

IRAN'S NAVAL FORCES

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



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FROM GUERRILLA WARFARE TO A
MODERN NAVAL STRATEGY

Fall 2009

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 2009		2. REPORT TYPE		3. DATES COVERED 00-00-2009 to 00-00-2009	
4. TITLE AND SUBTITLE Iran's Naval Forces From Guerilla Warfare to a Modern Naval Strategy				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Senior Intelligence Officer-China,4251 Suitland Road,Suitland ,MD,20395				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Table of Contents

Chapter One: History of Iran’s Naval Forces and the Importance of the Strait of Hormuz	1
Brief History of Iran’s Naval Forces	1
Importance of the Strait of Hormuz.....	2
Chapter Two: Iranian Naval Strategy	6
Historical Context.....	6
Preparing for an Asymmetric War	7
Passive Defense.....	8
Decentralization.....	9
Destabilization.....	9
Capitalizing on Favorable Geography.....	9
The Moral Component	10
Political Victory Trumps Military Victory.....	10
Naval Reorganization—Increasing Effectiveness	11
Chapter Three: Procurement and Acquisition Trends	13
Self-Sufficiency	13
Smaller, Faster, More Numerous Vessels.....	13
Iranian Mines.....	16
Coastal Defense Cruise Missiles.....	16
Torpedoes.....	17
Submarines	17
KILO	17
YONO.....	18
NAHANG.....	18
Iranian Air Defense	19
Chapter Four: Operations and Readiness	20
Patrols	20
Exercises.....	21
Training	21
Dispersals	21
Intelligence, Surveillance, and Reconnaissance (ISR).....	22
IRGCN Small Boat Tactics.....	22
Small Boat Warfare: Advantages and Disadvantages	23
IRGCN Small Boat Employment	23
Chapter Five: Outlook	24
Submarines	24
Surface Ships	24
Weapons.....	25
Changes in Strategy.....	25
Conclusion	26

Chapter One

History of Iran's Naval Forces and the Importance of the Strait of Hormuz

Brief History of Iran's Naval Forces

Iran's naval forces, like the country itself, have been shaped by the Islamic revolution, petroleum, and an often adversarial relationship with neighboring countries and the international community as a whole. These factors have influenced how Iran's naval forces are organized, how they are equipped and manned, and how they interact with external forces.

Iran has two naval forces: the Islamic Republic of Iran Navy, or IRIN, and the Islamic Revolutionary Guard Corps Navy, or IRGCN. The IRIN is the naval branch of Iran's Artesh, the traditional military force that existed prior to the 1979 revolution. This force was the former Shah's Imperial Iranian Navy and was originally designed to be a blue-water force capable of demonstrating the power and prestige of the Shah's Iran. Today, it consists mainly of older, mid-sized naval combatants, such as corvettes and missile-equipped patrol craft purchased by the Shah from western nations, including the United States, the United Kingdom, and France. The IRIN has not fully escaped the stigma of its pre-revolution loyalties and remains secondary in most respects to the IRGCN.

The IRGCN emerged after the Islamic revolution during the Iran-Iraq War in the 1980s. The revolutionary forces not only distrusted the former Shah's military, they

greatly weakened it by executing many senior commanders and conducting purges to rid it of any loyalists to the Shah. This allowed the Islamic Revolutionary Guard Corps (IRGC)—the Ayatollah Khomeini's base of revolutionaries turned paramilitary internal security force—to take on a larger role in the country's defense. In addition to the original ground forces element, the IRGC also formalized an emerging naval component in the mid-1980s, following successful amphibious operations in the southern marshlands of Iraq. Over the intervening decades, the IRGCN has been politically favored over the IRIN and has capitalized on this status to acquire advanced weaponry and better platforms to develop additional capabilities.



Iran's British-made VOSPER-class corvette, a remnant of the Shah's navy

Unlike many countries, Iran does not have a long naval history. The development of Iran's naval forces was kick-started by the discovery of Iran's petroleum deposits in the early 20th century and the country's subsequent need to

protect its maritime commerce. However, the Shah's navy operated under the shadow of foreign forces until the 1970s when British stewardship in the Persian Gulf came to an end.

After the British withdrawal, Iran took a larger role in protecting the Persian Gulf sea-lanes, particularly escorting Iranian merchant ships. The Shah, awash with oil revenue, provided a large defense budget and the promise of new equipment with which the navy could carry out its expanding missions. In line with the government's cooperative relationship with the West, the Shah's navy bought frigates, destroyers, corvettes, and patrol craft and operated them largely according to NATO doctrine. Items ordered included modified SPRUANCE-class destroyers and diesel submarines from the United States and Germany. While some acquisitions were necessary for the navy's mission, others were more for the prestige that came with having one of the strongest navies in the region. So great were the Shah's ambitions that a few western countries sought to impose limits on the Shah's quest for regional power.

The Shah's plans to dominate the region's waters were ultimately terminated by the Islamic Revolution. In 1979, the Shah was deposed and the nation was transformed into the Islamic Republic of Iran, led by Supreme Leader Ayatollah Khomeini. Iran's ties with the West and the defense contracts that came with them were severed, leaving many Iranian naval aspirations unfulfilled. However, the remnants of the Shah's Imperial Iranian Navy survived to form the core of the new Islamic Republic of Iran Navy.

Soon after the revolution the Iranian naval forces experienced their most active period. During the Iran-Iraq War, both belligerents staged attacks against merchant shipping in the Persian Gulf. By one estimate, 546 commercial vessels were damaged, most of which were Kuwaiti vessels attacked by Iran. Iranian naval

forces executed hit-and-run attacks with small boats, fired naval guns from IRIN warships, boarded commercial vessels in search of material destined to support Iraq's war efforts, and attacked merchants using coastal defense cruise missiles.

Iran's use of naval mines during the war was, however, the most notable aspect of the maritime front of the war. During the very first escort mission of re-flagged tankers by U.S. Navy ships in July 1987, the Kuwaiti super tanker AL REKKAH, re-flagged as the United States super tanker BRIDGETON, struck a mine. Two months later, the United States caught the IRIN's IRAN AJR-class landing ship IRAN AJR laying mines off the coast of Bahrain. Then in April 1988, USS SAMUEL B. ROBERTS hit an Iranian mine, initiating the retaliatory Operation PRAYING MANTIS by U.S. forces. This list is not all-inclusive, and many other incidents of Iranian mine strikes occurred throughout the course of the war.

Today, Iran's naval forces protect Iranian waters and natural resources, especially Iran's petroleum-related assets and industries. Iranian maritime security operations guard against the smuggling of illegal goods (especially drugs) and immigrants, and protect against the poaching and stealing of fish in territorial waters. Additionally, Iran uses its naval forces for political ends such as naval diplomacy and strategic messaging. Most of all, Iranian naval forces are equipped to defend against perceived external threats. Public statements by Iranian leaders indicate that they would consider closing or controlling the Strait of Hormuz if provoked, thereby cutting off almost 30 percent of the world's oil supply.

Importance of the Strait of Hormuz

The U.S. Department of Energy estimated that in 2008 Gulf nations produced 29.8 percent of the world's oil supply, much of which transited the Strait of Hormuz. Additionally the Persian

The Strait of Hormuz is just under 90 nautical miles long and only about 22 to 35 nautical miles wide. It has two deep-water channels, one each for inbound and outbound traffic; these two channels are about 1 nautical mile wide.

