



מרכז חיפה למחקרי מדיניות ואסטרטגיה ימית Haifa Research Center for Maritime Policy & Strategy

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2016

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Chapter 2: The Red Sea and the Persian Gulf, and influences from the Indian Ocean

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General

Admiral Alfred Mahan, the geostrategist of the American Navy, once said: "Whoever controls the Indian Ocean will dominate Asia. The destiny of the world will be decided in its waters", 1

In 2015 there were about 100,000 vessels afloat on the Indian Ocean and its tributaries, carrying about 60% of the global maritime trade, including half the number of containers, one third of general cargo, 80% of petrol tanker traffic, and 50% of fishing boats. This does not include the illegal trade in the region, such as drug smuggling, illegal migrant trafficking, and marine piracy.

Some of the countries along the shores of the Indian Ocean also have strategic, economic and political interests in marine regions far from the countries themselves. In recent years, the importance of the Indian Ocean and its tributaries has increased enormously, particularly due to its heavy maritime traffic which is channeled through a number of strategic points (Choke Points). These choke points include the Suez Channel, the Straits of Malacca, the Straits of Hormuz, the Straits of Bab El Mandeb and others. Accordingly, the countries in the region, led by India and China, have updated their marine strategy, and they are strengthening their interest and marine activity and operations in this arena.

The north-west area of the Indian Ocean, which includes the Arabian Sea and the tributaries of the Persian Gulf and of the Red Sea, has great strategic importance. The Red Sea, which forms the north-western tributary of the Indian Ocean leads to the Suez Canal, which was widened in 2015. This forms the route for most of the trade between Asia and Europe. It is also the maritime route from Asia to the southern port of Israel, the Eilat Port.

The Persian Gulf, which represents a tributary of the Indian Ocean that divides the Arabian Peninsula and Iran, has vast economic and geostrategic importance, mainly as a source of crude oil (production), from where this oil is exported in petrol tankers all over the world. In the Israeli context, the Persian Gulf in many cases

¹ Alfred Mahan: China and the Indian Ocean Region, edited by Dr. Sidda Goud, Manisha Mookherjee.

serves as the starting point for the smuggling and transfer of weapons originating in Iran to Palestinian terror organizations. The ships carrying the weapons usually arrive in Port Sudan on the shores of the Red Sea. From there the weapons are taken overland to Egypt and the Sinai Peninsula, such as the case of the vessel Karine A which was seized in January 2002, and the vessel Klos C that was seized in March 2014.²

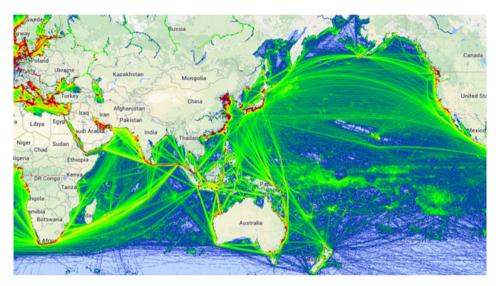


Figure 2.1 The Indian Ocean, choke points and traffic density on this global maritime route in 2014.

Around the west of the Indian Ocean, including the Arabian Sea and its tributaries, there is a presence of the Iranian Fleet, part of an independent Iranian force combating piracy. This force demonstrated Iranian marine presence around the Bab El Mandeb Straits in the framework of Operation Decisive Storm³ against the Houthis, a militant Islamist-Shiite organization operating in Yemen against the regime, with the support of the Iranians. In October 2016 (after the official end of the Operation in 2015), the Houthis, using a shore-to-sea C-802 missile, attacked a ship of the United Arab Emirates (UAE) in the Bab El Mandeb Straits area. This ship was severely damaged. In October 2016, in the same area and in two separate

² Announcement from IDF spokesperson: http://www.idf.il/1133-20437-HE/IDFGDover,aspx

A military campaign involving a coalition of Arab and Muslim (Sunni) countries, which began in March 2015, with the aim of driving back the Houthi rebels who had captured large parts of Yemen, and helping the deposed President Abd Rabo Mansour Hadi to regain control of the country.

incidents, the American destroyer Mason was attacked. The destroyer diverted the missiles fired at it and escaped these incidents without damage.

