.S. Navy SEALs. Although there was much anxiety among U.S. military officials over the possibility, the IRGCN never mounted a clandestine attack against the anchorage off Bahrain: Despite the IRGCN's bravado, it lacked both the equipment and trained personnel to deploy underwater frogmen that far out into the Gulf or capable of overcoming U.S. countermeasures. Yet in recent years, the IRGCN has moved to enhance this asymmetric capability. During the 1990s, Iran experimented with modifying logistics ships to deploy frogmen. The intent seems to be to mimic their covert mining tactics of blending in with normal commercial traffic to deploy underwater saboteurs close to U.S. warships or Gulf harbors. More recently, Iran has experimented with two submersible swimmer-delivery vehicles.⁴

Mining remains a core mission for the IRGCN. The SADAF-02 moored contact mines used during Operation Earnest Will had serious limitations: A ship had to physically run into the mine, and the mines could not be used in depths much more than three hundred

4. Ibid., p.14.

feet, which limited their use in the Us commonly used by oil tankers. Currently, Iran possesses between three thousand and five thousand naval mines. While most of the stock is SADAF-01 and SADAF-02 mines, Tehran has invested in several hundred bottom-laid influence mines, which use sensors to detect the presence of a vessel and detonate when the vessel comes within blast range. Tehran has also invested in acoustic mines from China and Russia, and it might be able to produce domestic variants. Acoustic mines are far more difficult to detect and can be laid in the deepwater channel of the Strait of Hormuz.

Currently, the IRGCN uses vessels similar to those used during Operation Earnest Will to deploy its mines. Although virtually any vessel in the Iranian military's inventory can lay mines, including dhows, the IRGCN now tends to favor larger, open-decked ships such as landing craft. These vessels have more open area to stage the mines for deployment and can carry far more than a dhow. These surface vessels can be augmented by both the Iranian midget submarine and the Kilos. Covert mining is a prime mission for the smaller Ghadir-class submarines, but it is likely a secondary mission for the larger IRIN-manned Kilo-class submarines, which can hold two dozen mines.

The IRGCN continues to use the Gulf islands and oil platforms as bases for its operations. These venues remain primary links in the IRGCN's surveillance scheme and provide forward operating bases for small-boat and mining operations. However, the IRGCN, rather than the regular navy, now controls these facilities. Drawing from the lessons learned in 1987 and 1988, Iran has greatly expanded the military infrastructure on the islands. On Abu Musa, the IRGCN has expanded the runway and has stored upwards of sixty to ninety days worth of munitions; it may have as many as five thousand troops on these islands alone.⁵ Should the United States attack again, it will take far more firepower to neutralize these nodes.

Since 1988, Iran has improved its radar coverage by erecting a string of coastal radars along its nine-

hundred-nautical-mile coast. As during Operation Earnest Will, these sites are augmented by IRGCN visual observation posts located on oil platforms; large dhows; and in the northern Gulf near the Shatt al-Arab waterway, a large, partially destroyed crane (hit by Iraqi aircraft during the Iran-Iraq War). This linked visual and radar scheme enables Iran to effectively monitor ships moving along the commercial tanker routes.

Plausible Deniability versus Counteroffensives

The Iranian military continues to plan for two distinct courses of action in the event of a renewed confrontation with the United States. As with much of Iran's current military doctrine, the foundation for both courses rests on the experiences of the 1980s, albeit modified with renewed confidence and more robust capabilities than existed at that time.

The first option remains Iran's preferred course of action—namely, “invisible hand” tactics that rely on plausible deniability. Such tactics consist of covert, asymmetrical operations similar to those conducted in the past; they could take the form of harassment mining of the Strait of Hormuz or Gulf Cooperation Council (GCC) port facilities. To avoid detection and increase the chances of success, Iran will likely employ more sophisticated influence mines in limited numbers, delivered by either surface vessels or submarines. Initially, with the element of surprise, this tactic could be combined effectively with frogmen using limpet mines to specifically target either coalition warships or GCC oil tankers. The objective of these attacks would be to respond to either a U.S. attack (e.g., against IRGC Qods Force units in Iran) or the imposition of severe economic sanctions against Iran. The goal of Iran's action would be to bring economic pressure to bear against the United States and the international community by threatening the flow of oil from the Persian Gulf.

More robust variants of this limited option undoubtedly exist. If added intimidation is required,

5. Michael Knights, *Troubled Waters: Future U.S. Security Assistance in the Persian Gulf* (Washington, DC: Washington Institute for Near East Policy, 2006), p. 67.

