MILITARY POWER AND STRATEGY OF IRAN

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The series of events which followed the September 11, 2001, terrorist attacks in the US have finally resulted in the strengthening of Iran's position in West Asia. Iran always had the potential to become a big regional power in West Asia because of its geographical size, population and resources. But because of a number of reasons, it was denied this opportunity during much of the 20th century. The closest that Iran came to securing such a position was during the time of Reza Shah Pahlavi during the 1960s and 1970s. In the context of the British withdrawal from the Gulf region during this period, Iran saw itself as responsible for filling the void left over by Britain and maintaining stability and security in the region from a position of strength.

The Iranian Revolution disrupted the plans of the Shah and Iran entered a period of isolation in international politics when its relations with the two superpowers and most of the states in West Asia were strained. The Iran-Iraq War which followed almost immediately after the revolution severely undermined Iran's economy. At the same time, the conflict helped unify Iran politically under Ayatollah Khomeini. Iran's strained relations with the major powers did not prevent it from involvement in the politics of the wider West Asian region, especially in Lebanon. In fact, as will be discussed later in this paper, Iran's activities in West Asia during the 1980s, paid rich dividends in the 1990s and the period following the September 11 attacks. Militarily, Iran's capabilities were very much weakened due to the eight-year war. During the

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1990s, Iran got the opportunity to rebuild its military strength because of its lack of involvement in any major conflict. A major factor that worked in favour of Iran was the destruction of Iraq's military might. During the Iraqi invasion of Kuwait in 1990, Iraq had the fourth largest army in the world. That war, the subsequent decade-long sanctions and, finally, the US invasion and occupation of Iraq in 2003, completely decimated the Iraqi armed forces. This has left Iran as an influential regional military power in the Gulf region, besides the US which is basically an external power.

This paper will assess Iran's military strength by studying its force structure which includes the Regular Iranian Armed Forces and the Islamic Revolutionary Guards Corps (IRGC) which is also called the Pasdaran in Farsi. An attempt will be made to understand the differences in the duties and responsibilities of these two forces and, thereby, their impact on Iran's defensive and offensive military capabilities. This paper will also study Iran's nuclear and missile capabilities and look into its links with radical Islamist guerrilla movements like Hezbollah, Hamas and Palestinian Islamic Jihad. Iran's links with Hezbollah are important not only because of Iran's role in creating that movement but also because of its ability to use Hezbollah to attain its strategic objectives. Besides analysing these factors, Iran's strategy, operations and tactics during the Iran-Iraq War will be looked into as this was the only major conflict that Iran fought during the last century. Such an analysis will help us to understand how Iran is likely to act in any future conflict in that region.

IRAN'S MILITARY STRATEGY AND TACTICS (IRAN-IRAQ WAR)

The objective in this section of the paper is not to go into the history of the Iran-Iraq War or the reasons for its outbreak. It will merely look into the military strategy and tactics deployed by Iran during the war. At the time of the Iraqi invasion, the Iranian armed forces had a standing strength of 413,000 men. The army strength was about 285,000 men. The Iranian Navy was 28,000 strong and the air force strength was about 100,000. The combat formations of the army basically consisted of three armoured divisions and an armoured brigade. This consisted of about 2,000 tanks, 800 armoured personnel carriers and 1,000 guns.

There were three infantry divisions, one special forces brigade, and an airborne one. The Army Aviation Command had about 58 aircraft and over 200 helicopters. There were four battalions of United States Hawk surface-to-air missiles. Tanks included the United States M-47, M-48 and M-60, as well as British modified Chieftains. Light armoured vehicles included the British Scorpion, Fox and Ferret, the American M-113, and the Soviet BTR series. The guns included the 75mm, 85mm, 105mm, 155mm, 175mm and 203mm. The anti-tank missiles included the French ENTAC and SS-11, and the United States Dragon and tube-launched, optically tracked, wire-guided missile (TOW). Iran also had many of the latest American helicopters.

