On the night of July 23, 1987, there was news of an unusual amount of naval activity around the small Iranian island of Farsi in the northern Persian Gulf. Rear Admiral Harold Bernsen, commander of Middle East Force, found the reports disquieting. The first convoy of Operation Earnest Will was due to arrive in a few hours. It consisted of two oil tankers accompanied by three naval warships. The next morning, twenty miles west of Farsi, Captain Frank Seitz of SS Bridgetown heard a sound like "a 500-ton hammer hit us up forward." The ship had struck one of nine contact mines laid by the Iranian vessel Sirjan on the previous night. It blew an eight-and-a-half by ten-foot hole in the tanker, halting activity in the northern Gulf to the embarrassment of Washington.

The United States launched a unique effort in response, forming a joint special operations task force based aboard two converted oil barges. For more than a year this force engaged in a daily struggle with Iranian small boats and mine layers for control of the sealanes in the channelized area north of Bahrain. In every respect, this operation was a remarkable effort and a blue-print for crafting unconventional responses to unconventional threats.
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### Distribution/Availability Statement
Approved for public release, distribution unlimited

### Supplementary Notes
The original document contains color images.

### Abstract

### Subject Terms

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The Tanker War

As the eight-year Iran-Iraq conflict stale-mated, the countries began preying on each other’s oil industries. Iran also began attacking shipping by Iraq’s chief financial supporters, Kuwait and Saudi Arabia. Many early Iranian attacks were by fixed wing and helicopter, but spare parts shortages and operational losses virtually eliminated any credible air threat, forcing a change in strategy. Small boats, a combination of fast Swedish-built Boghammers and Boston Whaler-type craft manned by Revolutionary Guards, roamed the sealanes attacking shipping in September 1986. Armed with 107mm rockets, RPG–7s, and machine guns, this mosquito fleet rarely sank a ship but could inflict serious damage on tankers or their crews. Their favorite tactic was to approach a target, swarm around it, then rake its bridge and superstructure with automatic weapons and rocket propelled grenades. Some 43 attacks included the sinking of the 42,000-ton bulk carrier Norman Atlantic.

Mines, in conjunction with sea raids, added another deadly threat. Kuwait formally inquired about reflagging its oil tankers under the Stars and Stripes on December 23. Three months later the United States agreed to place 11 tankers under American registry and provide them with armed protection from Iranian attacks.

Washington rushed additional assets to the region following the SS Bridgetown incident. But even countermine vessels were not enough. The dangers in the northern Persian Gulf were not a classic blue water threat. The shallow passages forced the shipping into a narrow corridor constricted by islands, shoals, and oil platforms, which provided concealment for hostile boats. Any vessel needed a shallow draft to avoid mines located 12–18 feet below the surface. Ships made tempting targets. This area was assigned to Iranian 2nd Naval District in Bushehr, which used Farsi Island as a forward operating base. American warships were not designed or equipped to deal with the combination of small boat attacks and mines employed by the Iranians.

Middle East Force developed a plan that provided for constant patrolling to prevent attacks. Bernsen sent an outline of his concept of operations to General George Crist, USMC, Commander in Chief, Central Command, on August 6, 1987:

“In my view, to be successful in the northern Gulf we must establish intensive patrol operations to prevent the Iranians from laying mines.” Rather than using regular naval vessels, he concluded, the area could be better patrolled by a mixture of helicopters and small boats, augmented by SEALs and marines. They could range over a wide area and were better equipped to deal with unconventional threats. These assets would also be far less expensive than additional warships.

Because of political sensitivities, neither Kuwait nor Saudi Arabia would grant U.S. Central Command (CENTCOM) basing rights for combatants who might engage in offensive operations against Iran. Thus American forces required an operating base, ideally in the center of the patrol area, positioned astride the sealane and close to Farsi Island. Attention quickly focused on two oil platform construction barges, Hercules and Wimbrown VII, located at a shipyard in Bahrain and owned by Brown and Root. The company had extensive business dealings with the Kuwait Oil Company and agreed to lease the barges. Both were strong, compartmentalized, and surrounded by a floodable tank which would protect against a mine strike. They had large support facilities and helicopter flight decks. Hercules was immediately available. At 400 by 140 feet, it was one of the largest oil barges in the world. Wimbrown VII, 250 by 70 feet, required extensive repairs to be made habitable.