Iran's military planners may combine these with limited long-range surface-to-surface missile attacks, most likely against Arab states or even Israel, for a coercive effect. The goal would be to intimidate Iran's neighbors into withdrawing support for the United States, while avoiding a direct military confrontation with superior U.S. forces. It is unlikely that such missile attacks would target U.S. forces in Iraq or Kuwait, for fear of a significant U.S. military response.

The second course of action would be a robust counteroffensive, similar to plans drafted in the 1980s, involving widespread mining of the Strait of Hormuz as a punitive response to a specific action against the regime. Likely triggers for an Iranian response of this scale would be a sustained air campaign to destroy Iran's nuclear facilities and air defense systems, or a large-scale U.S. attack on Iran in response to terrorism or a devastating action in Iraq or Afghanistan that was linked directly to the Islamic Republic. An Iranian counteroffensive could threaten lucrative infrastructure in the GCC countries, including oil production facilities, desalinization plants, and even the large Knock Nevis floating storage unit moored off Qatar.⁶

Foremost among Iran's objectives, though, would be effectively halting the export of Persian Gulf oil to all but Iranian tankers. Tehran's first action would be to conduct extensive mining of the Strait of Hormuz, initially with the sophisticated influence mines and then with contact mines. The regime's operational objective would be to place as many mines as possible before a coalition force could react and use its superior might to prevent any additional mining of the Strait. According to testimony by Vice Adm. Lowell Jacoby, then director of the Defense Intelligence Agency, Iranian mining could halt the flow of oil through the Strait of Hormuz.⁷ Others in the U.S. intelligence community believe that Iran could achieve this objective—briefly—with as few as three hundred strategically placed mines. It would require

at least a month to clear the mines, provided Iran did not defend its minefield with a layered defense scheme.⁸

Although some Iranian leaders advocate such a massive response, perhaps just to derail any reconciliation efforts, Tehran realizes that the likelihood of its long-term success is minimal: Any attempt to close the Strait would be met by a united coalition force. The IRIAF remains vastly inferior to its U.S. counterpart, and Iranian submarines and missile boats, although they might achieve an initial tactical surprise around the confined Strait of Hormuz, could not withstand the onslaught of a U.S.-led counterattack. Iran's Kilos and Ghadir-class midget submarines would be dispatched easily in the littoral waters. In previous engagements with Libya and Iran, missile boats have not proved particularly effective against the U.S. Navy's airpower. Even within the confines of the Gulf, superior targeting capabilities enable U.S. combatants to engage with standoff missiles before the Iranian missile boats can even target the U.S. warships. A large-scale engagement would have to be seen as a last resort, perhaps if the regime itself were threatened.

The Iranian military still views the Strait of Hormuz as the center of gravity in any conflict with the West. In all likelihood, Tehran's military strategy to control this vital waterway rests on a layered defense scheme, first developed during Operation Earnest Will. In such a scheme, Iran would lay large minefields of moored contact mines to the west of the Strait of Hormuz, with hidden lanes to permit its own ships' movement. These mines would be reinforced by the more sophisticated influence mines, which would be placed around the deepwater channel. These minefields would be covered by fire from multiple land-based surface-to-surface missiles that ring the Strait. With U.S. or coalition combatants presumably canalized in the minefields, the Iranians would strike with swarms of IRGCN small missile boats, which would

6. Haghshenas, *Iran's Asymmetric Naval Warfare*, p. 23.

7. Vice Adm. Lowell Jacoby, USN, "Prepared Testimony on the Global Threat," Senate Select Committee on Intelligence, Senate Armed Services Committee, 108th Cong., 1st Sess., February 11, 2003.

8. Dennis Blair and Kenneth Lieberthal, "Smooth Sailing: The World's Shipping Lanes Are Safe," *Foreign Affairs*, May/June 2007, pp. 7–13.

move en masse to cause target overload for coalition warships, harassing the larger conventional warships with missile barrages and approaching simultaneously from multiple directions.

In the rest of the Gulf, the IRGCN would try to mingle with smuggling and fishing boats, congregating for mass small-boat attacks on isolated targets in the Gulf. The sheer number of boats would make a difficult target for U.S. precision weapons systems to counter, although U.S. aircraft in Operation Earnest Will using cluster munitions proved effective in countering this very threat. Nevertheless, when combined with standoff surface-to-surface missiles, these small-boat formations offer a cost-effective, low-tech alternative to threaten the United States throughout the Gulf.

Command and Control

Coordinating this type of operation will not be easy. Iranian naval forces continue to operate under a bifurcated command with two separate navies that maintain independent command structures, with bases and headquarters reporting back to their respective naval headquarters in Tehran. This division also includes coastal defense missiles, with both the IRGCN and the IRIN operating their own missile batteries. The two naval forces deconflict simply by operating in separate areas.