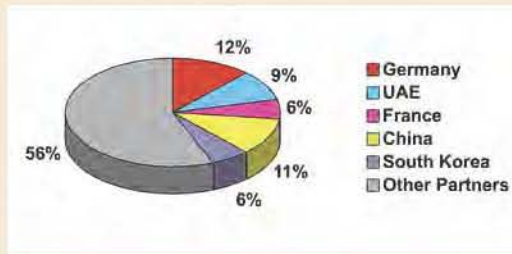
Gulf region produced 29.1 percent of the natural gas for export to the world's markets. Closure of the Strait of Hormuz would require the use of overland routes to transport oil out of the Persian Gulf. Currently the Saudi Arabia East-West Pipeline has the capacity to move five million barrels per day to the port of Yanbu on the Red Sea, well short of the average 17 million barrels per day that currently transit the Strait of Hormuz.

Iran would not be immune to the economic impact of a Strait of Hormuz closure. Iran's exports of crude oil and petroleum products alone in 2006 accounted for 74 percent of the

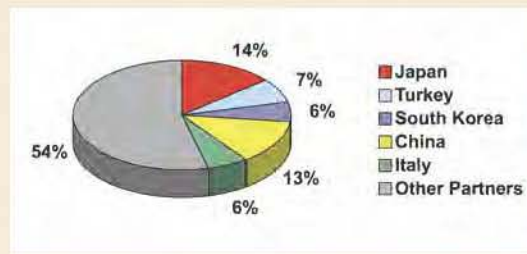
total value of Iran's exports and were equal to 29 percent of the nation's gross domestic product (GDP). By volume, roughly 87 percent of Iran's imports and 99 percent of its exports are by sea. The vast majority of this trade transits the Strait of Hormuz. Figure 1-1 (page 4) shows the leading countries for Iranian imports and exports.

Closing the Strait of Hormuz would cause Iran tremendous economic damage, and therefore Iran would probably not undertake a closure lightly. However, given the importance of the Strait, disrupting traffic flow or even threatening to do so may be an effective tool for Iran.





Iran's main trading partners for 2006 imports by value

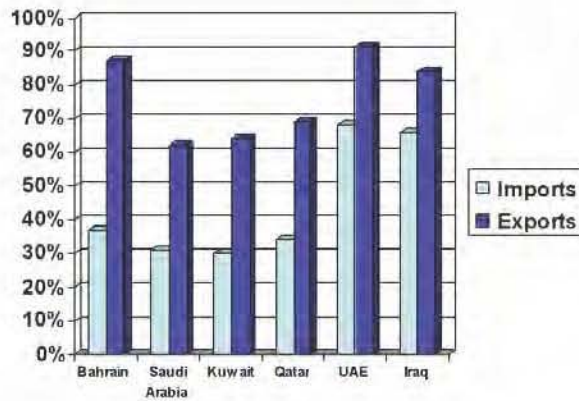


Iran's main trading partners for 2006 exports by value

Figure 1-1

The other Persian Gulf countries are also dependent on trade via the Strait of Hormuz. Exports from many of these countries consist primarily of crude oil and liquefied natural gas (LNG) going to world markets. The United

Arab Emirates (UAE) ports of Abu Dhabi and Dubai are the busiest in the region and account for 88 percent of the UAE's GDP. Most UAE trade involves these Persian Gulf ports and therefore must transit the Strait. Iraq's import



Imports/Exports as percentage of GDP

Percentage of value that transits the Strait of Hormuz

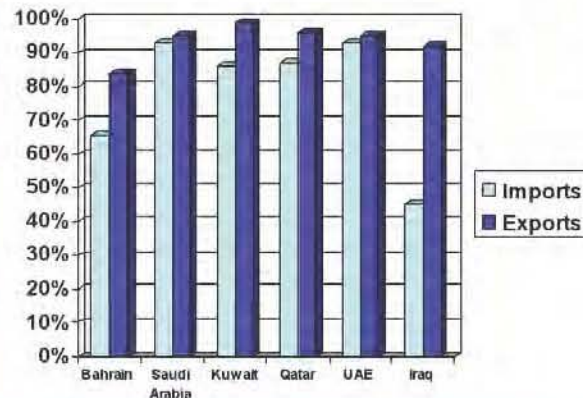


Figure 1-2

dependence is less than the other countries in the region; about 55 percent of its imports by value come over land from Syria, Turkey, and Jordan. Figure 1-2 (page 4) shows imports/exports for Persian Gulf countries (other than Iran) as percentage of GDP as well as percentage of value of GDP that transits the Strait for those countries.

The world as a whole, especially industrialized nations, would experience a serious economic impact from a sustained closure of the Strait of Hormuz due to greatly reduced supplies of crude oil, petroleum products, and LNG. According to Reuters, "Any military action in the Strait of Hormuz in the Gulf would knock out oil exports from OPEC's biggest producers, cut off the oil supply to Japan and South Korea, and knock the booming economies of Gulf states."¹ In 2007 the Strait of Hormuz accommodated outbound exports of about 16 million barrels per day of crude oil and refined petroleum products. These exports amounted to about 40 percent of all seaborne oil exports. Most of the oil exported via the Strait goes to Asia, the United States, and western Europe. An average of 15 large crude oil tankers per day transited Hormuz in 2007, as well as other



Dhow typically found in the Persian Gulf region

tankers transporting petroleum products and LNG. Of note, about 19 percent of global LNG exports transited the Strait outbound from Qatar and the UAE in 2007. The importance of the Strait of Hormuz will likely continue to increase over time.

In addition to the high volume of energy-related maritime traffic, a large volume of other civilian traffic uses the Strait on a regular basis. Small local craft, known as dhows, ply these waters every day. Many transport a variety of consumer goods throughout the Persian Gulf and others are used for fishing. These craft add to the overall volume of traffic crossing the Strait of Hormuz.



Oil tanker typically found in the Persian Gulf region

¹ "FACTBOX: Strait of Hormuz: economic effects of disruption," Reuters, 7 Jan 2008.

Chapter Two

Iranian Naval Strategy

“Iranians are preparing for guerilla war at sea... like operations on land, when two unequal opponents face each other, the best way for the weak side is to resort to a war of attrition and guerilla operations.”

*Retired Rear Admiral Ali-Asghar Kazemi
Professor, Tehran University²*

Historical Context

The origins of Iran’s naval strategy can be found within the context of the Iran-Iraq War (1980–1988). This was a crucible for the nascent Islamic Republic, and while both naval forces engaged in operations during the war, the IRGCN’s small boat attacks established it as a legitimate entity and viable threat and solidified the primacy of the IRGCN’s asymmetric tactics.

Iran first employed an asymmetric naval doctrine during the Tanker War (1984–1988), part of the larger Iran-Iraq War. It decreed an exclusion zone off its Persian Gulf coast that forced non-Iranian shipping to circumnavigate this area, limiting shipping to a narrow lane where Iran could monitor and attack enemies and mine sea-lanes far from its own shores and friendly shipping. Iran conducted the majority of its early ship attacks in a conventional manner, using naval gunfire and anti-ship cruise missiles fired from ships, aircraft, and coastal launchers. However, as these were only moderately successful, Iran also employed small, fast attack boats to conduct ambushes and hit-and-run missions against tankers.

Furthermore, these inventive tactics, developed out of necessity and using the limited assets on hand, became the forerunners of Iran’s modern asymmetric warfare doctrine.

Asymmetric Warfare

Asymmetric warfare is a loosely defined term. Within the context of Iran’s naval strategy, asymmetric warfare can be described as incorporating one or more of the following concepts:

- The use of conventional weapons in unconventional ways. For example, using small boats to lay small mine lines directly in the path of a target.
- Capitalizing on the strengths of atypical assets, such as the speed, maneuverability, and stealth of small boats, to target the weaknesses of more typical naval assets, such as the relative sluggishness of a large warship.
- Incorporating concepts such as mass, in which assets leverage large numbers to overwhelm their targets.

Finally, for Iran, asymmetric warfare uniquely includes concepts of a revolutionary spirit, jihad, and martyrdom.