To guard the 100-mile stretch, each barge would be deployed to cover a 50-mile section, with their helicopters and patrol boats operating in a 25-mile radius. While patrol boats maintained a 24-hour presence, preventing penetration by small craft, helicopters would provide a quick reaction force as well as night surveillance. Each
Crist barge would have a mixture of patrol craft, including Vietnam-era riverine patrol boats (PBRs), Navy SEALs, and a Marine platoon. Should the Iranians directly challenge the barges, positions would be reinforced with metal plating and sandbags while the marines manned various weapons: 50 caliber machine-guns, MK–19 grenade launchers, a TOW missile, 81mm mortars, and Stinger missiles. With the addition of an explosive ordnance team and a Marine Corps radio reconnaissance linguistic and communication detachment, Hercules and Wimbrown VII would carry complements of 177 and 132, respectively. Barges would be moved randomly every few days among the Saudi islands and oil platforms and have a layered defense. Helicopters would interdict any target out to 50 nautical miles while MK–III patrol boats covered the mid-distances and smaller Seafoxes and PBRs safeguarded for the first five miles. If all else failed, the Marine security force would man the decks with machine guns, rifles, and side arms.

Stovepipes, Rice Bowls, and Home Turf

The mobile sea base concept was essentially complete by mid-August. The CENTCOM plan was forwarded to the Joint Chiefs for approval. The proposal touched off a storm of debate. Adm.iral Lee Baggot, Commander in Chief, Atlantic Command, argued along with the commanders of Sixth and Seventh Fleets that the bases would be lucrative targets for air and naval attacks. They had no effective air defense. Command and control would be impossible due to the hodgepodge of multiservice Special Operations Forces (SOF) on board. Some critics referred to these barges as floating “Beirut Barracks.”

CENTCOM convened a conference to address the rising chorus of criticism and work out the details of essentially designing a ship from scratch. Representatives from 2d Marine Division, Mine Warfare Command, Naval Sea and Air Systems Commands, U.S. Atlantic and U.S. Pacific Commands, and the Joint Chiefs met on September 9–11 in Tampa. Every relevant operational issue was discussed—tactics, ammunition storage, barge defense, firefighting, damage control, and

electromagnetic concerns. Then there were bureaucratic worries. Food service areas had not passed a Navy health inspection. Moreover, a detailed certification program was needed to allow Marine pilots to land on the barges even though they were already carrier qualified. The conference did little to change the opinions of those opposed to the plan.

Bernsen countered that the critics failed to understand the threat in the northern Gulf. The Iranians had no real air capability, with only twenty operational F-4s which were occupied with fighting Iraq. Their navy had only one working Harpoon anti-ship missile. The threat was unconventional. Nothing in Tehran’s arsenal could sink the barges. The mobile bases offered the best, least expensive means to support the patrol craft and helicopters required to control the sealanes. “Unless in extremis,” he maintained, “the Iranians will continue to avoid a direct confrontation.”

Crist countered JCS arguments by asking, “Would you rather risk losing two oil barges or a billion dollar ship?” The threat of mines or an errant missile from an Iraqi aircraft simply made the northern Gulf too risky for a gray hull. He also worked behind the scenes, specifically with Richard Armitage, Assistant Secretary of Defense for International Security Affairs, to overcome resistance and get the plan approved.

The Chairman, Admiral William Crowe, threw his full support behind the plan after examining Hercules on September 17. While recognizing the perils, Crowe concluded that the barges were the best means to control the northern sealanes without unduly risking lives. With his support, the operation went forward.

**Fortresses at Sea**

In the meantime, men and matériel destined for the bases flowed into theater. The first two MSH-4s arrived by ship on September 3 along with Lieutenant Commander Paul Evanoe, designated as the first barge commander. The aluminum-hulled patrol boats could only operate in the open ocean with difficulty, but they were the only assets available in the inventory. Additional weapons stations were added. A stabilized 40mm bow-mounted Bofors gun, 50 caliber machine guns, and MK-19 grenade launchers proved more than enough firepower to deal with any Iranian boat, but they reduced the maximum speed of the boats to 25 knots, slower than most enemy counterparts.