The Joint Staff of the Armed Forces understands this problem and attempted to integrate the two forces. In 2000, Tehran established a joint headquarters around the Strait of Hormuz, where both navies operate, by combining the First Naval District headquarters of the IRGCN and IRIN; this operational consolidation may have been duplicated in other districts as well. In the event of war, the IRGCN commander assumes overall command. Iran has tried to prepare this joint headquarters, holding a massive exercise in November 2008 that involved more than thirty-five ships and submarines from both the regular navy and the IRGCN. However, the fact that the joint naval command is activated only during wartime limits its potential.

Relations between the two navies remain strained, and the regular navy resents its subservient status. From 1989 to 2005, the commanders of the regular

navy all came from the IRGCN. The current IRIN commander, Rear Adm. Habibollah Sayyari, and his immediate predecessor are the first admirals in two decades to come from the regular navy's officer corps, perhaps an indicator that the regime believes the regular navy is now politically dependable.

Iranian command and control thus remains primitive by Western standards. Under the stress of combat, the two naval forces will most likely prove no better today than in the past at coordinating their operations, especially given the distrust between them.

Iran's military leaders remain impressed by the performance of U.S. precision weapons during the operations in Iraq in 1991 and 2003; hence, they have invested considerable effort in increasing the survivability of their command and control systems. In recent years, both the IRGCN and regular navy have constructed an array of underground command centers to control both fleet and coastal defense missile operations, hoping these will prove more resistant to U.S. air strikes.

In the event the United States destroys these underground centers, the IRGCN has developed a decentralized command and control structure based largely on a culture of rewarding aggressive, independent-minded subordinates. The IRGC leadership has repeatedly supported local commanders who have displayed initiative even when it involved insubordination. In the event of a war with the United States, these enterprising commanders would be able to operate without guidance and attack targets of opportunity, such as isolated coalition warships or supply ships.

A good example of this initiative occurred in March 2007: A detachment of fifteen British Royal Marines and sailors were conducting a United Nations-mandated boarding of the merchant vessel *Hanin*, thought to be smuggling cars into Iraq, when two IRGCN small boats pulled up alongside the boarding party. The IRGCN crews accused the British of being in Iranian waters, and the conversation became heated; the situation quickly escalated when the Iranians pointed two loaded heavy machine guns at the British, who responded by pointing their own small arms at the Iranians. The Royal Marine commander, believing a

firefight was imminent, decided to capitulate rather than risk loss of life.⁹

The senior IRGCN commander in the northern Gulf, Capt. Abol Qasem Amangah, was credited in an Iranian newspaper with seizing the British sailors and marines. A veteran of the Iran-Iraq War, Amangah displays the characteristics prized by the IRGC: aggressiveness, initiative, and independent action. Apparently without orders from headquarters, he decided to hold the British servicemen, calculating that the United Kingdom would not resist and knowing that his actions—if successful—would be rewarded by Tehran. His motivation appears to have been to demonstrate Iranian dominance of the waterway and to push back against the coalition, which had been increasingly encroaching on the boundary claimed by Iran. He may also have wanted to disrupt the coalition's antismuggling campaign as the IRGC has been known to profit from the black market.

Captain Amangah's calculations proved correct on all scores. The fourteen British servicemen and one woman were transferred to Tehran, where they were interrogated and held for fifteen days before being released by President Mahmoud Ahmadinezhad. It was a national embarrassment for the British government, the coalition stopped operations close to the contested boundary, and Captain Amangah received a medal.

Risk-Taking Behavior in Iraq and the Gulf

With the exception of its spasmodic response during Operation Praying Mantis, Tehran has preferred retaliation with asymmetrical means: terrorism, mining, improvised explosive devices, and surrogates. With the continued imbalance in conventional forces between the U.S.-led coalition in the Gulf and the Iranian military, these "invisible hand tactics" as former Iranian president Ali Akbar Rafsanjani called them,

will continue to serve as Tehran's primary means of responding to the United States.

