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The Tanker War: Ship Attacks in the Persian Gulf

A Reference Aid

*Information available as of 1 June 1987
was used in this report.*

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addressed to the Chief, International Security Issues,

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Warning Notice



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Information

Unauthorized Disclosure
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Dissemination Control
Abbreviations



The Tanker War: Ship Attacks in the Persian Gulf

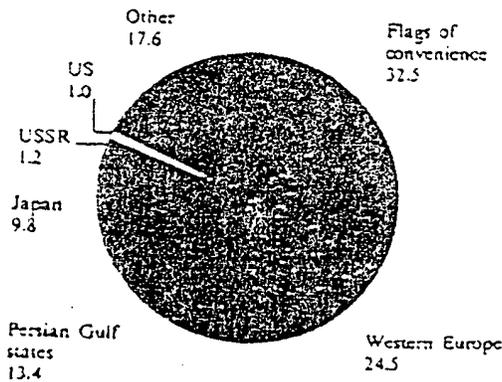
Ship Attacks

Increased Iraqi and Iranian attacks on ships in 1987 and Iraq's accidental strike on the USS Stark have widened the scope of the "tanker war" in the Persian Gulf. Thirteen ships, including the Stark and the Soviet freighter Ivan Koroteyev, were attacked in May. In addition, a Kuwaiti-chartered Soviet tanker, the Marshal Chuykov, and one other ship struck mines in the northern Gulf. The number of ships attacked in May raised the total for this year to 51 and may lead to a much higher total for 1987 than the 110 attacked in 1986.

Ships flying flags of convenience—Liberian, Cypriot, and Panamanian—have been hit most frequently, with 19 attacked this year. Fourteen Iranian ships have been attacked. Only five ships from other Gulf states have been hit, but 13 vessels from nine other countries including China, the Soviet Union, the United Kingdom, and the United States have also been hit. On average, less than 2 percent of the more than 600 ships per month that call in the Persian Gulf have been attacked; few have suffered major damage.

Nationality of Shipping in the Persian Gulf, April 1987

Percent



Total number of ships - 603

Iran

Since Baghdad began the "tanker war" in 1984, Iraq has retaliated against shipping bound for the Gulf Arab states in the hope that these countries will pressure Iraq to stop its attacks. Tehran intensified its attacks in late 1986 and again in early 1987 against ships bound for Kuwait because of Kuwait's continued support for Iraq and its request for US and Soviet protection for its tankers. Iranian leaders have repeatedly stated that, if Iraq successfully interdicts their oil exports, Tehran will not allow other countries to ship oil through the Strait of Hormuz. Tehran probably realizes, however, that foreign warships would be able to reopen and maintain freedom of passage through the Strait.

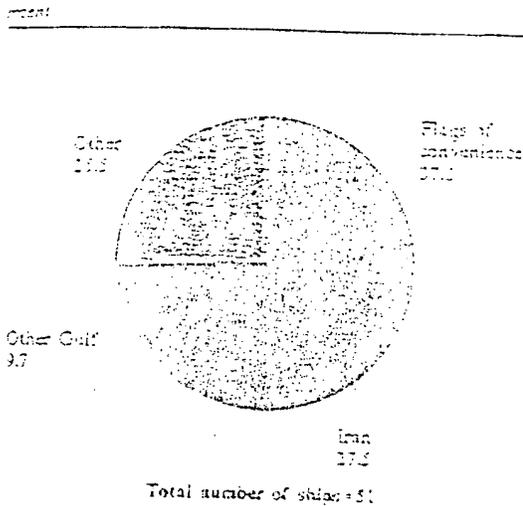
Iranian antishipping attacks are intended to scare tanker crews and owners with the prospect of more costly and dangerous operations. Iran often uses aircraft, warships, and small boat patrols throughout the Gulf to locate targets.

These antishipping operations are difficult for tankers to avoid because they can occur at any time and are launched from Iranian bases on islands, offshore platforms, and naval vessels throughout the Gulf. Warships and boats also regularly stop, board, inspect, and sometimes divert to Iranian ports ships carrying war material bound for Iraq.