The Arabian Sea region has also seen several attacks by Sunni Muslim organizations. These include the attack in the Port of Aden in October 2000 on the American destroyer Cole by a suicide boat of Al Qaeda operatives, and the attack on the commercial port in the town of Mukalla in April 2016, where a local branch of Al Qaeda (Al Qaeda in the Arabian Peninsula) used exploding boats to attack the port's infrastructures. In the western part of the Indian Ocean, following a Security Council resolution, there is a combined task force to combat piracy, as well as independent forces from a number of other countries.

Important Navies in the Indian Ocean Arena

The Indian Fleet and India's Maritime Strategy

An examination of the strategic activity of India shows that it sees itself as a country with central influence over what happens in the Indian Ocean. This perception has a historical dimension, since for several decades India has been the heir of the British Empire with respect to control of the Indian Ocean, and a strategic dimension, starting from the 1980s, the period when India began to develop a large, modern fleet following changes and developments in marine security requirements. Later, the Indian strategic perception developed into a concept of the Indian Ocean and the western part of the Pacific Ocean as one area (the Indo-Pacific).

The Indian Navy has significantly widened the marine areas where India has a strategic interest, and divided them into two groups. The first consists of regions of prime importance, while the second consists of regions of secondary importance. The whole area covers all the Indian Ocean and seas linked to it directly and indirectly.

The first group includes all of India's coastline and regions defined in the Maritime Convention (territorial waters, EEZ etc.). This group also includes the Arabian Sea, the Bay of Bengal and the Andaman Sea (with their coasts), the Persian Gulf (including the coasts), the Gulf of Oman and the Gulf of Aden, the Red Sea and its coasts, the south west of the Indian Ocean, and all the choke points in the area, as well as all areas crossed by Indian maritime trade lines and oil transportation routes.

The second group, areas of lesser importance, includes the south east of the Indian Ocean, and places where it joins the Pacific Ocean; the south and east of the China Sea, the west of the Pacific, the south of the Indian Ocean (including Antarctica), areas where India has political and economic interests, and areas where Indian diaspora live.

The definition of the areas and their expansion is a sure sign of the intention of the Indian navy to take a position and be more actively involved in the arena. Some examples are the Persian Gulf area, the Red Sea area, and others, which have become of primary importance, notwithstanding their distance from the Indian coast. The South China Sea, on the other hand, in spite of events and activity there in recent years, is one of the secondary regions, apparently because of an intention to avoid direct involvement in clashes between the Indian navy and the Chinese navy.

In the framework of building the Indian naval strength, we should mention in particular the start of operational service of the first Indian nuclear submarine, INS Arihant, in February 2016. The body of this submarine, which is driven by nuclear power and can carry long-range missiles with nuclear warheads, was launched back in 2009. Since then it has undergone a series of marine tests and tests of its weapons systems.⁴

The Indian Navy is also equipped with an aerial arm, which in addition to MIG 29 planes on aircraft carriers, also has a large number of helicopters located on vessels for the purpose of warning and combating submarines, and eight new P81 planes made by Boeing, equipped with Harpoon missiles, unmanned aircraft and other advanced means for patrolling the seas and locating submarines.





Figure 2.2 Vessels of the Indian Navy

⁴ http://www.thehindu.com/news/national/Now-India-has-a-nuclear-triad/article16074127. ece

The Saudi Arabian Navy

Saudi Arabia is the world's largest oil exporter. Geographically it is surrounded by three choke points, so that its maritime security and strategy are of primary importance. Saudi Arabia's traditional rival in the region is Iran. The rivalry is driven by differences of religious ideology, mainly by the divide between the Sunni majority and the Shiite minority in Islam. The fact that the Persian Gulf is the body of water that separates the two countries obliges Saudi Arabia to maintain sufficient naval capability to counter the danger of Iranian expansion, which has already explicitly threatened to close the Straits of Hormuz.⁵

The development of the Saudi navy as a guardian force in the Persian Gulf and the Red Sea actually began back in 1972, with the start of the Saudi Naval Expansion Program (SNEP) in collaboration with the United States. The purpose of the plan was to enlarge and modernize the fleet of vessels and the naval bases in both arenas, mainly in order to balance the naval strength of Saudi Arabia against the fleet of the Shah of Iran. After the Iranian Revolution, between 1980-1990, the Saudi navy was reinforced with French-made frigates. In 2013 dozens of light patrol ships of the Mark V type were purchased from the USA, mainly to protect the oil installations and the areas of Saudi Arabia's Exclusive Economic Zones. Today all the large vessels are equipped with modern weapon systems and carry sea-to-sea and sea-to-air missiles. In addition, the Saudi Navy has dozens of helicopters (some stationed on ships) for patrol, detection and anti-submarine warfare purposes.