Iran has shown a willingness to press the limits of U.S. tolerance. Following the U.S. invasion of Iraq in 2003, the IRGC served as the spearhead of a large Iranian movement into southern Iraq, with the objective of securing Iranian influence over the new Iraqi government. Iran quickly exploited the lack of any border guards in the wake of the U.S. attack. In the first few weeks of Operation Iraqi Freedom, Iran infiltrated into Iraq members of the IRGC Qods Force (IRGC-QF), Ministry of Intelligence and Security (MOIS) agents, and as many as 4,500 Badr Corps fighters.¹⁰

As the U.S. occupation became mired in a counterinsurgency campaign, Iran took advantage of the opportunity to expand its attacks to undermine the prospects for coalition forces' success. Tehran hoped to inflict enough casualties to sap the U.S. will to continue in Iraq and effectively end any further regional involvement by Washington—which might subsequently be directed at Iran. Additionally, Tehran's covert operations provided it with leverage over Washington that could be ratcheted up or down, depending on the international climate. As former Iranian president Rafsanjani said in a February 2004 interview, "[The United States] is stuck in the mud of Iraq, and they know that if Iran wanted to, it could make their problems even worse."¹¹

To control its operations in Iraq, the IRGC-QF created a new headquarters in Tehran. According to author Michael Knights, three subordinate forward command centers controlled movement into the country from the Kurdish region in the north, the central region into Baghdad, and south into Basra. The IRGC-QF formed small four-to-ten-man cells called Special Groups to facilitate anticoalition military operations. These cells are collected into larger subregional commands within Iraq and are supported by Iranian intelligence officers.¹² The IRGC smuggled in large numbers

9. BBC News, "Royal Navy Captives: Key Quotes," April 6, 2007, <http://news.bbc.co.uk/1/hi/uk/6533287.stm>, accessed April 12, 2009.

10. Michael Ware, "Inside Iran's Secret War for Iraq," *Time*, August 15, 2005, <http://time.com/time/magazine/printout/0,8816,1093747,00.html>, accessed February 4, 2007.

11. Multinational Corps Iraq Briefing (unclassified), "Iran's Goals in Iraq," 2006, slide 4.

12. Michael Knights, "Iran's Ongoing Proxy War in Iraq," Policy Watch #1492 (Washington, DC: Washington Institute for Near East Policy, March 16, 2009), p. 2.

of weapons: explosively formed projectiles (EFPs), 240- and 107-millimeter rockets, mortars, advanced RPGs, ammunition, and Iranian-made shoulder-fired anti-aircraft missiles. The IRGC-QF provided these munitions to pro-Iranian militants, such as the Badr Corps, Jaish al-Mahdi (JAM), and other Shiite militias. In a one-year period during 2004–2005, Iranian-backed forces conducted at least eighty-seven attacks, including assassinations, kidnappings, and ambushes, using these surrogate forces. Of these, more than 40 percent were against U.S. and UK forces. By July 2007, Iranian-supplied EFPs had been used in ninety-nine attacks, causing one-third of all coalition casualties.¹³ In late March of the following year, during a major confrontation between influential Shiite cleric Muqtada al-Sadr and Iraqi forces in Basra, IRGC-QF provided a steady stream of weapons to the JAM before brokering a ceasefire between the Iraqi government and the JAM in Tehran.

The IRGC has consistently demonstrated a willingness to push the military envelope with the United States; the events of Operation Earnest Will show this vividly. More recently, Iranian-backed proxies kidnapped and killed five U.S. soldiers in Karbala in January 2007. The use of EFPs by the IRGC-QF in Iraq is reminiscent of its use of naval mines in the Gulf. The objectives are similar: to conduct clandestine operations against the United States with plausible deniability.

The IRGCN has assisted Shiite militia operations in Iraq and has exhibited aggressive behavior against the U.S. military. At the beginning of Operation Iraqi Freedom, the IRGCN repeatedly crossed the Shatt al-Arab and planted Iranian flags on the al-Faw Peninsula. This soon escalated into harassing fire directed across the waterway at U.S. and coalition forces. On April 4, 2003, four U.S. Navy special warfare patrol boats attempted to move up the Shatt al-Arab to support British forces and to exercise freedom of navigation in Iraqi waters. The SEAL commander was fluent

in Persian and took great pains to avoid a confrontation, staying well within Iraqi territorial waters. The IRGCN responded by sending four small boats toward the U.S. vessels at high speed. The small boats cut in front of the U.S. flotilla and a crew took the tarp off of at least one heavy machine gun and pointed it directly at the lead boat. After several tense minutes, the U.S. Fifth Fleet command ordered the U.S. boats to withdraw and avoid a confrontation. The SEAL commander reluctantly obeyed, and the Iranian boats followed for a considerable distance before breaking off and heading back to their side of the waterway, rightly convinced that they had forced the United States to back down.¹⁴

Iranian actions grew bolder. In 2004, eight British servicemen were briefly taken captive by IRGCN forces in the Shatt al-Arab while training Iraqi Navy personnel. Six months later, an Australian boarding party rebuffed a similar effort near the Shatt al-Arab.¹⁵

The IRGCN has repeatedly displayed this modus operandi, conducting itself with volatility and aggression. It routinely monitors ships transiting through the Strait of Hormuz, often shadowing U.S. warships, which has resulted in a number of near engagements with the U.S. Navy. In June 1995 and again in December 2000, a large collection of IRGCN small boats approached U.S. aircraft carriers transiting through the Strait. In the later incident, forty boats closed on the USS *Lincoln*, uncomfortably close for the U.S. Fifth Fleet just three months after the suicide attack on the USS *Cole* in Yemen.