Iranian forces have used a variety of tactics in their antishipping operations. Iranian F-4 fighter aircraft have fired Maverick antitank missiles at tankers.

Equipment problems hinder Iranian forces from operating effectively in the Gulf. Cannibalization and innovative repairs have kept the Iranian Navy's larger ships operable, but all need major repairs that Iran cannot perform with its limited facilities. The older weapons and sophisticated electronic equipment on ships are increasingly unreliable because of parts shortages and lack of qualified personnel. These limitations may make Iranian naval officers reluctant to attack ships when a foreign warship is nearby.

Ship Casualties in the Persian Gulf
by Flag, 1987



Business Goes On

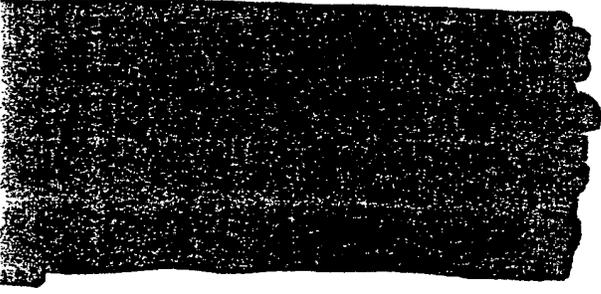
The tanker war has not disrupted the vital flow of oil from the Persian Gulf. On average, about 25 tankers a day pass through the Strait of Hormuz, carrying more than 7 million barrels of oil. Western Europe receives approximately 3 million b/d from the Gulf, or 25 percent of its total needs, while Japan receives 2.5 million b/d, or 30 percent of its total demand. The United States receives only 300,000 b/d, or 5 percent



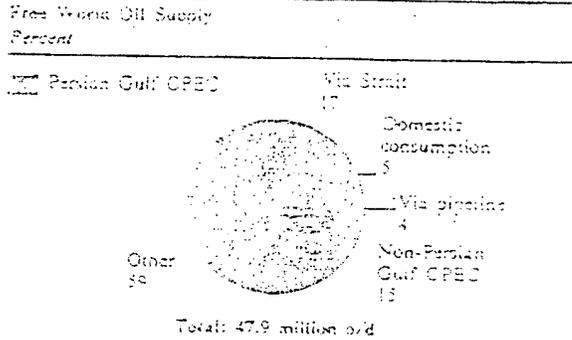
Market confidence in oil supply availability is bolstered by the 10-million-b/d excess oil productive capacity worldwide. Approximately one-third of this excess is outside the Persian Gulf. Saudi Arabia's pipeline to the Red Sea has another 1 million b/d of unused capacity that could be used to transport Persian Gulf oil if shipping in the Gulf is disrupted.

Foreign Military Responses

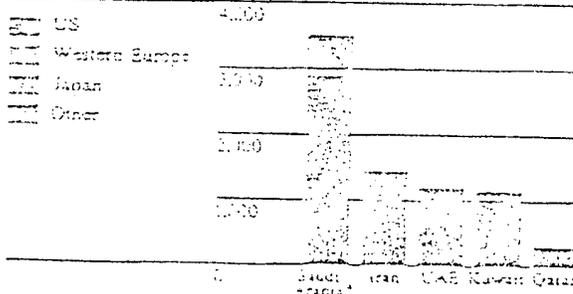
Iranian and Iraqi ship attacks have drawn few military responses thus far. Saudi Arabia does not react to tanker attacks except when Saudi flag vessels are hit. After three Saudi tankers were hit in May 1986, the Royal Saudi Naval Force deployed one of their new Saferi-class frigates and a replenishment ship to the Gulf. This frigate and smaller guided-missile converters—which were already in the Gulf—have been patrolling between Al Jubayl and the Strait of Hormuz for the last year. Kuwait only recently began naval escorts of its tankers within Kuwaiti territorial waters and the other Gulf states have had no military action to the ship attacks.