²Kahwaji, Riad, “Iran Plans For Attrition War In Gulf,” *Defense News*, 8 May 2006, p. 1.

It was during the Iran-Iraq War that Iran realized the consequences of technological inferiority. According to retired Iranian Navy Rear Admiral Ali-Asghar Kazemi, currently a professor of political science at Tehran University, Iran turned to a guerilla strategy after Operation PRAYING MANTIS, a naval battle between the United States and Iran in 1988, during which the United States sank one Iranian VOSPER-class corvette (heavily damaging a second) and one COMBATANTE-class guided missile patrol craft. Kazemi said that the lesson from this battle was that, “in a purely classical naval engagement, the Iranian Navy would not be able to sustain combat capability and will soon be out of effective operation.”³ Iran has incorporated lessons from this conflict and subsequent regional wars such as Operation DESERT STORM, Operation ENDURING FREEDOM, and Operation IRAQI FREEDOM into its naval strategy.

Preparing for an Asymmetric War

In studying these conflicts, the IRGC decided that Iran should plan to fight an asymmetric war against potential enemies. According to the IRGC commander, an asymmetric war would involve “working on all the weaknesses of the enemy and the maximal usage of our capability.” By choosing an asymmetric approach, however, Iran is not abandoning modern military technology. The IRGC claims that Iran would use its growing arsenal of modern weapons, including cruise missiles, modern mines, and submarines, but in a different way and at a time and place the enemy would not know or expect.

During the 1990s, the regime sought to rebuild from the Iran-Iraq War and bolster its national defenses. The IRGC, the favored military force due to its performance in the Iran-Iraq War, took the lion’s share of Iranian



Iran’s VOSPER-class corvette SAHAND after being attacked by the United States Navy during Operation PRAYING MANTIS in 1988

defense funding, increased domestic weapons production, and ramped up the procurement of weapons from Russia, China, and North Korea.⁴ Naval acquisitions included C802 anti-ship cruise missiles (both sea- and land-launched systems) and numerous patrol boats.

The IRIN devoted the bulk of its acquisition funding to order three KILO-class attack submarines. Submarines had long been on the IRIN’s list of desired platforms. During the Shah’s reign, the navy had ordered both U.S. TANG- and German TYPE 209-class diesel submarines. Despite the change of regime, the navy’s Shah-era plan to acquire submarines was finally realized.

With the receipt of new equipment, Iran continued to develop its naval tactics. Even the IRIN focused on developing integrated tactics using several weapons and platforms simultaneously (including its new submarines, smaller missile boats, mines, aircraft, and land-based missile systems) to overwhelm an enemy. Aware of its weakness against a modern air campaign, Iran also began decentralizing its command structure in order to decrease its

³Kahwaji, Riad, “Iran Plans For Attrition War In Gulf,” *Defense News*, 8 May 2006, p. 1.

⁴Haghsheenas, Fariborz, *PolicyWatch #1179*, “Iran’s Doctrine of Asymmetric Naval Warfare,” *Washington Institute for Near East Policy*: Washington D.C., 21 Dec 2006.

In 1988, a U.S. Navy ship, SAMUEL B. ROBERTS (FFG 58), hit an Iranian mine in the Persian Gulf. It was only due to extraordinary efforts on the part of the ship's crew that the frigate did not sink. Mines were Iran's main weapon to control the Persian Gulf and influence the military supplies transported to Iraq via maritime means. Since that time, Iran has worked to gain new, more powerful weapons to use against an enemy force in the Persian Gulf, the Gulf of Oman, and the Strait of Hormuz. Iran has continued to update these weapons and Iranian tactics have evolved to make the best use of them as well as to capitalize on the region's geography. In this photograph ROBERTS is seen aboard M/V MIGHTY SERVANT 2.



reliance on communications and enable continued resistance in the event of an attack. Iran has continued enhancing nearly all its weapons systems and developing its tactics, watching and learning from regional conflicts, through the 1990s to the present time.



KILO-class submarine acquired during the 1990s

While asymmetry is the cornerstone of Iran's access denial strategy, there are many other concepts that Iran is incorporating into its naval construct. Passive defense, capitalizing on favorable geography, and the primacy of Iran's moral cause are important factors in Iran's naval planning.

Passive Defense

In both 1991 and 2003, much of Iraq's defenses, military infrastructure, and forces were destroyed early in the conflict by United States and Coalition air power. Iran appears to understand that its forces must be able to withstand such an initial attack in order to fight back. From this need for survival, Iran's naval forces have developed plans for passive defense, seeking to ensure that assets remain available after an initial strike. Iran defines

passive defense as “a defense without weapons [which] comprises a range of measures that reduce vulnerability and increase endurance against foreign threats.”⁵ Measures such as camouflage, concealment, and deception are probably key elements in Iran’s passive defense plans. Potential examples of these measures include hiding platforms along Iran’s coastline, which is filled with islands, inlets, and coves, as well as a plethora of oil-related infrastructure. The IRGC has also built tunnels and underground bunkers on the Persian Gulf islands which could provide protection from initial strikes.

Decentralization

In addition to passive defense efforts, Iran has embraced what it calls a “mosaic defense.” This strategy essentially decentralizes the command structure, making Iranian forces more resilient in the face of initial strikes against their command and control architecture. According to Fariborz Haghshenass of The Washington Institute for Near East Policy:

“Speedboats will be taken out of camouflaged coastal or inland hide sites and bunkers, hauled on trailers to coastal release points, and given mission-type orders that will not require them to remain in contact with their chain of command. Each unit of such teams will be assigned a naval sector of operation where, in the event of a conflict, enemy naval assets or civilian maritime traffic will be attacked.”

Destabilization

While controlling the Strait of Hormuz is the key tool by which Iran could internationalize any conflict, it has other options as well. Iran could strike regional countries that actively support or participate in a conflict against the

Islamic Republic in an attempt to dissuade them from following such a course. According to former IRIN Rear Admiral Ashkbus Daneh-Kar, “There are numerous ports, oil terminals, industrial installations and rich resources in the Persian Gulf area—on the coastal areas, in the continental shelf and on the numerous islands. As a result, the Persian Gulf becomes specifically a vulnerable target for special [commando] operations.”⁶

“Indeed, Iran’s natural geographic advantages provide the navy with the option of seriously limiting the enemy’s maneuverability in the Persian Gulf.”⁷

*Retired Rear Admiral Ashkbus Daneh-Kar
Islamic Republic of Iran Navy*

“Reason requires separate tactics for the defense of each area.”

*Rear Admiral Habibollah Sayyari
Commander, Islamic Republic of Iran Navy*

Capitalizing on Favorable Geography

Iran’s naval leadership has stated that today’s threats across the world are sea-based and Iran needs to design its naval forces and strategy to defend against them. Iran’s four strategic maritime areas are the Gulf of Oman, the Strait of Hormuz, the Persian Gulf, and the Caspian Sea. Each of these areas has its own unique geography and challenges leading Iran to tailor defense plans by location. Geography is especially important with regard to the narrow Strait of Hormuz as it gives Iran the potential to disrupt the world’s economy. Ingressing or egressing warships must pass through mineable waters within the range of a variety of weapons including coastal defense cruise missiles, significantly increasing the ships’ vulnerability.

⁵ “Persian Press: Iran’s Passive Defense Chief Outlines Plans for Current Year,” *Tehran Javan*, 25 Sep 2007.

⁶ Daneh-Kar, Ashkbus Rear Admiral, “Operational Doctrine of the Navy of the Islamic Republic of Iran,” *Saff*, issue No. 235, pp. 32–35.

⁷ Daneh-Kar, Ashkbus Rear Admiral, “Operational Doctrine of the Navy of the Islamic Republic of Iran,” *Saff*, issue No. 235, pp. 32–35.