More recently, the IRGCN has become more truculent. In April 2006, an IRGCN Houdong missile boat tried to close on the aircraft carrier USS *Ronald Reagan*, until an escorting cruiser forced the Iranian boat to turn back. The following year, two Iranian Boghammers near Farsi Island again closed on an American carrier, forcing a U.S. F-18 aircraft to conduct a low flyover to warn them away. In December 2008, the USS *Whidbey Island* fired warning shots at yet another

13. Michael Gordon, "U.S. Says Iran-Supplied Bomb Kills More Troops," *New York Times*, August 8, 2007.

14. David B. Crist, "Iranian Small Boats Are a Big Problem," *New York Times*, January 20, 2008.

15. BBC News, "Timeline: UK-Iran Relations," March 23, 2007, http://news.bbc.co.uk/2/low/middle_east/3077540.stm, accessed April 12, 2009.

Iranian boat that came too close. This was followed by another close encounter three days later when the frigate USS *Carr* used its ship's horn to ward off three Iranian small boats near the Strait of Hormuz. On January 6, 2008, five IRGCN small boats approached the guided missile destroyer USS *Hopper* from opposite directions in what appears to have been a mock attack. The U.S. warship nearly opened fire.¹⁶

In each of these engagements, the Iranian military tests the United States and, upon failing to pay a price, pushes a little harder in subsequent engagements. How should the U.S. military react? Historically, selective use of military force has proven effective in curbing Iranian asymmetrical operations. During Operation Earnest Will, precision responses to IRGCN operations had the desired effect: Iran ended mining and curbed its small-boat attacks following U.S. retaliation. Iraqi attacks on Iranian urban areas during the last stages of the "War of the Cities" had a dramatic impact on Iran's willingness to continue the war.¹⁷ U.S. attacks in the 1980s deliberately targeted IRGCN offshore facilities and carefully avoided target sets that might lead Iran to

conclude the attacks were aimed at regime change. Iran seems to have understood the message.

Conversely, timidity emboldens the IRGC. During the 1980s, Iran conducted three mining operations, including the direct attack on the first U.S. convoy, without any U.S. response. It was not until the United States seized the *Iran Ajr*, and followed up Iran's small-boat and Silkworm attacks by destroying a key oil platform in the IRGCN node, that Tehran halted its mining campaign. Following the U.S. invasion of Iraq, the coalition's unwillingness to confront Iranian aggression in the northern Gulf encouraged repeated provocations, including blatant aggression inside Iraq. In Gen. Tommy Franks's haste to withdraw forces from Iraq in May 2003, the Iranian border went unsecured, allowing an influx of Iranian provocateurs.¹⁸ The lack of fortitude displayed by CENTCOM and Washington to halt Iranian intrusions into Iraq was an important factor in Iran's aggressive support to anticoalition militias. Iran's security services seem to exploit habitually any vacuum left by a timid or overstretched opponent.

16 Adm. James Lyons, USN (Ret.), "Iran Continues to Provoke," *Washington Times*, January 15, 2008.

17 Patrick Clawson and Michael Eisenstadt, *The Last Resort: Consequences of Preventive Military Action against Iran*, Policy Focus 84 (Washington, DC: Washington Institute for Near East Policy, 2008), p. 8, <http://www.washingtoninstitute.org/templateC04.php?CID=292>.

18. From the author's notes and observations, May 2003.

4 | Lessons for U.S. Planners

WHILE IRAN STUDIED the lessons of its conflict with the United States, the Pentagon arguably paid far less attention than it should have. The “Tanker War” had never been popular with an “open ocean” U.S. Navy. The tactical innovations of waging counterinsurgency operations at sea were not incorporated into U.S. naval doctrine or training, except by individual participants who taught at the Naval War College according to their own experiences in the Gulf. The service branch that did take some interest was the U.S. Army: Operation Earnest Will was used as a case study at its Combined Arms Center, when interest in low-intensity conflict heightened during the 1990s.