In October 2015, the USA approved in principle the sale to Saudi Arabia of four LCS (Littoral Combat Ships) of the Freedom class, with associated equipment. The total value of the deal is 11.5 billion dollars.⁶ According to unofficial reports, Saudi is seeking to purchase some 209 model submarines from Germany, and in future to increase its submarine fleet, although at present it appears that Saudi Arabia is still very far from such a purchase.⁷

TheTower.org Staff, Iranian General Threatens to Shut Down Straits of Hormuz if U.S. "Makes a Small Mistake", the Tower Magazine, July 29, 2016, http://www.thetower.org/3712-iranian-general-threatens-to-shut-down-straits-of-hormuz-if-u-s-makes-a-small-mistake/

⁶ Announcement from the Security Cooperation Agency of the US Army: http://www.dsca.mil/sites/default/files/mas/saudi-arabia-15-68.pdf.

⁷ Defense News. Retrieved 24 December 2014.





Figure 2.3 Vessels in the Saudi Navy

The Iranian Navy

The Iranian navy is perhaps the most important wing of the Iranian Army. The country's dependence on its oil exports means, from Iran's point of view, that its main route for oil (and other) exports, namely the Persian Gulf, must remain open to Iranian oil tankers and other merchant vessels.

The Iranian marine arm consists of two separate forces: the Navy, which is part of the Iranian army (The Islamic Republic of Iran Navy – IRIN), and the Revolutionary Guards Navy (IRGC). There is some overlap between the two in terms of areas of responsibility and action, but there are differences in their weapons, training and tactics of warfare.

IRIN is a conventional navy operating along the coast and out at sea, equipped with various kinds of vessels (including submarines) and aircraft. Its main area of responsibility is to provide a defense line in the Persian Gulf and the Gulf of Oman, but its activity as a marine attack force stretches to the Red Sea and northwards to the Mediterranean; to the Atlantic Ocean to the west; and to the east of the Indian Ocean and the Pacific Ocean, including visits by navy vessels to China. The navy's presence at such distances is a continuation of Iranian policy that promotes its presence far beyond the Persian Gulf. Some of the Iranian Navy's operational activity includes protection of Iranian ships against piracy in the west of the Indian Ocean (as an independent force, parallel to the Combined Marine Task Force – CMF). It should be noted that the Iranian Navy also carries out operations in the Caspian Sea.

The IRGC is responsible for protecting the Persian Gulf, and it operates from islands in the Straits of Hormuz and along the Iranian coast. The Revolutionary Guards Navy consists principally of about 1,500 small, fast vessels equipped with guided missiles and rockets to attack costal targets and large vessels, using a "hit and run" tactic of asymmetric warfare. The subject of naval mines is very developed

in Iranian warfare tactics. The Iranians, are using technologically advanced mines made locally or bought from China and Russia. Mining to close the straits and prevent sea traffic is supposed to be done, in case of need, by submarines and attack boats. Quite some time ago Iran announced that it intends to use the fleet to close the Straits of Hormuz to maritime traffic in the case of military hostilities with the USA (for further details, see the chapter devoted to the Iranian navy).

The Egyptian Navy

The Egyptian navy is considered to be the largest, most modern fleet in the Middle East and Africa. It operates in two arenas: the Mediterranean and the Red Sea. The Suez Canal, which links these two seas, allows vessels to pass from one arena to the other. Since the end of the 1970's, the task of the navy has changed. From possible warfare with Israel and Libya in the Mediterranean and the Gulf of Suez, its tasks have broadened to cover activity in the Red Sea, including patrols and protection of Egypt's coastal waters and Exclusive Economic Zones. In addition, over the years the importance of anti-submarine warfare has grown.