“Today, the security and tranquility of our country’s sea border is secured because of the self-sacrifice of navy forces who offer their lives honestly and are full-heartedly ready to safeguard the religion and country.”

*Major General Mostafa Mohammad-Najjar
Former Minister of Defense and Armed Forces Logistics*

“In Iran there are people who will not back down when the enemy attacks and they are ready to be martyred for God in resisting the enemy . . . The United States might be the starter of a war, but it will definitely not be the one who ends it.”

*Rear Admiral Morteza Safari
Commander, Islamic Revolutionary Guard Corps Navy*



According to Fariborz Haghshenass, Iran relies on the military’s allegiance to the rule of the country’s religious regime, promotes resilience in the face of adversity, and glorifies a culture of jihad and martyrdom. These ideas provide an extra dimension to the naval strategy and may give the Iranian warfighter extra motivation, similar to the concept of patriotism for the American warfighter. Iranian military leaders often publicly tout the moral superiority of Iran’s fighting forces.

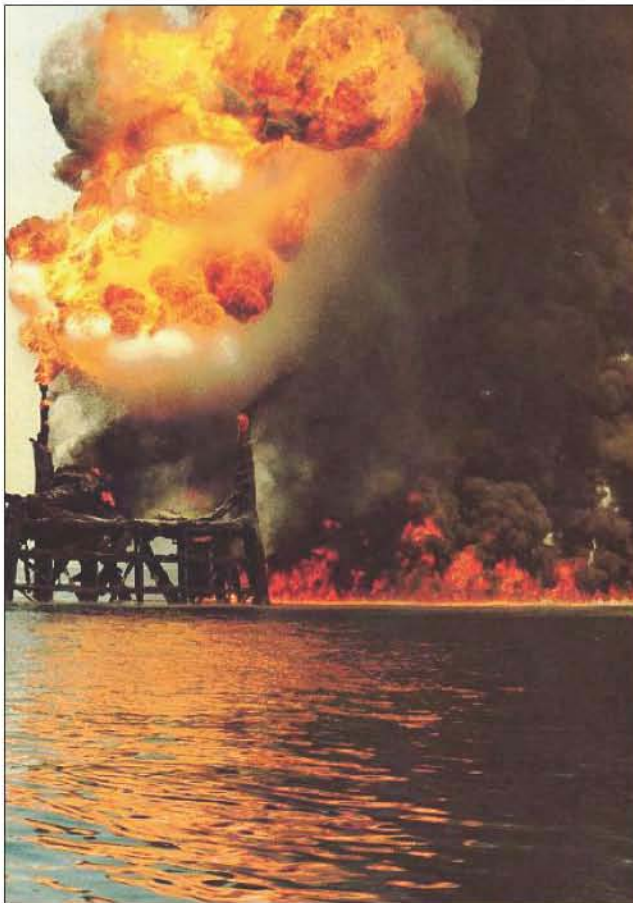
Iran also has developed tactics based on the water depth and confined nature of the Persian Gulf. Maneuvering in some parts can be difficult due to the shallow waters more suited to small boats. Also, Iran’s 1,000 nautical miles of coastline contains many coves and marshes in which small boats could hide from enemy forces. Because the Gulf is less than 100 nautical miles wide in many places, coastal defense cruise missiles would be able to reach targets in nearby shipping lanes.

The Moral Component

A unique, but key, component of Iran’s concept of naval strategy is its religious underpinning.

Political Victory Trumps Military Victory

An emerging theory of warfare states that the world has moved from the third generation of warfare, consisting of large armies moving against each other, to a fourth generation of warfare in which a smaller force would use asymmetric tactics to survive a conflict against a technologically superior enemy. According to Colonel Thomas Hammes, author of *The Sling and the Stone*, the fourth generation of war uses “all available networks—political, economic, social, and military—to convince the enemy’s political decision makers that their strategic goals are either unachievable or too



Oil platforms attacked during the Iran-Iraq war

costly for the perceived benefit. It does not attempt to win by defeating the enemy's military forces. Instead... it directly attacks the minds of enemy decision makers to destroy the enemy's political will."⁸ In an effort to attack political will, Iranian leadership has stated that if the United States took military action against Iran, "200,000 American soldiers will be seriously imperiled in the region,"⁹ and that "the U.S. Fifth Fleet in the Persian Gulf would be turned into a 'sea of fire.'"¹⁰ Iran is also prepared to spread the conflict beyond the Persian Gulf, and leaders have publicly stated that Iran would attack American interests around the world. Iran is aware that a conflict in the Persian Gulf would make the region the focus of the world's political considerations.

Naval Reorganization— Increasing Effectiveness

Iran's naval forces continue to change in order to better execute their naval strategy. Since 2007 the IRIN and IRGCN have been undergoing a reorganization that has included new base openings and a re-division of duties between the navies. Although the two navies have traditionally shared operations in the Caspian Sea, Persian Gulf, and Gulf of Oman, the reorganization split the IRIN and IRGCN areas of responsibility. The IRIN was assigned to the Gulf of Oman and Caspian Sea, while the IRGCN was given full responsibility for operations in the Persian Gulf.

This reorganization and the establishment of new bases are in keeping with Iranian naval strategy in the event of a conflict. Because Iran's naval doctrine is based upon access denial, the realignment of IRIN assets further into the Gulf of Oman and the concentration of IRGCN fast boats,

suicide boats, and coastal defense cruise missiles in the Strait of Hormuz and Persian Gulf better allow Iranian naval assets to contribute to and extend Iran's layered defense strategy. Throughout the restructuring, senior commanders in the IRIN and IRGCN have reiterated that the reorganization of existing bases and the creation of new bases create a line of defense that would prevent an enemy from accessing the Strait of Hormuz and, thus, the Persian Gulf. IRIN Commander Rear Admiral Habibollah Sayyari stated that new IRIN bases will extend from Bandar Abbas, near the Strait of Hormuz, to Pasa Bandar near the Pakistan border by 2015. Similarly, IRGCN Commander Rear Admiral Morteza

⁸Hammes, Thomas Col., *The Sling and The Stone: On War in the 21st Century*, Zenith Press, 2006, p. 2.

⁹"Top Military Advisor Warns U.S. Against Iran Attack," *Fars in English*, 20 Sep 2008.

¹⁰"Iranian Military Exercise 'Great Prophet III' vs. U.S. Navy Drill," *Renmin Ribao*, 10 Jul 2008.



**Rear Admiral Morteza Safari
Commander of the IRGCN**



**Rear Admiral Habibollah Sayyari
Commander of the IRIN**

Safari described the necessity of creating a new 4th Naval District base at Asaluyeh to increase military capability in case of any instability caused by foreigners in the Persian Gulf. The goal of the naval reorganization—allowing the IRIN and the IRGCN to operate in accordance with their relative strengths and thereby better contribute to Iran’s layered defense strategy—may not be fully realized because of a lack of

infrastructure and resources. At a minimum, both naval forces may experience some growing pains as they assume their new areas of responsibility.

The geographic split of the two services not only streamlines command and control by reducing the need to coordinate and deconflict between different naval services operating in the same water space, but should also reduce confusion or miscommunication that an enemy could exploit in wartime. This division of Iran’s primary bodies of water is logical given the characteristics of IRIN and IRGCN ships. The IRIN operates traditional large warships and auxiliary ships, which have the endurance and sea-keeping qualities needed for extended patrols and missions in open waters. This makes the IRIN the natural service to deploy in the Gulf of Oman to push Iran’s reconnaissance as far out as possible and also to engage enemy forces as far away from Iranian territory as possible. The IRGCN operates a force of much smaller boats, most of which lack the endurance or configuration to remain at sea for more than a few days. These boats will now operate in the enclosed waters of the Persian Gulf and the Strait, and will rarely be far from an IRGCN base.