To save money, U.S. combatant vessels were withdrawn from the Gulf as quickly as possible following the July 1988 ceasefire in the Iran-Iraq War, over the objections of the new CENTCOM commander, Gen. Norman Schwarzkopf. He argued that too rapid or dramatic a drawdown in U.S. naval forces would send a message to the region of decreased U.S. commitment and may invite aggression from Iran or other regional adversaries. By 1989, the Joint Staff and the navy advocated a force level of only five combatants in the Gulf, the same number as before the conflict.¹ Over CENTCOM objections, just two months before the Iraqi invasion of Kuwait, the last of the deployed minesweepers departed Bahrain—only to return a few months later to address a much more serious Iraqi mine threat. It would take Operation Desert Storm and a decades-long naval embargo against Saddam Hussein’s Iraq for the U.S. Navy to begin to address the command-and-control and force-structure requirements needed for the Persian Gulf.

Similarities and Differences, Then and Now

Although political and military conditions have changed considerably in the Persian Gulf since

Operation Earnest Will, the operation continues to offer valuable lessons for a future conflict with Iran. The operational environment in the Gulf remains the same. Tanker traffic flows through the same shipping routes in the Gulf and the same channel in the Strait. The deep water is still on the Iranian side, and ships will still be forced to navigate the shallower shoals of the southern Gulf to avoid Iran, making tanker traffic vulnerable to mining and small-boat attacks. As a military force, the Gulf Cooperation Council (GCC) remains anemic and equally vulnerable to Iranian interdiction of its oil exports. Much of the key leadership in Iran is unchanged, and the government operates under the same decisionmaking processes.

Nevertheless, there are a number of key differences between the 1980s and today in the Persian Gulf, generally favoring the United States. U.S. military power in the Gulf far exceeds that deployed twenty years ago. Whereas the United States could not get combat aircraft into Saudi Arabia or Bahrain to support Operation Earnest Will, today U.S. Air Force combat aircraft are positioned in five GCC countries plus Iraq. Multiple U.S. Navy carriers are now a fixture in Gulf waters. Today, the logistical infrastructure to support U.S. forces is extensive. The U.S. Fifth Fleet controls more warships today than at the height of Operation Earnest Will. Even in countermine operations the United States is better positioned today; the U.S. Navy learned its lesson in this instance and maintains four countermine ships in Bahrain.

The most dramatic difference is in coalition support. During the 1980s, the United States acted unilaterally. Although European nations did dispatch seven countermine vessels to the Gulf, they operated independently of CENTCOM. Coalition command arrangements were ad hoc with respect to U.S. participation.² Since the September 11, 2001, attacks, coalition naval forces have been fully integrated into U.S. operations.

1. USCINCCENT message to CJCS, “Subj: Earnest Will Review,” December 12, 1989, p. 2; “Memo for the Assistant Secretary of Defense for International Security Affairs,” enclosure as part of proposed USCINCCENT Talking Points, undated; personal message from General Schwarzkopf to Assistant Secretary of State for Political-Military Affairs Richard Clarke, “Subj: Persian Gulf Naval Presence,” March 24, 1990, p. 1.
2. CJTFME message to USCINCCENT, “Subj: International Support in the Persian Gulf,” April 17, 1988.

The U.S. Navy Central Command commander is dual-hatted as is the Combined Forces Maritime Component Command (CFMCC) commander, who has a British deputy commander. Coalition officers routinely command Task Force 150, which conducts interdiction operations in the Strait of Hormuz and Gulf of Oman as part of Operation Enduring Freedom. As many as twenty-three ships from Europe, Canada, Australia, and the United States operate in the task force and a similar one operating off the Bab el Mandab, the strait connecting the Red Sea and the Gulf of Aden. During Operation Iraqi Freedom, British and Australian forces were fully integrated into the mine-clearing operations off the Iraqi coast. Most important, this command arrangement proved flexible enough to allow U.S. Naval Forces Central Command to execute operations for Operation Iraqi Freedom, in which only two coalition navies agreed to participate, while still simultaneously conducting the larger counterterrorist interdiction operations, often in the same battle space.³

The political realities are different, too. The end of the Iran-Iraq War means that Tehran is not operating against the United States while fighting a major land war. The U.S. military has nearly 200,000 troops deployed in two of Iran's neighbors. Potential military confrontations are complicated by current efforts to reengage Iran to both halt its nuclear program and enlist it in efforts to help undermine insurgencies in Iraq and Afghanistan.