The Iranian Navy had 11 destroyers, frigates and corvettes, and 23 other surface craft, together with 16 hovercrafts; but no submarines. The destroyers were armed with British Sea Cat missiles. The Naval Air Service had about 24 aircraft for maritime reconnaissance, and used about 30 helicopters in an anti-submarine warfare role. There were also three battalions of marines. The Iranian Air Force had about 460 combat aircraft, mainly F-4 Phantoms and F-5s, but more modern ones included 79 F-14 Tomcats, and 16 RF-4Es, backed by a tanker squadron, and squadrons of transport aircraft. Missiles included the Phoenix, Sidewinder, Sparrow, Maverick and Condor. Airfield installations were protected by the British Rapiers and US Tigercats. The air force had about 164 helicopters, mainly American, but also 16 French Super Frelons. The biggest weakness of the Iranian armed forces was that they had not completely absorbed all this hardware. About 40,000 military advisors, training staff and technicians, mainly American and British, were in Iran to aid this absorption process.[1] This process was brought to an abrupt halt due to the Iranian Revolution.

MILITARY STRATEGY

Iraq had invaded Iranian territory when Iran was barely recovering from the revolution that had taken place earlier. Iran was also facing sanctions from the international community, especially since the beginning of the American hostage crisis in Tehran at the end of 1979. While Iraq had mostly relied on armour and

1. Edgar O' Balance, *The Gulf War* (London: Brassey's Defence Publishers, 1988), pp.14-15.

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artillery during its invasion, Iran was badly in need of weapons spare parts. The Iranian Regular Armed Forces were not trusted by the Iranian revolutionary authorities and many purges had been conducted, leading to the execution of several senior officers. Many more of the officers had been arrested and imprisoned on suspicion of plotting against the government. There was a severe shortage of technically qualified people to operate battle tanks and fighter planes. In such circumstances, the Iranian preference was to rely on its excessive manpower in the form of the IRGC infantry and thousands of Basij volunteers. The IRGC was a paramilitary force that had been created and developed by the ruling Shia clergy as a political and ideological force immediately after the revolution.

As most of the Iranian leadership did not expect an invasion from Iraq, they did not have any proper military strategy at the beginning of the war. But Khomeini's call for converting every occupied city and town into a "Stalingrad" was heeded by the Iranian fighters and brought a halt to the advance of the Iraqis. The Iraqis' blunder of excessively relying on armour with insufficient infantry helped the Revolutionary Guards to effectively engage the Iraqis in urban warfare.[2] During the rainy season of 1980, the Iranian military strategy was to use this period to prepare their armed forces for the offensive drive in the spring until which the Iraqis were not expected to act. In the following period, the Iranians successfully used their superiority in numbers by launching "human-wave" attacks against the Iraqis and dislodged them from Iranian territory. In a battle, the Iranians would launch successive human-waves of infantry against Iraqi positions, overwhelming them in the process. From the Iranian viewpoint, it was possible to gain a large number of recruits for such heavy-casualty operations because of the Islamist revolutionary fervour that was prevalent in Iranian society. After the Iraqis had been evicted from

2. Chaim Herzog, "A Military-Strategic Overview," in Efraim Karsh, ed., *The Iran-Iraq War: Impact and Implication* (London: Macmillan Press Ltd., Jaffee Centre for Strategic Studies, 1989), p. 260.

most of the areas occupied in 1980, Iran invaded Iraq with the objective of capturing Basra as the Iranian leadership believed that the fall of that city would prompt the Iraqi Shias to revolt against Saddam's government.

Except for a few exceptions like the battle of the Fao Peninsula in 1986, Iran's strategy of human-wave attacks did not work against well defended Iraqi positions. After the initial defeats, the political leadership in Iran decided to fight a war of attrition against Iraq with no grand offensives in 1983.[3] But after winning some victories, a debate ensued between the Iranian leaders who were either the supporters of the Regular Armed Forces or the Revolutionary Guards. The Regular Armed Forces and their political supporters favoured fighting a war of attrition against Iraq where Iran's superiority in numbers would wear down the Iraqis. But the supporters of the Revolutionary Guards or Pasdaran, like the Speaker of the Iranian Majlis, Hashemi Rafsanjani, believed that the best strategy was to continue to launch human-wave attacks and push into Iraqi territory. What really came to be implemented was the latter strategy which paid no major dividends after the Fao victory. Finally, after rebuilding their armoured forces, the Iraqis pushed back the Iranians and advanced almost twenty-five miles into Iranian territory, forcing the Iranians to call a ceasefire. During the course of the war, the Iranians had greater success in the northern mountainous region where they effectively used Kurdish fighters from the Kurdish Democratic Party (KDP) and commando units from the Regular Armed Forces to push into Iraqi territory.