Importance of Persian Gulf Oil, 1986



Destination of Crude Oil Exports via the Strait of Hormuz
Thousand b/d



The response by the Soviets to the Iranian attack on their freighter also has been low-key. Two Natya-class minesweepers joined the minesweeper and Lashin-class destroyer already escorting Soviet arms carriers and Kuwaiti-chartered tankers to Kuwait. The minesweepers have only a limited ability to defend against Iranian air and naval attacks, but the

* Excludes Saudi exports through the East-West pipeline to the Red Sea. Includes 100,000 b/d of Saudi oil refined in Bahrain and exported.

Shipping Protection

Ship owners and operators have tailored their voyages to reduce their vulnerability to attack. Most major oil companies follow a daylight transit of the eastern Gulf and a nighttime transit of the western Gulf. Japanese flag vessels and one international oil company follow a night transit of the Gulf with one or two daytime anchorages between Ras Tanura and the Strait of Hormuz. The protection gained from sailing at night remains minimal, however, since almost half the Iranian ship attacks in the Gulf this year have taken place at night. Ship operators also raise false flags, maintain radio silence, and declare false destinations to avoid Iranian naval vessels in order to avoid attack.

Tanker owners are willing to send their vessels into the Persian Gulf, despite the risks, because of low insurance rates and stiff shipping competition. Risk insurance rates are only a few cents per barrel for the larger tankers, and overall transportation costs for buyers are about 5 percent of the delivered price of oil. Furthermore, the global surplus of tankers—particularly large crude carriers of 200,000 DWT or more that are used in the Gulf trade—continue to depress freight rates and provide incentives to owners to take whatever business is available. Industry sources report that 30 or more empty tankers are always at the entrance of the Gulf to be chartered.

The effectiveness of attacks will have to increase substantially before owners stop sending their ships into the Persian Gulf or before tanker crews refuse employment despite substantial war-risk bonuses. Gulf shipping might plummet if Iran begins indiscriminate attacks on tankers passing through the Strait of Hormuz using Silkworm missiles from shore installations. A significant increase in Iranian attacks on tankers in the Gulf or an Iranian airstrike on Kuwaiti or Saudi oil facilities also might halt the movement of tankers into the Persian Gulf at least temporarily.

Open sources indicate that at least the merchant ships owned by the Indian Government have been armed with anti-aircraft guns.

One armed merchant ship—still unidentified—fired at a helicopter used on the destroyer USS O'Bannon last January.

Shuttle systems are the primary method of continuing commerce in the face of shipping attacks. The Kuwaiti Oil Tanker Company uses Khawr Fakkan, a port in the Gulf of Oman, to transfer cargo between its vessels and non-Kuwaiti ships unwilling to sail into the war-risk zones. The Iranians run a similar shuttle between facilities at Khark Island in the northern Persian Gulf and Larak Island near the Strait of Hormuz. Approximately 20 ships—many flying flags of convenience—are actively involved in the Iranian shuttle service.

Ship Attacks in May 1987

- Attack by Iran
 Attack by Iraq
 Mine

Date	Name of Ship	Flag	Type	DWT
04	Diamond Mariae	Liberia	Tanker	101,416
04	Petrobulk Regent	Panama	Tanker	31,600
05	Shuhu Maru	Japan	Tanker	258,000
06	Ivan Koroteyev	USSR	Freighter	6,459
11	BR Ambedkar	India	Tanker	89,454
14	Silikon	Panama	Tanker	206,109
14	Rodosa	Panama	Tanker	29,680
16	Marshal Chuykov	USSR	Tanker	67,980
17	Zeus	Cyprus	Tanker	158,694
17	Aquamarine	Liberia	Tanker	Unknown
17	USS Stark	US	FFG	3,605*
18	Golar Robin	Liberia	Tanker	98,804
20	Alvand	Iran	Tanker	236,807
22	Al-Rashida	Qatar	Freighter	2,596
27	Prinzess	Liberia	Tanker	272,700

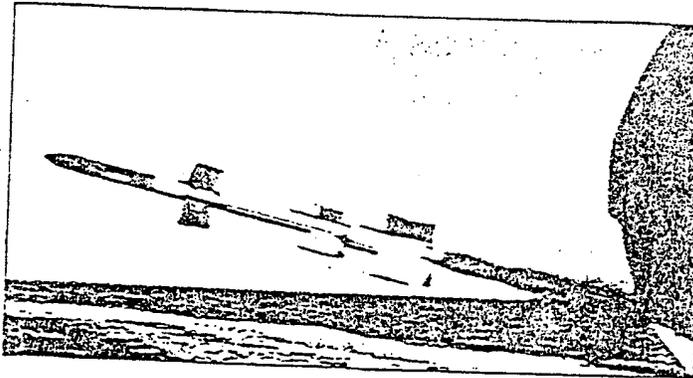
* Displacement, tons.