The Marine Corps wanted the helicopter mission, but their craft were too large and their pilots lacked extensive night flying training. At Crowe’s insistence, and over the objections of the Department of the Army, Task Force 160 from Fort Campbell was tasked to provide helicopters and night surveillance capability for the barges. Its A-6 (attack) and M-6 (command and control) helicopters were designed to operate exclusively at night, being outfitted with forward-looking infrared (FLIR) and night vision goggles. Army pilots had thousands of hours flying time with night vision goggles as opposed to, at most, a couple of hundred common in most Marine squadrons. In addition, with their small airframes, three helicopters could be accommodated on each barge.

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On September 22, 1980, Iraqi fighters struck air bases across Iran, the first blow of a protracted war that resulted in over half a million military casualties. The precise reason for Saddam Hussein’s decision to invade Iran remains unclear, though the two countries had long-standing religious, border, and political disputes.

In the first phase of the conflict, six Iraqi divisions launched a surprise offensive on three fronts, rapidly overrunning Iran’s border defenses. The high water mark of Iraqi territorial gains was reached on November 10, 1980, during house-to-house fighting for control of Khorramshahr. The government in Tehran rejected a settlement and began a series of counteroffensives in January 1981. By 1984 Iran had regained all its lost territory and the remaining years of the conflict were a bloody war of attrition fought across a relatively static front.

Iraq lost virtually all its capacity to export oil during the first years of the war. Iran’s exports also suffered when its major export facility on Kharg Island was severely damaged. In the Tanker War of 1984–87, each side attempted to block the other’s remaining oil exports through the northern Persian Gulf, employing missiles, small boat raids, and mines. These operations also threatened the commerce of neutral suppliers, attracting the attention of the United States and Western countries who relied on oil exports from the region. Before the end of the war, ten Western navies of 1984–87, each side attempted to block the other’s remaining oil exports through the northern Persian Gulf, employing missiles, small boat raids, and mines. These operations also threatened the commerce of neutral suppliers, attracting the attention of the United States and Western countries who relied on oil exports from the region. Before the end of the war, ten Western navies were operating in the narrow waters of the Persian Gulf. An Iraqi missile struck USS Stark on May 17, 1987, killing 37 crewmen. Baghdad apologized for the attack, but the incident proved a catalyst for a new initiative, reflagging Kuwaiti tankers as American ships under Operation Earnest Will and thus affording them U.S. protection.

Another unique feature of the war was the use of chemical weapons and short-range ballistic missiles by both sides.

Iraq launched a devastating series of counterattacks from April to August 1988. After these setbacks, Iran accepted a U.N. resolution on ending the war, and a ceasefire went into place on August 20, 1988. In the event, none of the major issues cited at the outbreak of the conflict were resolved.
Evancoe outfitted Hercules before the ships arrived, ordering 20,000 sandbags to surround the gun positions. Old crew quarters and drilling equipment were replaced by steel ammunition bunkers, an aircraft hanger, and a communication van. At one point 40 welders were busy 24 hours a day. At the same time, work continued to get Wimbrown VII ready by December. Two MK–III patrol boats went on the first patrol north of 27°30 parallel on September 9. The first presence mission ended after five days and 530 miles, which included escorting a convoy from north of Bahrain to Kuwait. It revealed significant problems. The rough seas took a heavy toll on the hulls and crews because the boats were not designed to operate in the open ocean for extended periods. They also had difficulty keeping up with the convoy. Additionally, while the concept of operations in the northern Persian Gulf had been well articulated up the chain of command, the same was not true for those tasked to execute it. Evancoe bitterly complained that they were not even given a simple mission statement, let alone a basic operational concept. It was not until December that Middle East Force published guidance.

As Hercules neared completion in late September, intelligence closely monitored the massing of some seventy small boats near Bushehr and Farsi islands following an Iranian exercise menacingly called “Martyrdom.” Concern heightened on October 1 when satellites imaged small boats massed along a 45-mile front, perhaps for an attack on the Saudi Khafji oil complex. The assault failed to materialize. However, U.S. forces still believed the Iranians were up to something in the northern Gulf. Hercules deployed into this environment on October 6 with welders still installing ballistic metal plates. As the northernmost American unit, many on the barge had the distinct feeling of being “hung out to dry.” The nearest warship was USS Thach, a frigate which provided air warning while remaining 20 miles to the south.