The reorganization has not been without challenges. Although the IRGCN 4th Naval District and the IRIN 2nd Naval District have already relocated to Asaluyeh and Jask, respectively, the new naval bases probably cannot accommodate

all of the reallocated assets because of a lack of pier space and support infrastructure. The IRIN has plans to expand these and other coastal ports, but the time and resources required to do so mean that these investments will pay off only in the long term.



Locations of Iran’s new naval district headquarters

Chapter Three

Procurement and Acquisition Trends

In order to implement its naval strategy, Iran has engaged in a program to develop and acquire advanced weapons and platforms. Iran's defense planning hinges on three motivations: achieving self-reliance, becoming a regional power, and maintaining strong deterrent measures against future attacks. Overall, Iran's development program has strengthened its naval capabilities, yielding increases in the country's inventory of small boats, mines, anti-ship cruise missiles, torpedoes, and air defense equipment.

Self-Sufficiency

During the Iran-Iraq War embargoes against Iran inflicted shortages of spare parts, and many systems became non-operational as a result. In order to remedy this situation, Iran developed a campaign to decrease its reliance on outside suppliers. These so-called "self-sufficiency jihads" graduated from manufacturing spare parts for existing equipment to designing and constructing complete systems almost entirely in Iran. Although Iran has sought to develop its own defense industries to reduce dependence on foreign arms suppliers and minimize the effect of future arms embargoes, it is still heavily reliant on military technology support from North Korea, Russia, and China.

Smaller, Faster, More Numerous Vessels

While the IRIN is comprised primarily of aging Shah-era vessels, the IRGCN has con-

tinued to purchase and construct new vessels over the years. The smaller and faster craft operated by the IRGCN are more suitable to the IRGC's mandate to protect the revolution. From a naval standpoint this translates into a focus on coastal waters. For these reasons the IRGCN has grown to be a non-traditional force, focused on preparing to survive any threat, while incorporating asymmetric and novel defenses. Moreover, unlike the traditional naval force of the IRIN, the IRGCN remains politically favored. This is reflected in the resources the IRGCN receives to build craft indigenously and to seek out suitable technology from abroad.

As a coastal, more flexible force, the IRGCN began primarily with small patrol craft, similar to fishing or pleasure vessels. However, over time and with increased funds, the IRGCN sought out better equipped vessels and technology, often from abroad. In the mid-1990s the IRGCN acquired ten 38-meter HOUDONG-class missile boats from China armed with C802 anti-ship cruise missiles. Iran also received the Chinese-built C-14-class missile boat in late 2000. This 14-meter craft carries short-range anti-ship cruise missiles and a rocket launcher, and has a catamaran hull allowing it to reach speeds up to 50 knots. Later, in 2006, the IRGCN took delivery from China of the MK 13-class patrol craft also measuring 14 meters but armed with anti-ship cruise missiles and torpedoes.



IRGCN small patrol craft



IRGCN HOUDONG-class missile boat



IRGCN Chinese-built C-14-class missile boat



IRGCN PEYKAAP-class coastal patrol craft

Iran's aggressive move toward self-sufficiency has been evident in IRGCN vessels like the PEYKAAP I-class coastal patrol craft and the PEYKAAP II-class missile boat. Although both classes are reportedly based on North Korean designs, Iran indigenously builds and markets them for export through Iran's Maritime Industries Group (MIG). Despite being small, measuring 17 meters, the vessels carry serious firepower. The PEYKAAP II is not only armed with torpedoes but also the Iranian-made "Kowsar" anti-ship cruise missile.

Since the late 1990s the IRGCN has worked to enhance its small patrol boat inventory by purchasing fast boats from Italian speedboat manufacturer Fabio Buzzi (FB) Design. Besides purchasing a number of models, which are based on record-breaking racing boats, the IRGCN reverse engineered the boats and began indigenously producing them. Like the PEYKAAP II, the FB boats are marketed for export by MIG's parent company Defense Industries Organization (DIO). Advertised by FB Design with top speeds of 60–70 knots, these patrol boats give the IRGCN some of the fastest naval vessels in the Persian Gulf.

Besides more traditional naval craft, the IRGCN also reportedly is working on incorporating "unmanned vessels" into its inventory. Other world navies operate unmanned vessels; IRGCN adoption of this modern technology demonstrates the continued initiative of the IRGCN to increase its naval capabilities.

Other examples of the IRGCN's search for innovative vessels include the GAHJAE- and KAJAMI-class semi-submersible craft that Iran reportedly purchased from North Korea in 2002. Measuring 15 meters and 20 meters respectively, these vessels are configured to carry two torpedoes each. The ability to almost entirely submerge allows the vessels to hide from detection.

Table 3-1: Naval Order of Battle	
Class	Number in service
KILO	3
YONO (IS-120)	4
NAHANG	1
Swimmer Delivery Vehicle	8
GAHJAE	3
KAJAMI	3
ALVAND (VOSPER MK 5)	3
BAYANDOR (PF 103)	2
KAMAN (COMBATTANTE II)	14
TONDOR (HOUDONG)	10
C-14	9
MK 13	10
KAYVAN	3
PARVIN (PGM-71)	3
PEYKAAP II	25
PEYKAAP I	15
US MK III	10
TIR	10
US MK II	6
PASHE (MIG-G-1900)	10
GHAEM (MIG-S-1800)	6
MURCE (MIG-G-0900)	20
SEWART	3
MIL 40	2
MIL 55	1
TARLAN	15
KASHDOM II	10
ASHOORA I (MIG-G-0800)	20
BOGHAMMER	30
Various Patrol Craft	8
LST	2
IRAN HORMUZ 21	2
HENGAM	4
KARBALA (MIG-S-3700)	2
IRAN HORMUZ 24	3
LIYAN 110	1
WELLINGTON (MK 4)	2
WELLINGTON (MK 5)	4
IRAN	1

The IRGCN continues to set itself apart from the IRIN as its naval vessels primarily consist of smaller, faster platforms that can perform surreptitious operations while at the same time carrying significant firepower such as C802 anti-ship cruise missiles. The smaller size and speed of the IRGCN's fleet make it ideal for operations off the Iranian coast and in the Strait of Hormuz. The ability to construct craft indigenously offers the IRGCN increased options, as it can work to design and fit vessels that fulfill its operating requirements. It is likely that the IRGCN will continue to replace aging craft with new construction undertaken at sites such as Joolalee Marine Industries, Arvandan Maritime Corporation, and Martyr Darvishi Marine.

Table 3-1 (page 15) shows a naval order of battle for Iran's naval forces.

Iranian Mines

In addition to small boats, Iran's credible mining threat can be an effective deterrent to potential enemy forces. The Strait of Hormuz is a narrow chokepoint that could be mined effectively in a relatively short amount of time. Iran uses its mining capability as a strong deterrent to attacks from western nations. Such operations would disrupt or temporarily halt maritime traffic and harm western economies dependent on Middle Eastern oil exports.

In 1993 Iran entered into negotiations with China to purchase the Chinese-developed EM52, a rocket-propelled anti-ship mine. The Iranian purchase of three Russian KILO-class submarines most likely included modern magnetic, acoustic, and pressure-sensitive mines. In addition to importing mines, Iran has continued domestic mine production, resulting in a growing stockpile of naval mines. As of 2004, U.S. experts estimated that Iran had an inventory of at least 2,000 mines.

Currently Iran has a limited number of conventional naval vessels capable of mine-laying



Mine damage to USS TRIPOLI after hitting a mine during the first Persian Gulf War in February 1991

operations, and thus nonconventional tactics have been developed enabling Iran to deploy mines using commercial vessels and small boats. Both the IRIN and IRGCN have been expanding their capabilities to perform mine-laying operations.