Despite improvements in hardware within the Iranian military and a changing political reality, Tehran's strategy for the Persian Gulf and for confronting the United States rests upon the same operational premises that applied twenty years ago: Iranian islands and oil platforms still serve as the key links in the Islamic Republic's ability to project power into the Gulf. Its ability to close the Strait of Hormuz still rests on land-based surface-to-surface missiles, backed by IRGCN mining and limited air cover. Small boats remain the backbone of the IRGCN, which remains the force of choice for senior Iranian officials.

Relevant Lessons from the U.S.-Iranian Clashes in the 1980s

Taking into account the political-military and military-technical changes over the years, history imparts a number of lessons that remain valid.

1. Coercive deterrence works.

Iran has usually modified its clandestine attacks when confronted by a U.S. military response. Although some U.S. officials feared military action would bring about Iranian escalation or terrorist attacks, the Islamic Republic typically demonstrated greater restraint when faced with U.S. resolve. Although an attack on its nuclear program would most likely result in more overt aggression, Iran continues to view conflicts with the West in terms of a limited war. Based on the historical record and continuity in decisionmaking among many of the key Iranian political and military leaders, Iran would probably restrain its behavior if the cost of aggressive action becomes too high and the threat does not put at risk the regime's survival.

2. CENTCOM must anticipate the unconventional threat.

Mining and insurgent tactics have been used successfully by Iran in Lebanon, Iraq, and during Operation Earnest Will. Iran's improved mine capability allows for mining throughout the Persian Gulf. The United States needs a surveillance plan designed for the entire Gulf—and not just in a few shallow nnnnnnnnnnnnnnnns as during Operation Earnest Will—for possible Iranian minelayers or clandestine frogmen. With a large number of unmanned aerial vehicles and much more expansive tactical intelligence capabilities, the United States should adapt its surveillance regime to contain an enhanced Iranian threat.

3. The IRGCN small-boat threat is largely unchanged and can be successfully countered.

The IRGCN tactics and command-and-control abilities to execute small-boat attacks have not

3. David B. Crist, "The Formation of a Coalition of the Willing and Operation Iraqi Freedom," in Bruce A. Elleman and S. C. M. Paine, eds., *Naval Coalition Warfare: From the Napoleonic War to Operation Iraqi Freedom* (New York: Routledge, 2008), pp. 208–216.

changed significantly. Iran has not displayed credible command-and-control to employ swarms of small boats effectively, other than in staged exercises, and the IRGCN does not usually deploy more than three to five boats together. The machine guns and rocket launchers deployed on its small-boat fleet remain highly inaccurate to hit anything but a lumbering, unmaneuverable supertanker.

In previous engagements, the U.S. military has dominated Iranian small boats. Even conventional combatants such as the cruiser *Vincennes*, in its fire-fight with Iranian small boats in July 1988, showed that the five-inch guns could strike IRGCN boats before they could get close enough to fire their rockets and machine guns. Naval Special Warfare Mark V and Special Operations Craft–Riverine (SOC–R) patrol boats, along with armed Coast Guard vessels, are more than a match for the IRGCN small boats. U.S. Special Warfare sailors are better trained and disciplined than IRGCN personnel. A firefight between small boats of these opposing forces would be a one-sided engagement.

4. Floating patrol bases have ongoing utility.

Floating patrol bases, which are currently used to safeguard Iraqi offshore oil platforms, would provide a cost-effective system by which to monitor IRGCN activity. Manned by Marines and SEALs, and equipped with helicopters, they could provide the needed presence and deterrence to thwart Iranian small-boat or mining operations. Three Mobile Sea Bases could be deployed opposite the major bases of the IRGCN: one in the northern Gulf, another near Farsi Island, and a third close to Abu Musa Island in the southern Gulf. Similar U.S. forces, especially helicopters, could be staged out of Oman to safeguard the Strait of Hormuz.

5. Iranian-held offshore facilities are useful targets for signaling strikes.

The Iranian-held Abu Musa Island, near the Strait of Hormuz, and Farsi Island, near Kuwait, remain

important targets for a measured U.S. military response. All are IRGC bases and key cogs in the Iranian military machine in the Persian Gulf. (And in the case of Abu Musa, Iran's sovereignty claims are disputed by the United Arab Emirates.)

6. Strong countermine capabilities need to be maintained in the Gulf.

The United States and its allies in Europe need to maintain robust countermine capabilities within the Gulf, positioned to respond quickly to any attempt to disrupt oil exports by Iranian mining. The United States currently has four countermine vessels stationed in the Gulf. This is enough to address any initial contingency, but during Operation Earnest Will, seventeen coalition countermine vessels were required to maintain the safety of the tanker routes.⁴ Getting these assets to the Persian Gulf takes time: Piggybacking on super transport ships would take thirty days. If the countermine vessels were to go by their own power, it would take at least sixty days.