**First Blood**

A frustrated and increasingly worried Evancoe launched three patrol boats two days later to gather intelligence on the Iranians at Farsi. He planned to establish a listening post at Middle Shoals Buoy, a navigation aid 15 miles west of Farsi and 8 miles northeast of Hercules. One Seafox boat had Marine Farsi and Arab linguists from the barge’s radio reconnaissance detachment. The Seafox would be dropped off, with its radar signature hopefully blending into that of the buoy as the patrol boats passed close to Middle Shoals. The three Army craft, controlled by a light airborne multipurpose system (LAMPS) helicopter from USS Thach, would fly a different route, arriving to scout out the buoy ahead of the patrol boats.

The operation began at 2100 hours. With the boats still four miles from the buoy, the Army
ERNEST WILL

helicopters flew ahead to reconnoiter. To their amazement, Army pilots, looking through FLIRs, observed that three small boats were already at the buoy. Realizing that it was impossible for the U.S. boats to have arrived, one pilot approached to take a closer look. He found an Iranian Boghammer and two smaller craft.

An Iranian leaped up to open fire with a 12.7mm machine gun. As tracers flew by, the aviator vectored in the two A-6 helicopters following close behind. They responded with a hail of high explosive and flechette rockets and machine gun fire. The smaller boats were quickly dispatched in dramatic fashion as their gasoline engines exploded, spreading burning fuel across the water. The Boghammer maneuvered, trying to get up to speed while firing a 107mm rocket in the general direction of U.S. forces. As an A-6 closed in to finish off the Boghammer, the Americans were greeted by an antiaircraft missile. The warhead did not have time to arm because of the helicopter’s close proximity. The second A-6 closed in and its last high explosive rocket hit the Boghammer squarely on the port side, killing several of its crew including the commanding officer. It sank in 30 seconds. At the first sight of the tracer fire, clearly visible eight miles away, Evansco ordered general quarters.

The remaining patrol boat was lowered into the water as the Marine security platoon manned its positions, joining the other already serving as a local protection and reaction force. Shortly thereafter, the three A-6s returned and were quickly rearmed and refueled.

The two patrol boats closed on Middle Shoals Buoy in search of other vessels or survivors. Six Iranians were pulled from the water, all grievously wounded. Two succumbed. A petty officer noticed a floating Styrofoam case and dived in to retrieve it. Inside was a battery for an American-built
Stinger. It was later learned that the Iranians had obtained the missile from Afghanistan.

The Iranian mission had been commanded by a Revolutionary Guard officer andcrewed by a motley collection of landlubbers, including an illiterate cook and an AWOL soldier who had been impressed by the Revolutionary Guards in Bushehr on the previous day. They had left Farsi shortly after sunset, the commander telling them they were “headed on a great mission.”

Radar picked up 20–40 small craft heading south toward the base a short time later. To those aboard Hercules, it appeared the Iranian vessels at Middle Shoals Buoy were part of a larger coordinated strike. Marines dropped hand grenades off the side to forestall boarding by swimmers as Evancoe arrayed his forces for the impending attack. He ordered the two patrol boats that had just returned from Middle Shoals Buoy to head north, with the ominous words “Turn and engage.” Meanwhile he requested support, and shortly three additional A-6s arrived from the southern Gulf, followed by USS Thach, which came steaming north at a speed of 30 knots.

Once again an attack failed to develop. It appeared to Evancoe that the enemy turned and went back to Bushehr. Other intelligence sources confirmed that the Iranian boats were there and likely broke off the attack following the action at Middle Shoals Buoy. However, the commanding officer of USS Thach later concluded that the reported Iranian boats were a radar anomaly and never existed. The true nature of the threat that night remains a mystery to this day.

**Fighting an Unconventional Conflict**

The Army and Navy forces on the barges perfected their tactics over the following months. While the original concept called for the MK-IIIs to operate 25 nautical miles out, radar problems and limitations on crew endurance reduced the practical range to 16 miles. Operating in pairs and at night, patrols lasted from 4 to 12 hours, moving along predetermined routes. All the while, small riverine boats provided local security until they were withdrawn as unsuitable for operations in rough open water.

Helicopter tactics evolved as well. The Army craft operating in groups of three, one M-6 and two A-6s, went on one and sometimes a second two-hour patrol every night. All patrols proceeded to a predetermined set of checkpoints from a list of 25 identifiable sites. They often operated in conjunction with MK-IIIs, where speed and range complemented patrol boat endurance. Meanwhile, the Navy LAMPS helicopters, with their excellent surface search radar, perfected their techniques of command and control over the Army craft, vectoring them in from a safe distance on suspected Iranian boats. Wimbrown VII became operational in December. Although the original plan called for it to be deployed farther north, it remained ten miles away to provide mutual support for Hercules. Not as large or capable, its presence doubled the patrol area and relieved overstretched Hercules assets.