The internal political situation, Muslim extremism, and instability in neighboring countries (particularly Sudan) have also contributed in changes to the navy's tasks in the Red Sea. Other important factors influencing the change include the pirate attacks in the Red Sea and attacks on tourists on Red Sea beaches by extremist elements. After many years of stagnation, these led to a constant process of modernization and growth of the fleet. Since the start of the 1980's, old vessels, mostly made in Russia, have been replaced with vessels from China and western countries. In addition, a deal has been finalized to purchase ships from the United States, to strengthen the naval capabilities of the Egyptian army and to maintain its status as the largest and strongest Navy in the Middle East.

Although most of the Egyptian vessels are stationed in the Mediterranean (at its marine bases in Alexandria and Port Said), there have been significant reinforcements in two other important bases in the Red Sea (Aurdaqa and Safaga). Ships sailing from these bases carry out random checks (or based on intelligence) to locate weapons being smuggled on merchant or fishing vessels to Egyptian ports, or ships on their way to the Suez Canal. For example, in April 2013 a merchant ship sailing under the flag of Togo was stopped on entering Egyptian territorial waters in the Red Sea. The ship was found to be carrying a cargo of heavy weapons, which was confiscated in Safaga.







Figure 2.4 Vessels of the Egyptian navy

As part of the closer relations between Egypt and Saudi Arabia, the navies of the two countries have held joint training exercises in the Red Sea in order to increase their abilities to cooperate at strategic and maritime level "in order to lay the foundations for security and stability in the Middle East". The growing closeness between Egypt and Saudi Arabia reach its height in the agreement signed in April 2016, in which the islands of Tiran and Snapir were transferred from Egypt to Saudi Arabia (in a move that met with opposition in the Egyptian Supreme Court).

The Egyptian navy includes the latest helicopter carriers, four submarines of the 209/1400 class, four Romeo submarines, 11 frigates, six corvettes, 25 landing craft of various kinds, 45 missile boats at least, eight anti-submarine ships, 23 minelayers, 9 tankers, 4 supply and assistance ships, and five training vessels. In addition the Coast Guard operates about 180 rapid patrol boats in the coastal waters and in the area of marine installations.

The Pakistani Navy

For many years, Pakistani policy gave the navy secondary importance compared to the land army and the air force. Although Pakistan, as coastal country located between Iran and India, should have had a large interest in maritime economy and strategy, the process of modernizing the navy only began in 2001. The change came

⁸ Egyptian–Saudi Maritime Maneuver Underway in Red Sea http://thecairopost.youm7.com/news/136750/news/egyptian-saudi-maritime-maneuver-underway-in-red-sea

following Pakistan's involvement in the War on Terror. The navy expanded its areas of operation, in both the national and international arenas, against terror threats at sea, drug smuggling, and the war on marine piracy, including participation in the UN Task Force against piracy in the Gulf of Aden and the Horn of Africa. Most vessels in the Pakistani navy are made locally or in China, although some of them were made in western countries, including the USA, England and France.

The Pakistani navy has 10 frigates, three minelayers, 13 missile boats, 10 auxiliary ships, 12 hovercraft, 17 coast guard ships, and 6 patrol boats. The navy's aircraft include ten anti-submarine planes, 7 marine patrol planes, 4 electronic warfare planes, 12 anti-submarine helicopters and about 35 Chinese attack planes model JF-17.

The Pakistani navy also operates three Augusta model B90 submarines, two Augusta model 70 submarines and three attack submarines for shallow water. According to local publications, eight model 20S submarines have been ordered from China, some to be built in China and some in Pakistan by 2028. Declarations have also been made about a plan to build a nuclear submarine. However, it appears that the road to actual purchases is still long. 10







Figure 2.5 Vessels of the Pakistani navy

⁹ http://thediplomat.com/2016/08/china-to-supply-pakistan-with-8-new-stealth-attack-submarines-by-2028.

¹⁰ http://quwa.org/2016/05/11/part-1-will-pakistan-now-seek-nuclear-submarines.

The American Fleet in the Indian Ocean, the Persian Gulf, and the Red Sea

Since the British retreat from "East of Suez" in the 1970's, the United States has provided the main guarantee of freedom of navigation and security in the Indian Ocean and its tributaries,. Three separate fleets of the American Navy are active in the Indian Ocean. Two of them – the Sixth Fleet and the Seventh Fleet – are also active in the Atlantic and the Pacific, respectively. Only the Fifth Fleet, stationed in Bahrein, is limited by its task definition to the south of the Middle East, the coasts of Pakistan, the Horn of Africa and the Indian Ocean. The naval activity is under the command of the US Naval Forces Central Command. The task of the Fifth Fleet consists of marine security operations and collaborations with friendly navies to strengthen their operational capability and to promote security and stability in the region.