War Risk Insurance

sum of 0.25 percent of the value of a vessel's piled to ships calling at Persian Gulf ports wait. Policies are effective for 14 days, except limit is seven days. Rates for Iraqi and Iranian often impossible to obtain. The Kuwaiti premiums are not assessed for the ports of Al in.

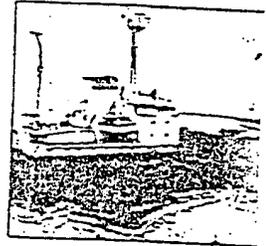
Ship Profiles

non-piercing
radio command

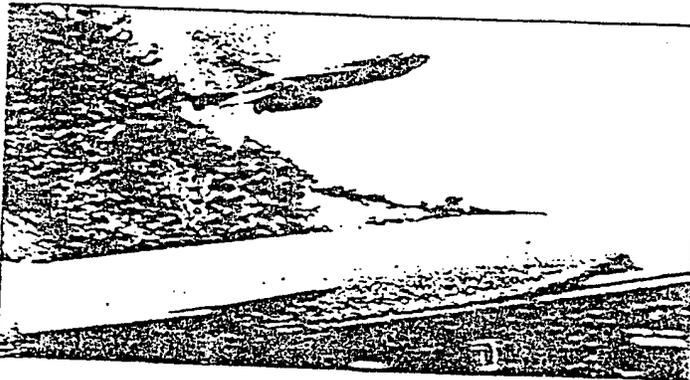


Ivan Korolev
5,459 DWT

Soviet freighter returning from Kuwait... attacked by Iranian patrol boat 30 miles from Rasam on 5 May 1987.



infrared



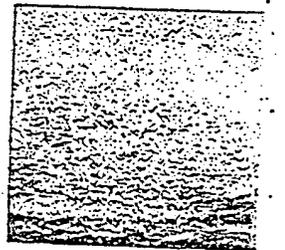
Medusa
153,700 DWT

Liberian tanker participating in Khark shuttle service... struck by Iraqi Exocet missile on 10 June 1986.