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The military strategy with regard to the air force was to prevent it from being used in operations where it was likely to suffer huge losses because of Iran's lack of access to technology. These assets were mostly used against less-defended and vulnerable economic targets like oil refineries and oil tankers. There were few instances of the Iranian Air Force engaging in dog-fights with the Iraqis, and

3. Dilip Hiro, *The Longest War: The Iran-Iraq Military Conflict* (London: Grafton Books, 1989), p. 96.

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Iranian fighters did not take part in many tactical missions or provide much support to ground troops during battle. The Iranians conducted air strikes and fired missiles at Iraqi urban centres in retaliation for Iraq's bombing of Iranian cities. The naval strategy was perhaps in certain ways much more important to Iran than the ground or air strategies as this was the only area where Iran could economically hurt Iraq's supporters in the Gulf and possibly influence the international community to put pressure on Iraq in a manner favourable to Iran. This was because of the vast quantities of energy supplies that were passing through the Straits of Hormuz in the Gulf. In the later phases of the war, Iran threatened to close these straits if Iraq conducted attacks on Iranian ports or oil installations. Iran also conducted attacks against shipping in the Gulf without claiming any responsibility in the hope that Iraq would be blamed for them. These strategies were employed along with the expected ones of denying Iraq access to the Gulf while making sure that Iranian ports remained opened.

MILITARY OPERATIONS

As Iranian military operations were heavily dependent on the infantry, the Iranians used anti-tank infantry weapons like the RPG-7 and Sagger anti-tank rockets. This was to compensate for Iran's lack of enough operational battle tanks to fend off Iraq's armoured columns. Later on during the war, Iran received even the more advanced TOWs from the US for the release of American hostages in Lebanon. These missiles were then reported to be used against the Iraqis during the war. Iranian soldiers were mostly armed with West German G-3 and Russian Kalashnikov rifles. Besides the British Chieftain tanks, the Iranians used Libyan supplied Soviet T-54, T-55 and T-62 tanks. Iranian artillery played a major role from the very beginning of the conflict. A majority of the Iranian fighter planes which were used in combat were F-4 Phantoms. More than the fighters, Cobra helicopter-

gunships saw action in the form of providing ground support, especially during the early stages of the war. The Iranians had SAM-7 missiles in their stocks which they received from Syria and Libya.[4] Negotiations with the Americans helped Iran obtain Hawk anti-aircraft missiles. The missiles that were launched against Iraqi cities were of the Scud-B type which they had received from the Libyans.

Most of the Iranian air attacks on Gulf shipping had been launched from the airfield on Lavan Island, in the Straits of Hormuz, roughly opposite Qatar, and had been carried out in the southern part of the Gulf. In June 1985, the Iranians positioned airworthy Phantom aircraft at Bushehr, enabling them to attack shipping much further north in the Gulf than before.[5] Iran further improved its capability to hit vessels in the lower Gulf by building a helicopter base on its offshore oil platform at Reshadat which is 75 miles from the Qatari coast. [6]The Iranian Revolutionary Guards Navy used Swedish Boghammer boats against targets at sea.

MILITARY TACTICS

During a typical human-wave attack, the infantry would attack in rows, with armour and artillery providing flank support which would fire a rolling barrage over the heads of the advancing troops. This cover would last only for a short distance. Then the infantry would move in distances of about two miles each time. After covering such a distance each time, the Iranians would halt and consolidate before making the next rush forward, often in the face of artillery and machine-gun fire. During Operation Fatah al-Mobin in March 1982, the Iranians managed to encircle the Iraqis and squeeze them in a pincer movement. Through their local intelligence, the Iranians identified and located Popular Army detachments between regular formations. They then targeted these formations and destroyed them so that the flanks of the Iraqi regular brigades would be exposed. In this manner, the Iranians encircled the Iraqis and cut them off from their supply lines.[7] The Iranians also used the nature of the terrain to stop the

4. O' Balance, n. 1, p. 73.
5. O' Balance, Ibid., p. 171.
6. Hiro, n. 3, p. 146.
7. Hiro, Ibid., p. 80.

advance of the Iraqi invasion force. For example, the Iranians opened the sluice-gates on the Kharkheh River, caused flooding to stop the advance of the Iraqi Army in 1980.