The Fifth Fleet, stationed in Bahrein, usually consists of over twenty vessels, about 1,000 shore crew, and about 15,000 sailors, air crew and marines in a battle group of aircraft carriers, landing group, fighter aircraft and assistance units. The Fifth Fleet is ready for an immediate response to anything required in an emergency, including assistance to UN peace-keeping missions and war on pirates, help at times of natural disasters, and military missions in the event of local hostilities. It is important to note that the presence of the American navy in the area is conditional on the good will and readiness of the friendly host countries.

Overcoming the tension in Iran, the war in Yemen, arms smuggling through the Red Sea and Sudan, the concern regarding instability in Saudi Arabia and Egypt, and other political and military events, have led and continue to lead to reinforcement of the American Navy in the region by means of vessels from the Sixth Fleet which is stationed in the Mediterranean. The passage of American vessels through the Suez Canal for patrol purposes in the Red Sea is a routine matter.

Here are four examples of the activity of American vessels in the Red Sea, whether for routine patrols or for special missions:

 In June 2010, 11 American ships and an Israeli missile boat sailed through the Suez Canal from the Mediterranean to the Red Sea when Iranian ships were intended to approach the Gaza coast. One day before the passage, the Egyptians permitted the passage of the Iranian ships.

- On July 2013, two ships carrying marines on patrol in the Red Sea drew close to the Egyptian coast during the removal of the Egyptian President Mohamed Morsi.
- In January 2015, the President of Yemen was captured by Shiite Houthi rebels. Two American ships carrying helicopters and marines (an amphibious assault ship and a dock landing ship) entered the Red Sea and were on alert to evacuate the American Embassy in the situation deteriorated.
- In May 2016 a missile destroyer from the Sixth Fleet in the Mediterranean came through the Suez Canal on its way to the Red Sea for a routine patrol.

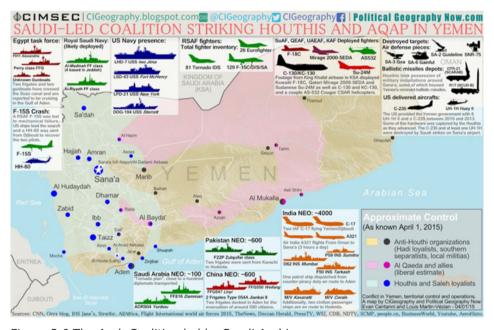


Figure 2.6 The Arab Coalition led by Saudi Arabia

The "Decisive Storm Operation" in the Seas around Yemen

The uprising of the Shiite Houthis against the Sunni regime in Yemen began in June 2004. At the end of 2009, Saudi Arabia imposed a marine blockage on the coast of northern Yemen as part of an escalation of the fighting against the rebels in the south of the Arabian Peninsula. Forces of the Saudi Navy carried out searches on vessels, and even took control of an Iranian merchant ship that was

shipping weapons to the rebels. In January 2011 a civil revolution began in Yemen (following the revolution in Tunisia, as part of the "Arab Spring"). Later, in May, a civil war broke out in the country. In September 2014, the Houthi rebels captured the capital. On 26th March 2015, a coalition of Arab and Muslim countries, led by Saudi Arabia, embarked on "Decisive Storm Operation", with the aim of driving the rebels back and restoring power to Sunni government.

The organized naval activity began on 28th March 2015, with the evacuation of Saudi, Arab and Western diplomats from the town of Aden, by vessels from the Saudi Arabian navy, due to fears of a Houthi takeover. On 3rd May the first ground force of the Saudi coalition landed in Aden. At the same time, the Saudi Navy placed a blockade on Yemeni ports. The purpose of the blockage was to prevent the rebels from obtaining reinforcements of weapons and men from Iran (activity that both the Iranians and the rebels denied).