Coastal Defense Cruise Missiles

An important layer in Iran's defense of the Persian Gulf and the Strait of Hormuz is its coastal defense cruise missile (CDCM) capability. Iran can attack targeted ships with anti-ship cruise missiles from its own shores, islands, and oil platforms using relatively small mobile launchers.

The primary missile in the Iranian mobile CDCM arsenal is the C801/802, first imported from China in 1995. This system augments



Iranian coastal defense cruise missile systems

the Seersucker missile system used by Iran in the Iran-Iraq War. Although the Seersucker series missile has a greater range and a larger warhead, the C801/802 missile is capable of engaging targets at a shorter range of six nautical miles vice the Seersucker's ten nautical miles. The C801/802 also boasts greater accuracy, a lower cruising altitude, and a much faster set-up time. These capabilities work together to make this missile a better choice than the Seersucker for coastal defense within the narrow waterways along the Iranian coast. Using the C801/802 alone, Iran can target any point within the Strait of Hormuz and much of the Persian Gulf and Gulf of Oman. Lebanese Hizballah successfully used a C802 missile to target an Israeli naval vessel in 2006; Iran could use the missile in the same way. Additionally, Iran has worked jointly with China to develop shorter-range missiles, including the C701, for deployment in narrow geographic environments.

Iran's mobile CDCM launchers can readily be deployed anywhere along the Iranian coast and target much of the Persian Gulf and Gulf of Oman, as well as the entire Strait of Hormuz. These systems have auto-control and radar homing guidance systems, and some can target using a remote air link. Through the deployment of mobile CDCMs combined

with multiple-rocket launchers (MRLs), coastal artillery, and ballistic missiles, Iran hopes to overwhelm enemy air defenses.

Torpedoes

In addition to mines and anti-ship cruise missiles, Iran has a growing torpedo inventory. Former Iranian Defense Minister Mostafa Mohammad-Najjar said in 2007 that Iran had made great strides in building torpedoes, as well as anti-missile missiles, radar systems, and rockets.¹¹ As evidence of this progress, in 2005 Iran announced that it had begun production of two types of torpedoes.

Submarines

Iran boasts the Gulf's only submarine program. Iran has three operational classes of submarines: the KILO, YONO, and NAHANG.

KILO

Iran has three KILO-class diesel-electric submarines, all based at Bandar Abbas. These relatively modern and quiet submarines were bought from Russia in the 1990s. The first KILO, TAREQ 901, was commissioned on 21 November 1992. The second KILO, NUH 902, was commissioned on 6 June 1993, while the third KILO, YUNES 903, was commissioned on 25 November 1996.

¹¹"Iranian Defense Minister Elaborates on Military Capabilities," *Vision of the Islamic Republic of Iran Network* 2, 13 Feb 2007.



Iranian KILO-class submarine

Following negotiations to upgrade the boats with Rosoboronexport, the Russian arms agency, TAREQ began a refit at Bandar Abbas in mid-2005. The Russian shipyard Sevmash is reported to be providing technical assistance during TAREQ's refit. The other two KILOs are likely to undergo refits following TAREQ. Reportedly, an upgrade might involve the fitting of the submarines with a cruise missile capable of hitting an adversary's surface ship or land target at a range of up to 108 nautical miles.

YONO

Iran also has seven YONO-class midget submarines (also known as the IS-120, QADIR, or GHADIR). Hulls 1, 2, and 3 are currently in service, and a fourth was reportedly launched on 28 November 2007. A ceremony introducing three additional YONOs was held on 1 June 2009. Iran is building more of these midget submarines, and additional YONOs may be launched in the near future. Little is known publicly about these submarines; however, a video showing the internal fit of one of these boats suggests that they are equipped with modern, commercially available navigation and ship control systems. These boats are likely to be employed in shallow areas of the Gulf, such



Iranian President Mahmoud Ahmadinejad visiting a YONO-class midget submarine

as the Strait of Hormuz, and may be used to deploy divers.

NAHANG

Iran also has a NAHANG-class midget submarine, which became operational in 2007. Iran claims that this 25-meter submarine was indigenously designed and built. The NAHANG reportedly was designed for the shallow waters of the Persian Gulf and may act as a mothership for swimmer delivery vehicles.

Iranian Air Defense

Iran is concentrating on its ground based air defense (GBAD) assets and has put a large amount of financial resources into upgrades and acquisitions. Recently Iran acquired the



IRIN's NAHANG-class midget submarine

TOR M-1 surface-to-air missile (SAM) system and has shown interest in acquiring the S-300 SAM system from Russia. Aircraft upgrades appear to be lagging behind GBAD acquisitions.

Since the mid-1990s Iran has invested heavily in its GBAD capabilities, which indicates that it realizes the most cost-effective way to defend itself from an air attack is with GBAD systems. Most of these systems are located near key strategic sites, such as military or government installations. Iran recognizes its limitations against an air suppression strike, cruise missiles, or stealth aircraft, and is working to increase capabilities in these areas.

Iran purchased 24 Improved HAWK (I-HAWK) air defense systems from the United States in July of 1972 under the code name PEACE SHIELD. Delivery began in 1976 and ended on 4 November 1979, when revolutionaries seized the U.S. Embassy in Tehran. The I-HAWK is a medium-range, mobile SAM system. Due to the high numbers originally delivered, Iran can likely keep a number of systems operational at any time.

Iran also acquired a small number of the CSA-1, which is a Chinese copy of the Russian SA-2 system. The CSA-1 is a medium-range high-altitude SAM system.

The SA-5 is Iran's long-range SAM, and although it is an older system, it is still capable against modern aircraft. Iran is believed to have purchased anywhere from four to ten SA-5 batteries and 25 missiles from the USSR, and another ten missiles from the Ukraine by the early 1990s.

In 2006 Iran received the TOR-M1 (SA-15) from Russia. The TOR-M1 is a very capable short-range SAM system that can identify 48 targets and simultaneously engage two targets.

Iran announced in December 2007 that it has contracted to purchase an unspecified number of S-300s (SA-20) from Russia. The S-300 is a high-altitude, long-range SAM system that could significantly increase Iran's air defense capabilities.

In addition to SAM systems, Iran operates a number of anti-aircraft artillery (AAA) and man portable air defense systems (MANPADS) to augment its GBAD forces.

Chapter Four

Operations and Readiness

The IRIN suffers from the problems inherent in trying to maintain aging western-built ships without access to western support. Most of the IRIN's surface ships are a combination of United States, French, and British designs, and most are more than 30 years old. Without the ability to send these ships to foreign ship repair yards or overhaul facilities, Iran has had to maintain them as best as it can for three decades. Approximately half of the IRIN's missile-armed surface combatants are in very poor material condition, limiting their readiness and operational endurance. Despite their significant readiness problems, the IRIN would probably be able to get most of its major combatants to sea in a time of crisis or conflict.

The IRGCN operates smaller combatants and patrol boats, which have much lower maintenance requirements than the IRIN's large ships and enjoy better overall readiness. Most of the IRGCN's missile and torpedo boats are less than ten years old, and should be much more reliable than the IRIN's older ships and boats.

The IRIN's three KILO-class submarines are all past the halfway point in their estimated 30-year lifespan, and have not been sent back to Russia for overhaul. As mentioned earlier, Iran is attempting to overhaul KILO SS TAREQ, the oldest of the three boats, at Bandar Abbas Naval Base, with Russian assistance. Crew training and materiel readiness are below the

standards of western navies, and IRIN KILOs are probably not capable of detecting, tracking, or attacking modern western submarines, although they should be able to defend themselves if attacked. Despite their age and need of overhaul, the IRIN KILOs probably have fair to good readiness levels.