The Iranians effectively used commando tactics during Operation Wal-Fajr-8 when they infiltrated frogmen to the west of the Shatt al-Arab waterway to secure the Fao Peninsula. They had used the same tactics in the Haweizeh Marshes when they utilised small crafts and rubber boats to ferry troops. The Iraqis could not completely take back the Majnoon Island complex then as the Iranians controlled the floating roads and platforms that criss-crossed the reed filled marshes. They used helicopters, motorcycles, and boats to move about and fight. The Iraqis could not use their artillery and tanks in the narrow roads to counter-attack.[8] The Iraqis found it hard to recapture the Majnoon Islands as Iran had by then established specialised amphibious commando units of about 1,000 men.

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In the sea, the Iranians began to respond to the tactics used by the Iraqis while bombing the Kharg Island terminal. The Iraqi fighters flew at very low altitudes, evading Iranian radar, and then rose sharply near the target. This enabled them to fly directly over the Iranians' air defence equipment, take effective electronic counter-measures (such as jamming the radars of the enemy missiles) and direct their anti-radiation air-to-surface missiles with active radars at their targets. This was the task of the first wave of attacking Iraqi jet fighters. The succeeding waves fired stand-off air-to-surface missiles at the range of 3.5 to 5 miles. This caused considerable damage to the Kharg terminal. The Iranians soon learned to identify the flight profiles of the Iraqi warplanes. They reinforced their short range air defence to compel the Iraqi attackers to stick to higher altitudes. They refurbished their electronic counter-counter-measures and they adopted radar

8. Hiro, Ibid., p. 104.

emission tactics which made it difficult for Iraqi anti-radiation missiles to home in on their targets. The Iranians modified some of the key oil facilities to reduce their radar emissions and used decoys or radar reflectors to mislead Exocet anti-ship missiles.

The Iranians began to shift their oil transportation facilities when attacks against Kharg increased. They ferried crude oil in Iranian tankers from Kharg to Sirri Island, 340 miles to the south and out of the range of Iraqi warplanes. There it was stored in "mother ships" for transfer to the customer's tankers. This route came to be known as the "Sirri Shuttle."[9] The Iranian Navy began providing protection to oil tankers and ships coming to the Kharg Island and Bandar Khomeini ports by arranging them into convoys and making them sail close to the Iranian coastline to obtain maximum protection from land-based aircraft, guns and missiles. Some of these convoys also towed rafts on which large radar reflectors were fixed to attract enemy missiles away from the ships themselves. The Iranians also diverted Exocet missiles fired by the Iraqis away from ships by tethering gigantic balloons to barges towed behind the convoy.[10]This was in a situation when the Iraqis declared a "Naval Exclusion Zone" in the Gulf area to prevent the functioning of Iranian ports.

In 1984, Iran decided to strike at shipping visiting Saudi Arabian and Kuwaiti ports and oil ports without claiming responsibility in the hope that the blame would be put on Iraq. In such an attack, first a 'spotter' plane would locate the target and then a single F-4 Phantom aircraft would appear, release its Maverick missiles and quickly disappear.[11] From 1986 onwards, the Iranians began to increasingly use helicopters to carry out missile attacks on ships in the Gulf as they had a shortage of fixed-wing aircraft and also because by flying low over the water, they minimised radar detection.[12] Because of lack of aircraft, aircrew, spares and air-to-surface weapons, the responsibility for anti-shipping operations were increasingly shifted from the air force to the navy.[13] Iranian

9. Hiro, Ibid., pp. 144-145.
10. O' Balance, n. 1, p.170.
11. Martin S. Navias and E.R. Hooton, *Tanker Wars: The Assault on Merchant Shipping During the Iran-Iraq Crisis: 1980-1988* (London: I.B. Tauris and Co. Ltd., 1996), p. 77.
12. O' Balance, n. 1, p. 183.
13. Navias and Hootonn, n.11, p. 87.

frigates began to fire Sea Killer missiles at ships from September 1986 and the naval branch of the Revolutionary Guards used small craft to release mines into the Gulf waters. Towards the end of the war, the Revolutionary Guards began to use fast-attack craft to strike at oil tankers and US Navy ships. These Boghammer Marin fast patrol boats were fitted with posts for heavy machine-guns and were usually manned by 2 or 3 Pasdaran who also used RPGs.[14] The US retaliation for such strikes led to the loss of many Iranian naval assets. On rare occasions, the Iranians also fired their HY-2 Silkworm missiles at oil tankers and oil terminals in Kuwait.