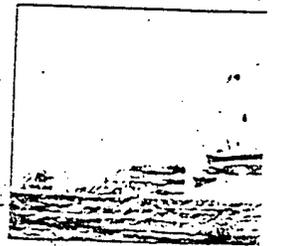
USS Stark
3,605 displacement, tons

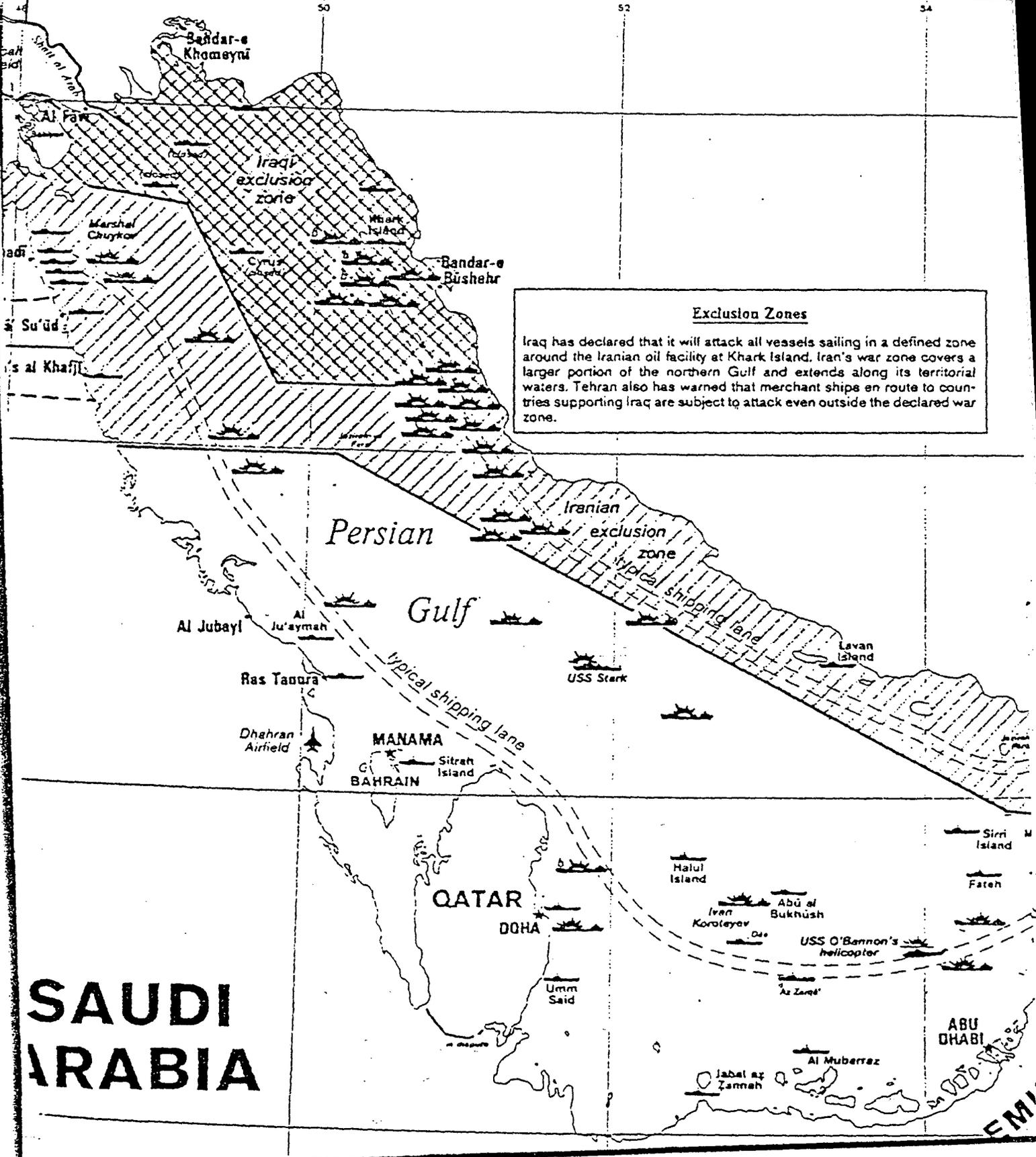
US Navy Perry-class frigate... attacked by Iraqi aircraft on 17 May 1987.



Sabalon
1,400 displacement, tons

Iranian SAAM-class frigate armed with Sea Killer antiship missiles... also involved in attacks by small patrol boats on merchant ships.





Exclusion Zones

Iraq has declared that it will attack all vessels sailing in a defined zone around the Iranian oil facility at Khark Island. Iran's war zone covers a larger portion of the northern Gulf and extends along its territorial waters. Tehran also has warned that merchant ships en route to countries supporting Iraq are subject to attack even outside the declared war zone.