Forces from the Emirates, Kuwait, Bahrain, Qatar and Jordan joined the Saudi Arabian forces. Egypt and Pakistan announced they would also join the campaign, and that they intended to supply fighter planes, naval forces, and if necessary ground forces as well. Four ships of the Egyptian navy entered the Red Sea sailing towards the Gulf of Aden. Their role in the operation was defined as "securing the strategic waters that control the southern entry to the Suez Canal".

The Egyptian vessels patrolled the Bab El Mandeb Straits, where they discovered the presence of vessels from the Iranian navy (a destroyer and a corvette), that arrived from the Gulf of Aden, where they had previously been engaged in the fight against piracy. Apparently warning shots were fired, and there was fear of a naval clash between the Iranian navy and coalition forces. The Saudi navy increased the range of its marine patrols in order to prevent the arrival of reinforcements and weapons to Yemeni ports. This activity was joined by the Pakistani navy, while the naval forces of Egypt, Saudi and the UAE were on operational alert on the western side of the Houthi forces in order to threaten their advance.

At the same time, the USA sent the aircraft carrier Roosevelt to join the five American vessels already in the region, in order to stop any Iranian vessel that might be carrying weapons to the rebels. Indeed, Iranian ships carrying supplies for the Houthis were forced to turn back to Iran when the United States threatened to open fire. Also two helicopter carriers manned by marines (USS Iwo Jima and USS Fort McHenry), which were engaged in routine activity in the Red Sea, were placed on alert to help in the operation. When the aircraft carriers joined the American forces, their presence was defined by the Pentagon thus: "To respond to

the deteriorating security situation...". This purpose was announced shortly after the Saudi announcement of the end of military activity and the start of contacts to find a political solution. In spite of the end of military activity, the Iranian flotilla remained in the area.

During October 2016 there were three incidents involving the firing of shore to sea missiles in the Bab El Mandeb Straits area by Houthi rebels. In the first case an Emirates ship was severely damaged, and in the other two (separate) incidents, missiles were fired at the American destroyer Mason, which returned fire and escaped from the incidents without damage.

Combined Maritime Forces – CMF, and marine activity against pirates in the Gulf of Aden

Since May 2008, at the request of the United Nations and according to the relevant decisions of the Security Council and international law, three task forces operating in the framework of the Combined Maritime Forces (CMF) have been active in the west of the Indian Ocean, as part of the international effort to combat marine piracy in the Gulf of Aden, the Horn of Africa and the Indian Ocean – the "Ocean Shield Campaign".

The CMF is a multinational task force set up to promote security, stability and economic prosperity in an area of 3.2 million square miles of international waters which involve a significant part of global maritime traffic. The main tasks of this force are to fight terrorism, to prevent marine piracy, to encourage and support international cooperation, and to ensure a safe marine environment.

The CMF consists of three task forces: CTF-150, in charge of marine security and fighting terror; CFT-151, in charge of combating marine piracy; and CTF-152, in charge of security in the Persian Gulf and of international cooperation.

31 countries participate in the multinational task force: Australia, the Emirates, Italy, the Seychelles, the United States, Bahrein, Belgium, Britain, Germany, Denmark, South Korea, Holland, the Philippines, Greece, Japan, Jorden, Quiet, Malysia, New Zeland, Norway, Singapore, Spain. Iraq, Saudia Arebia, Portugal, Pakistan, France Canada, Turkey, Thailand and Yemen.

Supreme command rests with the Commander of the Central Command of the American Navy, while commanders of the three task forces rotate among the participating countries. The General Command is located at the American naval base in Bahrein.

Other "independent" forces joining in the activity are fleets from China, India, Iran and Russia. The European Union operates the "EU Naval Force Atlanta", which includes Spain, Germany, Belgium, France, Holland, Norway, Portugal, Sweden, Italy and Estonia.

Shipping companies have also adopted various means to prevent attacks on their ships, from technological means to placing armed security teams on ships, all according to the guidelines in BMB4 11 (Best Management Practices for Protection against Somalia Based Piracy), a book of instructions and suggestions for captains and operators of merchant vessels who pass through areas at risk of pirate attacks.