DRAWBACKS IN MILITARY STRATEGY AND TACTICS

The Iranians managed to drive back the Iraqis from their territory using human-wave attacks but when it came to invading Iraq itself, the same method failed to achieve the objectives for the Iranians. The main reason for this was Iran's excessive reliance on infantry, with little armour or air support. While such attacks worked effectively on Iranian territory, they did not produce the same results on Iraqi soil because of the Iraqis' use of the strategy of static defence. This method which had not allowed the Iraqis to advance much into Iranian territory, helped in the development of a strong defence network of miles of trenches, sand bars, mines, sensors and barbed wire on the Iraqi frontier. Such a network stopped further advance of human-waves into Iraqi territory.[15] During Operation Ramadan in 1982, armoured units were placed well behind the advancing Basij and Pasdaran troops, making the attack ineffective.[16] The same mistake was repeated during Operation Muslim Ibn Aqil which was also conducted in 1982. During this operation, human-wave attacks were not very effective because of the mountainous nature of the terrain. On the other hand, during Operation Wal Fajr-1 in 1983, an Iranian armoured division advanced steadily into Iraqi territory without any infantry support. The Iraqi counter-attack by its armoured units resulted in the

14. John Bulloch and Harvey Morris, *The Gulf War: Its Origins, History and Consequences* (London: Methuen London, 1989), p. 194.
15. Herzog, n. 2, p. 263.
16. O' Balance, n. 1, p. 96.

complete decimation of the Iranian division. The failure to provide infantry support and exploit the earlier successes was attributed to the political rivalry between the Revolutionary Guards and the Regular Armed Forces.

Politics was also responsible for the launch of a disastrous operation by the Iranians in 1981. When the Regular Armed Forces were criticised by the religious clergy for lack of action, President Bani Sadr, who was also the commander-in-chief, launched a premature offensive led by tanks across the Kharkheh Plain. As it was the rainy season, most of the tanks got stuck in the mud and a complete armoured division was lost. It took a long time for the Iranians to recover from this loss. The Iranians could achieve spectacular breakthroughs only by exploiting the gaps in the Iraqi defence network. The Iranians could capture the Fao Peninsula and Majnoon Island complex in the Haweizeh Marshes by crossing geographical obstacles considered to be impassable by the Iraqis. The Iraqis had not made much preparation to defend against attacks from these sectors. The Iranians used the cover of night and rough weather to ferry thousands of troops across such areas. But once Iranian troops were on firm ground, they could advance little because of the lack of armour and air support.[17] This situation had a bearing on events that occurred during the last year of the Iran-Iraq War. The Iraqis managed to push back the Iranians and advance well into Iranian territory. Even at sea, the Iranians underestimated the lengths to which the Americans would go to protect commercial shipping in the Gulf. In 1988 alone, the Americans sank six naval vessels which constituted one-third of the Iranian Navy in response to attacks by the Iranian Navy. Finally, an American cruiser, the USS *Vincennes* shot down an Iranian passenger plane, thinking it to be a fighter aircraft, and killed all 290 abroad.[18] The Iranian inability to advance further, along with the Iraqis' use of chemical weapons and American retaliation on the Iranian Navy, created panic among the Iranian troops and shattered their confidence. This resulted in their failure to stop the Iraqi onslaught, resulting in the ceasefire of 1988.

17. Shahram Chubin, "Iran and the War: From Stalemate to Ceasefire," in Karsh, ed., n.2, p. 15.
18. Patrick Clawson and Michael Rubin, *Eternal Iran: Continuity and Chaos* (New York: Palgrave Macmillan, 2005), p. 113.