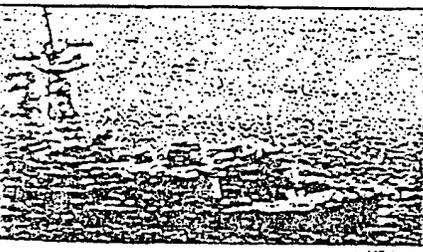
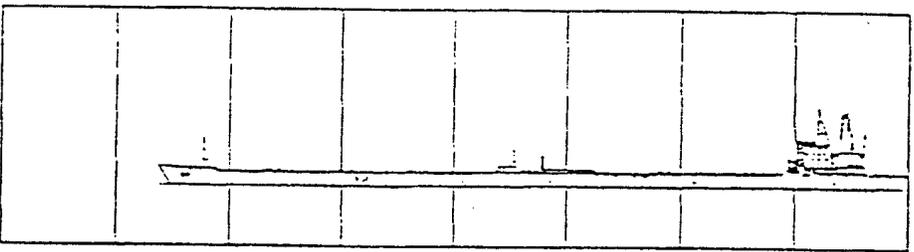
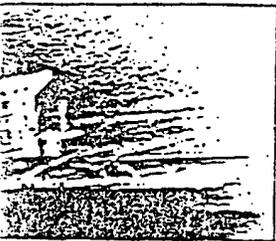
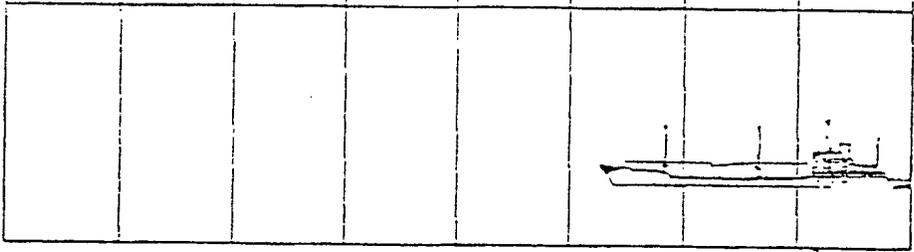
OMAN

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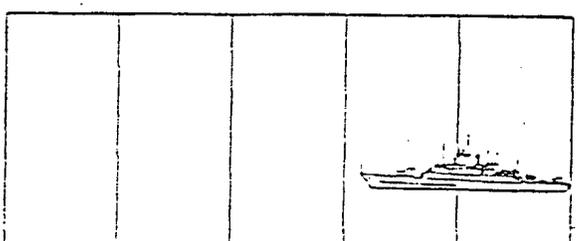
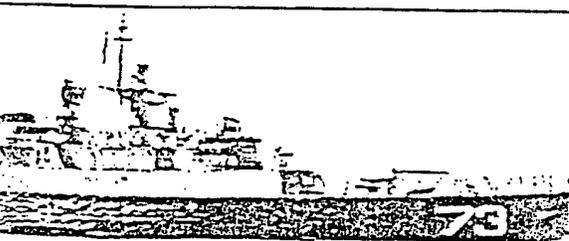
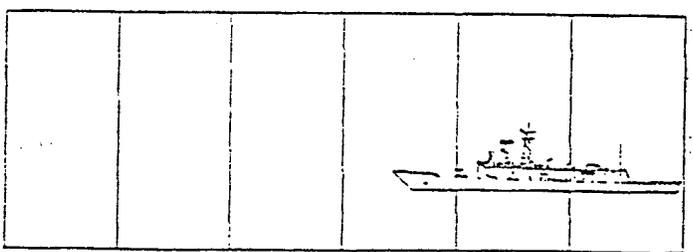
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Boundary representation is not necessarily authoritative

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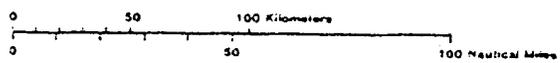