According to the IMB (International Maritime Bureau), ¹² in 2010 there were 124 attacks in the Gulf of Aden, the Red Sea and Somalia. In 2011 there were 198 attacks; in 2012 – 70 attacks; in 2013 – 10 attacks; in 2014 – 10 attacks; while in 2015 there were only three attacks. A combination of factors, including the combined efforts of the naval forces, the activities of shipping companies, preparing ships to resist attack following the BMP4 document, stationing armed protection teams on ships, political stabilization in Somalia, and the growing objections of the Somalian public to piracy in its territory have brought about a considerable reduction in attacks. However, it must be remembered that the Somali pirates still have the capability and the means to continue their activity, and every success, however isolated, could increase their motivation for more attacks (For further details, see the chapter devoted to Maritime Piracy and Armed Robbery at Sea).

Activity of the Chinese Navy - The String of Pearls

In recent years China has been taking aggressive action and reinforcing its military presence at key points in the South China Sea, by constructing harbors and landing strips on sandbanks and islands. This policy has led to diplomatic and legal disputes with other countries in the region. At the same time, actions are taking place in the Indian Ocean area to expand the Chinese naval presence through construction of the infrastructure for a civilian marine and Navy presence in countries friendly to China. This strategy became known as "The String of Pearls" and is part of the Maritime Silk Road initiative. The assessment is that the Chinese Navy and Air Force will set up and renovate 15 ports for civilian and military use, from Hong Kong to the Horn of Africa. The ports include Hong Kong, Sanya on the Chinese

¹¹ Guidelines for Operators of Merchant Ships on Planning and Executing Passage through Areas at Risk of Pirate Attacks: http://eunavfor.eu/wp-content/uploads/2013/01/bmp4-low-res sept 5 20111.pdf

¹² World Shipping Bureau: https://www.icc-ccs.org/piracy-reporting-centre

island of Hainan, a group of 7 islands and sandbanks in the South China Sea, the port of Sihanoukville in Cambodia, Kra in Malaysia, Coco Island and Sittwe in Myanmar, Chittagong in Bangladesh, Hambantota in Sri Lanka, Marao in the Maldives, Gwadar in Pakistan, Al Ahdab in Iraq, Lamu in Kenya, and Port Sudan in Sudan. The assumption is that with the help of these ports, China will aggressively defend its naval routes, both local and regional, and the relevant choke points. It appears that China intends to redraw the geopolitical lines in South Asia, with the intention of restoring the days of its greatness and status by building ports, oil pipelines and transport infrastructure.



Figure 2.7 The String of Pearls of China and ports of the Chinese Navy in the Indian Ocean Arena

Each "pearl" in the string represents permanent Chinese presence, from the Chinese coast, along the sea routes in the South China Sea and the Indian Ocean in East Africa, through the Red Sea, all the way to the Mediterranean. The "string of pearls" is an initiative of the Chinese government, economic in nature, whose purpose is two-fold: to secure the import routes for agricultural, energy and quarrying goods (mostly from Africa and the Middle East) to China, and to secure China's export routes to Europe. Ports that are not on Chinese soil are built according to various models of economic cooperation with the countries in whose territory the port is located, such as BOT, ¹³ Joint Venture (JV), and others.

The activity of the Chinese navy in the Indian Ocean, the Gulf of Aden and the Red Sea, includes well known and documented passage through the Suez Canal to

¹³ Build - Operate - Transfer.

the Mediterranean. The Chinese authorities even openly declare their intention to continue submarine patrols on its maritime merchant routes, and their intention to set up ports and infrastructures to support the activity of the Chinese navy in the Horn of Africa in order to prevent pirate raids. The intended sale of eight Chinese made submarines to Pakistan will undoubtedly secure free and permanent access by the Chinese navy to Pakistani ports. The Seychelles and the Maldives are also candidates to serve as secondary bases and thus permit a permanent presence of Chinese vessels in the middle of the Indian Ocean. The establishment of the Chinese military base in the port of Obock in Djibouti is more or less a reality.

Even if there are disagreements on the question of whether the "String of Pearls" strategy is a purely economic move or whether it derives from a wish to acquire areas of military influence, as Professor James Holmes said: "Just because China has not yet built bases in the Indian Ocean, that doesn't mean it won't build them in future". 14

Conclusion

This presentation of changes in the naval strategy of various countries, plus the survey of the growing tendency in those countries to adapt their navies to the 21st century by acquiring modern vessels and the process of renewal and growing strength, leads to the conclusion that there is a naval arms race in Asia.