Iranian maritime patrol and strike aircraft are a mixture of 1970s American designs, such as the P-3 ORION and the F-4 PHANTOM, and 1970s Soviet aircraft, such as the SU-25. Iran has managed to keep most of its aircraft flying through cannibalization and probably through black market acquisition of parts, yet Iranian aircraft probably suffer from much lower readiness than most western air forces' aircraft.

Patrols

Despite these readiness problems, Iran conducts peacetime missions such as maritime security operations and patrols. Iranian naval forces in 2008 confiscated ten oil tankers that, according to Iranian press, were smuggling 4,600 tons of Iranian fuel out of the Persian Gulf. Iranian run-ins with western naval units, notably the capture of 15 British naval personnel in March 2007, suggest that Iran's naval forces are keenly interested in protecting Iranian territorial waters. Iran justified the seizure of the British personnel by saying that they had illegally entered Iranian waters. Iran also claims that its naval forces are conducting

extended patrols. In December 2008 Iranian press reported that Iranian warships were heading to the Gulf of Aden to fight the burgeoning piracy threat in that area; in February 2009 Iranian press reported that the IRIN had started to deploy ships on missions “to the high seas,” including a deployment to the Indian Ocean.

Exercises

Both of Iran’s naval services conduct regular exercises, varying in size from a handful of units conducting simple operations to up to dozens of units conducting multi-day operations over a wide area. Most of these exercises are intended to improve military training and proficiency. These exercises occasionally include test-fires of new weaponry, such as anti-ship cruise missiles or torpedoes, and Iran frequently releases media photographs or video of these weapons events. Iran very rarely conducts exercises with other navies but has in the past exercised with the Pakistani Navy. As a result, Iran’s naval forces would probably have very poor interoperability with any other navies in wartime.

At times of heightened tension, Iran conducts highly publicized naval exercises, the most

notable being the first NOBLE PROPHET exercise, which was held from 31 March to 6 April 2006. Iran held additional NOBLE PROPHET exercises in November 2006 and July 2008. Each of these exercises featured extensive coverage in the press and showcased Iranian weapons and platforms.

Training

The IRIN and IRGCN maintain officer training schools and specialist training schools, although little is known about their curricula. A few IRIN ships are probably employed almost entirely as training ships for cadets and recruits. The Shah’s personal yacht was converted to a training ship for use in the Caspian Sea in 1993. The naval base at Bandar Anzali in the Caspian hosts a naval training center, and Iranian media have often shown naval special operations forces training there. IRIN submarine crews go through a training course, probably at Bandar Abbas, but little is known about the curriculum or the attrition rate for students.

Dispersals

Both the IRIN and IRGCN will likely rely on dispersal from major bases and facilities in order to improve their survivability



MEHR

A VOSPER-class corvette firing an anti-ship cruise missile



An Iranian KILO-class submarine and small boats during an exercise

against attack. The IRGCN's small boats are especially well suited for dispersals as they are inherently hard to detect and do not require large piers or deep-water facilities. Iran's lengthy coastline, numerous islands, and many inlets and inland waterways would provide ample hiding places for most of the IRGCN's small boats. The IRIN's larger ships would be less capable of hiding along the shore or in inland waterways, but would probably attempt to disperse from their major bases to smaller facilities in order to avoid detection and attack.

Intelligence, Surveillance, and Reconnaissance (ISR)

Iran uses a variety of means to conduct surveillance along its coastline and in the Persian Gulf and Gulf of Oman. The Islamic Republic of Iran Air Force's P-3F ORION remains Iran's principal maritime patrol aircraft. Other aircraft that can conduct patrols over water include the F-27 FRIENDSHIP, the SH-3D SEA KING, and the Y-12 TURBO PANDA, but none of these has the endurance of the ORION and are probably used only for local patrols. The IRIN's large ships can conduct surface patrols of up to ten days, although they lack modern surface search radars. The IRGCN's smaller boats cannot patrol for as many days as the IRIN's ships but can make

up for their shorter endurance with their much greater numbers.

Through a combination of traditional and supplemental ISR, Iran probably maintains a fairly accurate, timely picture of the maritime traffic in its waters. Iran's numerous oil platforms in the northern Persian Gulf probably provide some supplemental surveillance capability, either through radars or simple visual observation of nearby maritime traffic. The Iranian-held islands in the Strait provide ideal locations to monitor inbound and outbound maritime traffic, as the traffic separation scheme passes within a few miles of several key islands. Finally, there are several hundred small Iranian boats and dhows afloat on the Persian Gulf every day, coming and going to every corner of the Gulf. Any of these boats could pass ISR information to Iran's naval forces by satellite phone or radio.

IRGCN Small Boat Tactics

Unlike IRIN tactics—founded on conventional naval operations during the days of the Shah—the IRGCN's tactics have grown from a combination of irregular warfare and ground force principles. Although the IRGCN has existed for more than 25 years—growing significantly more professional and structured during that

time—it has eschewed a conventional approach to naval warfare in favor of asymmetric tactics and principles of irregular warfare. The results have been adaptable tactics that leverage surprise, speed, maneuverability, mass, and deception, and which ultimately manifest themselves in hit-and-run style attacks.

Although public statements from Iranian leadership routinely emphasize their “new” style of conducting asymmetric warfare at sea, IRGCN small boat tactics are neither new nor original but are typical of historical small boat warfare tactics. Thus, in seeking to understand the types of tactics used by the IRGCN, a review of the basic principles and tactics of small boat warfare is essential.

Small Boat Warfare: Advantages and Disadvantages

Small boats offer a number of tactical advantages when operated properly in the littoral. Most modern small boats are capable of high speeds, have very shallow drafts, can be difficult to detect because of their small size, and may not be positively identified even when detected. These advantages allow small boats to operate in areas where larger ships cannot, and their high speeds and greater maneuverability are well suited for conducting hit-and-run style attacks.

While small boats do have several advantages, they are also constrained by a number of tactical limitations. For example, small boats have limited sea keeping capability, limited operating ranges, and limited endurance. Additionally, they typically have a relatively small weapons load-out, little armor or protection for the crew, and difficulty firing weapons accurately due to platform instability. Thus, small boats will generally have to be close to their target to accurately employ their weapons, will have difficulty employing their weapons accurately at high speeds or when maneuvering, and will normally operate near shore or in shallow waters.

Most small boats conduct hit-and-run style attacks using surprise or deception, capitalizing on the surrounding environment. Small boats consistently attempt to use the geography to their advantage by engaging targets that are restricted in their maneuverability, such as vessels operating in areas of high traffic density, in straits, or vessels entering or leaving port. In order to exploit these tactical advantages and attempt to overcome their inherent disadvantages, small boats will most commonly operate in groups. Operating in groups affords small boats better combat capabilities through mutual protection while also increasing their offensive firepower. Small boat tactics vary slightly depending on whether they are operating in large groups, small groups, or independently. For example, deception and surprise are more essential for a small boat operating independently. However, surprise and deception are more difficult for a large group of boats to achieve, so they will typically rely on mass and maneuver to overwhelm their target, anticipating that some of the small boats will penetrate a ship’s defenses.

IRGCN Small Boat Employment

The IRGCN has used groups of small boats since the mid-1980s, conducting a number of attacks on merchant shipping in the Tanker War. While generally operating in relatively small groups, the boats would approach the targeted vessel to very close range and then fire any number of weapons, which typically included machine guns and rocket propelled grenades, into the bridge and crew living spaces.

Current IRGCN small boat tactics are probably similar to historical IRGCN small boat tactics or, at a minimum, utilize the same principles. There is an abundance of literature available on IRGCN small boat “swarms,” some stating that hundreds of boats may be used together.