Attacks in the Persian Gulf, January-May, 1987^a

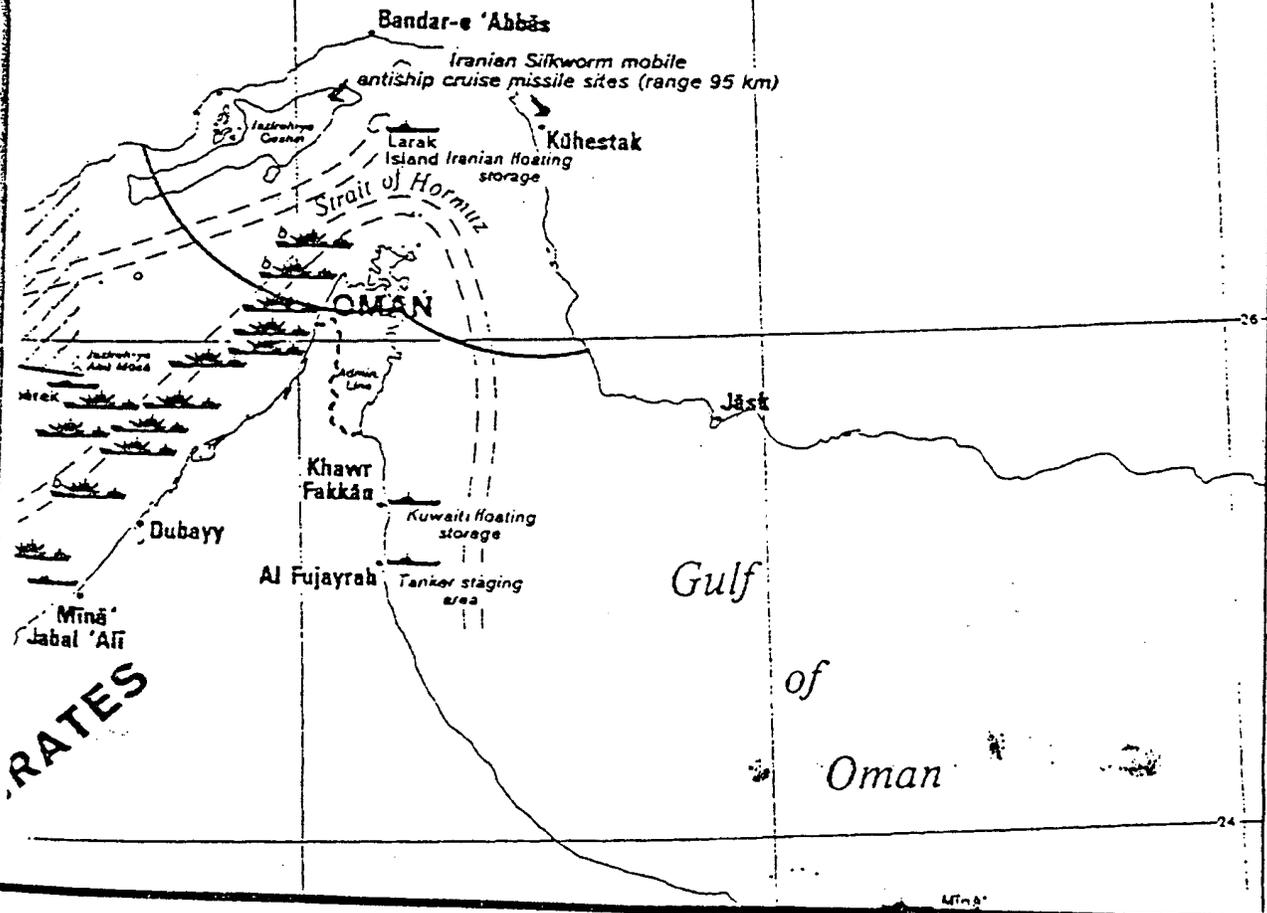
-  Ship attack
-  Iranian assault
-  Iraqi assault
-  Unknown assailant
-  Oil export facility

Scale 1:3,000,000



^a Does not include one assault by Iran and seven assaults by Iraq; locational data unavailable.
^b Location is approximate.

IRAN

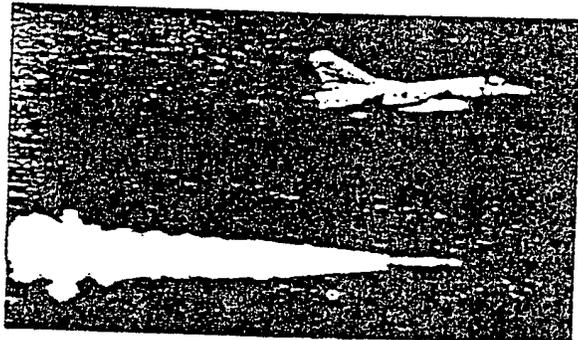
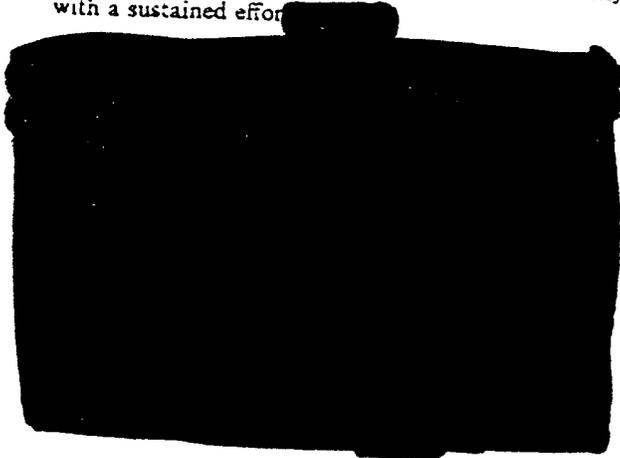