India has intended to implement its marine strategy for many years and to maintain its status as the leading country in the Indian Ocean. The expansion of the Indian navy to the status of a long distance Blue Water Navy, equipped with aircraft carriers and the latest submarines, will help it to achieve its ambition, although it could well encounter opposition from the aggressive Chinese navy, which is eager to create facts in the Indian Ocean and along the African coast, as it did in the South China Sea.

Nor must we overlook the development of the Pakistani navy, after many years of neglect. Now, when it is clear to the Pakistani authorities that a country with a long coastline and a strategic position needs a strong, modern navy, we can assume that it will continue to respond to Chinese proposals to balance its capabilities in the northern Indian Ocean against other players in the arena.

¹⁴ China Could Still Build 'String of Pearls' http://thediplomat.com/2014/11/china-could-still-build-string-of-pearls

Since China has upgraded its activity in the South China Sea and the Indian Ocean (as well as in the East China Sea), countries along the coasts of these seas have changed their marine strategy and they are accelerating the rate of building and renewing their fleets. These changes signify a marine arms race in South Asia and South East Asia.

China, which for generations adopted a land based strategy, now understands the urgent need – as it becomes one of the world's leading importers and exporters – to nurture its marine trading routes and has adopted the "string of pearls" strategy of setting up bases and ports along its central shipping routes, and thereby to secure its imports of energy, quarried materials and food from the Persian Gulf and from Africa, and its exports to Europe, as well as to improve its global geopolitical status.

Iran's intention is to expand its influence in the countries of Arabia and on their shipping routes by strengthening is naval military presence, in addition to the political and religious actions it carries out. The commander of the Iranian Navy, Admiral Sayyari, announced that the Iranian Navy maintains a presence in the north Indian Ocean and in the Gulf of Aden, and Iran intends to continue this presence on a permanent basis. Indeed, Iran has military naval links and activity with Sudan, Somalia and Eritrea. The presence of the Iranian fleet in the Horn of Africa and in the Persian Gulf and its activities against piracy, as well as its involvement in the war in Yemen, have a significant effect on the nature of the Egyptian and Saudi Arabia presences in the region, and on the intensity of this presence. The shared concern in the face of the Iranian moves have led to increasing cooperation between Egypt and Saudi Arabia, in the attempt to disrupt Iran's status and frustrate its attempts to take control of the approaches to the Red Sea.

The political relations between Saudi Arabia and Egypt are improving in view of their shared mission of preventing Iran becoming stronger in the Red Sea. The joint maneuvers, policy coordination, and the agreement regarding the return of the islands of Tiran and Snapir in the approach to the Gulf of Eilat in April 2016, are evidence of the concerns of both parties and their attempts to change the situation, or at least to block Iranian advances. The Egyptian purchase of two helicopter carriers, and its amphibious operations capabilities, give it the possibility of locating "two naval bases" in the Mediterranean or in the Red Sea or in the Arabian Sea, depending on developments and the nature of the required response. There is no doubt that such activity represents a significant change in Egyptian policy regarding the dispatch of military forces to regions of interest, in view of its growing ties with Saudi Arabia and moderate Sunni Muslim countries.

Piracy in the Gulf of Aden and Somalia has been almost entirely wiped out, thanks to military activity by more than 30 countries and proper preparations by the shipping sector. Aerial patrols and concentrated activity of vessels and control-taking forces have contributed to international cooperation and the acquisition of operational experience by the fleets involved in the activity.

The fact that the Red Sea is a route for smuggling weapons, usually originating in Iran, to Palestinian terror groups, Hezbollah and the Houthi rebels, adds a dimension of military activity, with the aim of finding and stopping vessels involved in the smuggling. These ships usually arrive at Port Sudan. From there the weapons are taken by land to Egypt and the Sinai Peninsula. A number of countries are involved in the efforts to stop this smuggling.

To sum up, it appears that the two main events in terms of geopolitical and geostrategic influence on the situation in the Indian Ocean and its tributaries are the frictions in the Persian Gulf between the Iranian Revolutionary Guards Navy and the navies of America and its allies, and the Chinese "string of pearls" strategy. For many reasons, it is possible that these two conflicts could expand to other marine regions, mainly around the Horn of Africa and the Red Sea.