Chapter Five

Outlook

Submarines

Submarines will probably remain a key feature of Iran's naval order of battle. Iran is the only country in the Persian Gulf region with submarines, and Iranian naval leaders have stated publicly that they believe submarines are a better value than other weapons systems. The late Rear Admiral Ashkbus Daneh-Kar wrote that Iran "calculated the deterrent value of submarines—submarines could, on a purely self-sufficient basis, detect surprise attacks launched from far distances and abort them."¹²

In keeping with this focus on submarines, in August 2008 Iran reported that the Ministry of Defense's Marine Industries Organization inaugurated the production line of the QA'EM-class submarine, reportedly a 450-ton submarine. Iran has stated that this new generation submarine will be built in Iran and will



Model of a QA'EM-class coastal submarine

be equipped with torpedoes, naval mines, and missiles. According to Iran, the QA'EM will be capable of carrying out both defensive and offensive operations.

Additionally, the IRIN Commander, Rear Admiral Sayyari, announced the production of a submarine of more than 1,000 tons. This may be yet another submarine for the IRIN in addition to the QA'EM.

Surface Ships

Iran has constructed what it calls the MOWJ-class destroyer—in fact a corvette—that, once accepted into service, will probably be employed in the IRIN's operating area in the Gulf of Oman. More construction of larger ships has occurred in the Caspian. Iran announced that it began a production line of the MOWJ-2 at Bandar Anzali. Also in the Caspian, Iran has built four copies of its COMBATTANTE II-class guided missile patrol boat. These construction programs demonstrate Iran's ability to produce mid- to large-size ships. Coupled with Iran's continuing interest in self-sufficiency, these ship-building programs will likely be followed by others.

The IRIN is also retrofitting older surface combatants with upgraded weapons systems.

¹²Daneh-Kar, Ashkbus, Rear Admiral, "Operational Doctrine of the Navy of the Islamic Republic of Iran," *Saff*, issue No. 238, pp. 40–42.

For example, in 2008 Iran announced that it had installed missiles on one of its patrol craft, turning it into a guided missile patrol craft. Iran also substantially upgraded the PF-103-class patrol ship NAGHDI with missiles. This type of retrofitting will allow the IRIN to extend the usefulness of its aging fleet.

In contrast to the IRIN, the IRGCN has concentrated on acquiring and developing small, fast boats, some lightly armed and others armed with missiles and torpedoes, and will probably continue this trend.

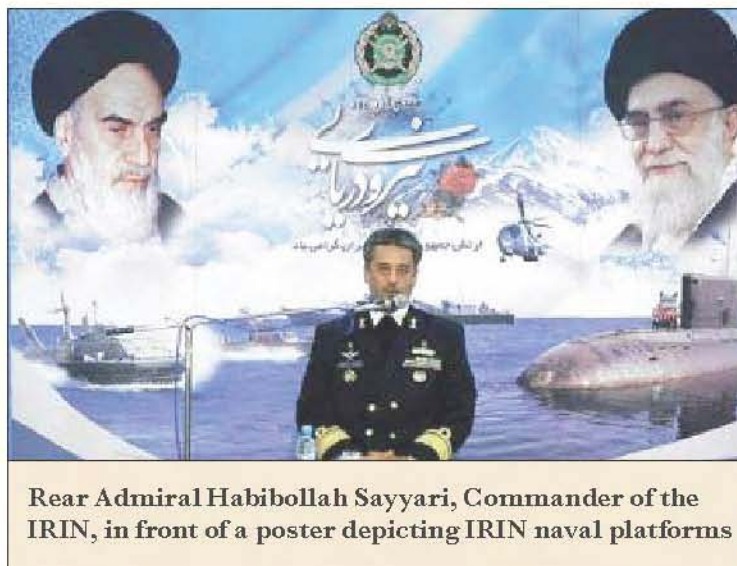
Weapons

Naval modernization is one of Iran's highest military priorities and the country continues to focus on weapons acquisition and development programs. Programs of interest include expanding inventories of existing weapons systems and increasingly sophisticated systems. Weapons, such as the Hoot supercavitation high-speed missile torpedo, may be proliferated throughout the Iranian naval inventory, as will longer range anti-ship cruise missiles, such as the Ra'ad. Finally, given the importance of mining to Iranian naval strategy, some effort will continue in this area as well.

Changes in Strategy

Iran's naval forces are unlikely to make wholesale changes to their naval strategy. However, it is clear that Iran will modify its strategy when appropriate. Rear Admiral Daneh-Kar noted that Iranian planners would review and revise their operational doctrine based on lessons learned from past and current operations, as well as on the capabilities of new weapons systems entering the service. He continued, "We cannot develop the Navy's operational doctrine in isolation."¹³

Recent activity bears witness to some of this adaptation. IRIN commander Rear Admiral Sayyari has stated that the IRIN will push operations further out into the Gulf of Oman and even the Indian Ocean to protect Iran's maritime interests, and, as mentioned earlier, Iran claims its naval forces are conducting extended patrols. A decade hence may see more frequent IRIN patrols in the north Arabian Sea or Indian Ocean. To support this, the IRIN has a plan to establish new naval bases along the Gulf of Oman by 2015 and strengthen its presence outside the Strait of Hormuz. The IRGCN will likely continue to patrol and operate inside the Persian Gulf, a place where



Rear Admiral Habibollah Sayyari, Commander of the IRIN, in front of a poster depicting IRIN naval platforms

¹³Daneh-Kar, Ashibus Rear Admiral, "Operational Doctrine of the Navy of the Islamic Republic of Iran," *Saff*, issue No. 235, pp. 32-35.

its asymmetric tactics and numerous platforms are at an advantage. However, its modernization efforts may provide it with more sophisticated platforms.

Conclusion

“The countries of this region have a sensitive strategic and geopolitical situation and the Islamic Republic of Iran can play a considerable role among these countries.”

*General Mohammad-Baqer Zolqadr
Former Deputy Commander
Islamic Revolutionary Guard Corps*

Iran sees itself as a regional power, and its naval forces, the IRIN and the IRGCN, plan to support this view as they work to expand both their weapons inventories and their capabilities. According to Iranian officials, “extra-regional” forces are neither welcome nor necessary in the waterways of the Middle East, and the Iranian armed forces have “proven during these 30 years of the revolution that they are ready to defend the territory of their country.”¹⁴

¹⁴“IRGC Commander: Missile Test Shows Iran Always Ready to React,” *Vision of the Islamic Republic of Iran Network*, 19 Jul 2008.



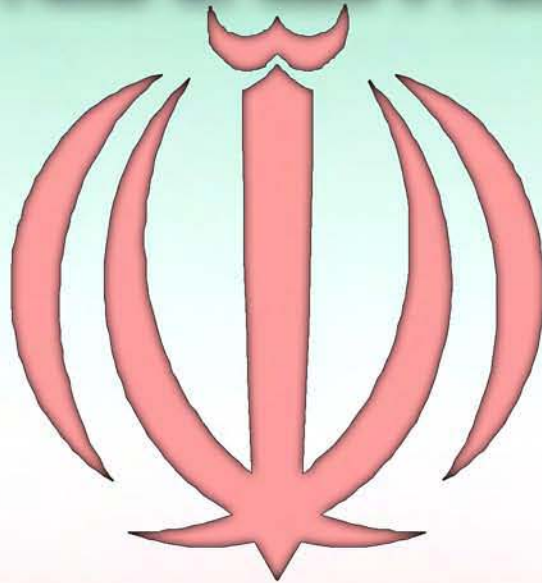
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لَا إِلَهَ إِلَّا اللَّهُ مُحَمَّدٌ رَسُوْلُهُ



لَا إِلَهَ إِلَّا اللَّهُ مُحَمَّدٌ رَسُوْلُهُ