7. Coalition support to counter Iran is critical.

Two years of Operation Earnest Will convoys strained the U.S. Navy twenty years ago. Today, the United States has only about two-thirds the number of ships it had during the 1980s. Smaller ships, including European and Australian frigates, would be needed for any prolonged convoy operations. The command relationship under CFMCC exists to conduct these operations, much in the same way operations have recently been expanded for antipiracy operations off Somalia. The United States needs to make the case with its naval allies that any Iranian attempt to mine international waters or threaten oil shipments will be viewed in the same vein as piracy or terrorism.

Recently, France has undertaken unilateral actions for its own defense arrangements in the Gulf. Under President Nicolas Sarkozy, France has updated contingency planning with the UAE and Qatar based on mutual defense agreements signed in 1994 and 1995.

4. Six U.S. and nine European, as well as two Soviet vessels.

CENTCOM plans should dovetail with France's efforts.

8. The issue of mainland attacks on Iran needs to be very carefully considered.

The United States must be prepared for robust retaliation should an asymmetrical attack in a future regional conflict escalate (or if the IRGCN decides to employ its missile boats) and a larger response becomes necessary. Such a response should come in the form of a series of targeting packages based upon graduated response options, ranging from IRGC targets only to more expansive attacks on Iran's military infrastructure.

A key question with no historical precedent is how Iran would respond to an attack on its mainland, either in response to a provocation or to destroy its nuclear weapons capability. During Operation Earnest Will, CENTCOM developed a series of scaled military options. The commander, Gen. George Crist, recommended as a first option attacking targets that facilitated Iran's ability to sustain its operations in the Gulf. He proposed seizing one or all of the islands of Farsi, Sirri, or Abu Musa, as well as destroying the oil platforms Iran used to collect intelligence and command the IRGCN. In a memo for the chairman of the Joint Chiefs, the CENTCOM commander said he wanted to "deny their eyes and forward staging bases within the Gulf." Iran would then be forced to sortie from its mainland and "would be more susceptible to detection and interdiction than is now the situation where Gulf havens afford cover, concealment, and support."⁵ In keeping with this strategy, U.S. Army and Marines planned to seize the Iranian offshore oil platforms and the larger islands, Abu Musa and Farsi Island in particular, during Operation Earnest Will.⁶

If such a plan failed to deter Iran, CENTCOM planned to escalate and strike Iranian air and naval

targets on the mainland. First on the target list were the Silkworm missile storage sites and Iranian intelligence sites. Other strike packages included Bandar Abbas (to destroy IRIN and IRGC forces). Fourteen B-52s with a mixed load, including precision-guided cruise missiles, would knock out the hard-to-reach targets, such as the Bandar Abbas air defense headquarters and the First Naval District Headquarters building, while others would attack the Bandar Abbas Naval Base. Simultaneously, U.S. Navy aircraft and F-16s based in Bahrain or Saudi Arabia would strike the air defense headquarters and destroy Iranian surface-to-air Hawk missiles that ring Bandar Abbas airport, which, in addition to being a commercial airport, was the main southern airfield for IRIAF and its complement of F-4 fighters.⁷

The validity of this concept was never tested, but based upon historical patterns of Iranian behavior, it was a sound approach to moderate Iranian actions while avoiding a wider war.

9. Explore asymmetric options.

The United States needs to be prepared to use its own asymmetrical operations against Iran. During 1987, CENTCOM and U.S. Special Operations Command developed a number of clandestine operations against the IRGCN. CENTCOM planners referred to such operations as "the invisible hand in reverse." One of the more popular ideas was to use SEALs to plant explosives on the hulls of the suspected mine-layers. There would be no evidence of U.S. culpability, and Washington could attribute their sinking to divine intervention. It was a high-risk venture, and Defense Secretary Caspar Weinberger did not authorize it.⁸

Yet the concept still holds promise.

5. Gen. George Crist message to Adm. William Crowe, "Subj: Persian Gulf CONOPS," December 4, 1987, p. 1.

6. Contingency MAGTF 2-88 message to CJTFME, "Subj: Contingency Ops—Sirri Island Raid," March 1988, Marine Corps Historical Center.

7. Naval War College Briefing, "Operation Earnest Will: A Study in Joint Operations," April 3, 2007, Slide 30; USCENTCOM Briefing, "Invoke Resolve," February 6, 1987, pp. 3–9.

8. Gen. George Crist interview.

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