RATES

Strategies, Weapons, and Tactics

Iraq

Baghdad's attacks on seaborne oil exports from Iran are designed to force Tehran to negotiate an end to the war by depriving Iran of its principal source of foreign exchange. If they fail in this aim, the Iraqis probably hope at least to deprive Iran of some funds that support the war effort. Baghdad has focused on ship attacks rather than the destruction of Iran's critical oil export facilities because it fears Tehran would retaliate against Iraqi oil exports or Iraq's Gulf Arab allies. Iraqi forces have struck Khark Island a number of times, however, and could close the facility with a sustained effort.



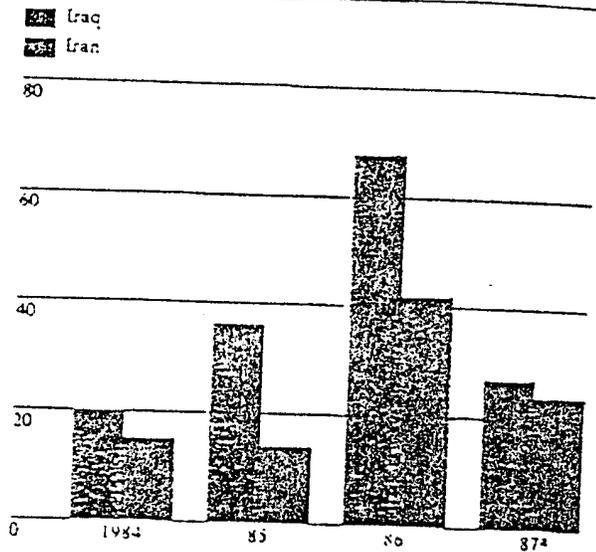
Dassault-Breguet Mirage F1 launches an Aerospatiale AM39 Exocet antiship missile

Most Iraqi ship attacks occur in an apparently predetermined area along the Iranian coast used by tankers servicing Khark Island. Baghdad has announced that the Persian Gulf north of the 29° 30' latitude is a prohibited war zone. Baghdad assumes that any ships operating in the area are potential targets. Iraqi attacks sometimes occur farther to the southeast, usually along Iranian shipping routes and against Iranian anchorages near the Lavan, Sirri, and Larak Islands. Iraqi F-1 aircraft conducting these strikes are refueled after takeoff, midway down the Gulf, and on the return trip, from other F-1 aircraft carrying "buddy" tanks.

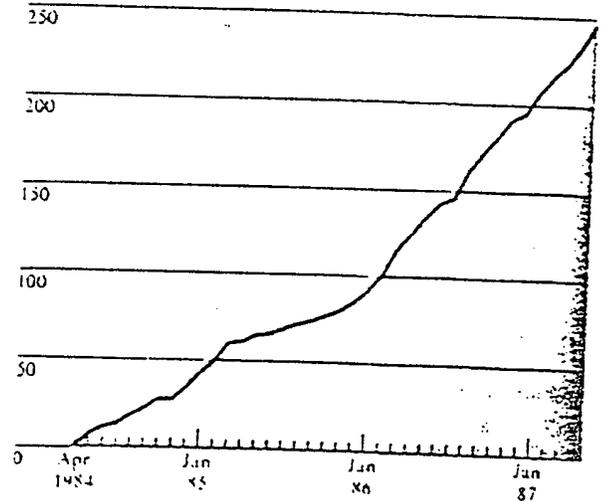
Ship Attacks in the Persian Gulf, 1984-87

Number of attacks

Attacks by Iran and Iraq



Cumulative Number of Attacks



Jan-May