In February 1988, Middle East Force merged with JTF Middle East, which had been charged with controlling all Earnest Will operations inside and outside the Gulf. This entailed a greater degree of control by the JTF staff. The barges began filing flight plans and patrol routes prior to operations. Improvements continued on the barges at the same time. More metal plates and sandbags were added until the Wimbrown VII decks were awash in high seas. In addition, 25mm naval chain guns augmented 50 caliber weapons on all four corners, and in July two of those were replaced by Army 20mm antiaircraft guns. Newly developed anti-missile radar reflectors were also deployed around both barges. Most notably, overtaxed A-6 and M-6 helicopters were replaced by Army OH-58s from Task Force 118. While not as small or quiet, the new craft possessed a greater FLIR capability and much greater firepower, including Hellfire missiles.

Hostile operations virtually ceased following the engagement at Middle Shoals Buoy. The Iranians occasionally tested the defenses by approaching at high speed, then withdrawing at the first challenge from a helicopter or patrol boat. They tried to blend in with numerous fishing boats off the Saudi coast while advancing. Only once did they challenge the barges. Two high speed surface craft commenced a run on Wimbrown VII on the night of March 4. The barge and nearby USS John A. Moore warned them off with machine gun fire and the boats returned to Farsi.

The Iranians attempted their only attack on a tanker in the patrol area on July 12, 1988. Small boats assaulted the Kuwait-bound Panamanian Universal Monarch in international waters. Then, to escape American retribution, they went back across to their exclusion zone, where the rules of engagement did not permit U.S. warships or aircraft to operate. Wimbrown VII and Hercules launched two OH-58s, and the JTF commander, Rear Admiral Anthony Less, gave the helicopters permission to enter the exclusion zone near Farsi. One helicopter received machine gun fire. The Americans returned fire, striking the boat with a high-explosive rocket and leaving it dead in the water.
With northern Gulf operations effectively shut down, the Iranians moved their small boats to the south, around Abu Musa Island. The idea of redeploying one of the barges there was rejected because it spread forces too thin. Shortages within the SOF community prevented standing up another mobile base. But retaliation for the minestrike on USS Samuel B. Roberts in April 1988 eliminated half of the operational Iranian fleet and destroyed the two major oil platforms used to coordinate mining and small boat attacks. With few platforms and islands to use as hiding places, and the vast number of U.S. warships operating in the southern Gulf, the Iranians became a minor annoyance more than a serious threat to the shipping lanes.

The barges remained operational after a U.N.-sponsored ceasefire in the Iran-Iraq War took effect on August 20. A gradual reduction in forces in the north coincided with a general withdrawal of forces throughout the Persian Gulf as the ceasefire held. Wimbrown VII reverted back to Brown and Root on Christmas Eve. Hercules remained in place. The Saudis expressed interest in leasing it for their forces, but they shelved the option as the situation cooled down. Hercules was returned to Brown and Root in July 1989 after being deployed for 21 months.

Some lessons were immediately noted after operations in the Persian Gulf as others were stubbornly resisted. While Army helicopters operating from Navy vessels have subsequently become more common, these were the first such ventures in years. New tactics were needed. Problems of corrosion and the effects of shipboard electronic emissions on ordnance were unexpected. Many of these issues were worked out aboard the barges. For the Navy, the problems confronting their patrol boats led directly to the development of a new generation of craft to replace the MK-IIIIs, the Patrol Craft Coastal. Its hull length, for example, had to be at least 100 feet so it could better ride the rough seas of the Gulf.

The entire mobile sea base concept had been strongly opposed by traditionalists within the Navy who simply could not grasp that the barges were not ships but were more akin to islands or the fire support bases in Vietnam. Further, the leadership viewed the Iranian threat through a Cold War prism, though the Iranian fleet was hardly the Soviet navy. The bases represented a strongly resisted move away from blue water to brown water operations. While the littorals are at the heart of current naval doctrine, that was not the case in the 1980s. Yet on this occasion the Armed Forces managed to break through the logjam of traditional thinking and field the right force for the task at hand. Proving equally facile will be the great challenge of future joint task forces.