IRAN'S ARMED FORCES STRUCTURE

Since the end of the war, Iran has focussed on filling the various gaps in its military capabilities which turned the war against Iran's favour. According to the latest International Institute for Strategic Studies (IISS) estimates, Iran has active forces of some 420,000 men. Iran's land forces comprise 350,000 men organised into four corps, with four armoured divisions, six infantry divisions, two commando divisions, an airborne brigade, and other smaller independent formations. It has some 1,613 main battle tanks, more than 725 other armoured fighting vehicles, 640 armoured personnel carriers, 2,010 towed artillery weapons, 310+ self-propelled weapons, 876+ multiple rocket launchers, some 1,700 air defence guns, large numbers of light anti-aircraft missiles, large numbers of anti-tank weapons and guided missiles, and some 50 attack helicopters.[19] Iran had an army reserve of some 350,000 men.[20] Even after the end of the war, Iran still faces the challenge of obtaining enough defence equipment to match its superiority in manpower. In reality, only one Iranian division (the 92nd) is equipped well enough in practice to be a true armoured division and two of the armoured divisions are notably larger than the others. Two of the infantry divisions (28th and 84th) are more heavily mechanised than the others.

The lighter and smaller formations in the regular army include the 23rd Special Forces Division, which was formed in 1993-94, and the 55th Para troop Division.[21] The regular army has a number of independent brigades and groups. These include some small armoured units, one infantry brigade, one airborne and 2-3 special forces brigades, coastal defence units, a growing number of air defence groups, 5 artillery brigades/regiments, 4-6 army aviation units, and a growing number of logistic and supply formations. With regard to armour, Iran has enough operational main battle tank holdings to sufficiently arm only 5 to 7 divisions according to Western standards. At present, these tanks are dispersed in relatively small groups among all of its regular army and some of the Revolutionary Guard combat units. Iran only has about half of the total holdings

19. The International Institute for Strategic Studies, T*he Military Balance: 2005-2006* (Routledge, Oxfordshire, 2005).
20. Zvi Shtauber and Yiftah S. Shapir, eds., *The Middle East Strategic Balance: 2004-2005* (Brighton: Sussex Academic Press, Jaffee Centre for Strategic Studies), p. 121.
21. Anthony H. Cordesman, *The Military Balance in the Middle East* (Westport: Praeger Publishers, 2004), p. 254.

of armoured infantry fighting vehicles and armoured personnel carriers it would need to fully mechanise its forces. Iran also has a good number of TOW and Dragon anti-tank guided missile launchers.

Iran's 120,000 Islamic Revolutionary Guards include 100,000 ground forces, 20,000 naval forces and a small air force.[22] It has bases on islands and coastal areas in the Gulf like Al-Farisyah, Sirri, Abu Musa, Khorramshahr, Latrak, and Bandar-e-Abbas, and on Halul (an offshore oil platform). The air branch is supposed to operate Iran's three Shahab-3 IRBM (intermediate-range ballistic missile) units, and may have custody of its chemical and any biological weapons. The IRGC now has command of Iran's Marine Brigade of some 5,000 men. The IRGC reportedly has 2 armoured, 5 mechanised, 10 infantry, and 1 special forces division, plus 15-20 independent brigades, including some armed and paratrooper units. The IRGC or Pasdaran has separate organisational elements for its land, naval, and air units. The Basij voluntary force and tribal units of the Revolutionary Guards are subordinated to its land unit command, although the commander of the Basij often seems to report directly to the commander-in-chief and the minister of the Pasdaran. The IRGC has close relations to the foreign operations branch of the Iranian Ministry of Security and Intelligence (MOIS), particularly through the IRGC's Quds force. Intelligence operations are usually managed by a ministerial committee called "Special Operations Council" which includes the supreme leader of Iran, the president, the minister of intelligence and security, and other members of the Supreme Council for National Defence.[23]

The IRGC has the largest control over Iran's military industries as it is in the forefront of Iran's efforts to acquire non-conventional military capabilities. Though formally the IRGC, along with the Regular Armed Forces, is under the same command at the general staff level, the IRGC maintains its own separate independent command chain below this level. At least, 5,000 men of the IRGC are assigned for unconventional warfare and intelligence operations. The IRGC has a special Quds force that plays a major role in giving Iran the ability to conduct unconventional warfare overseas using various foreign movements like

22. n. 19, p. 121.
23. Shtauber and Shapir, n.20, p. 263.

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Hezbollah as proxies. The budget for this force is classified and directly controlled by Ayatollah Khamenei, the supreme leader, and is not reflected in the Iranian general budget. The Quds troops are divided into specific groups or "corps" for each area or country they operate in. There are directorates for Iraq; Lebanon, Palestine and Jordan; Afghanistan, Pakistan and India; Turkey and the Arabian Peninsula; and the Central Asian Republics, Western Nations (Europe and North America); and North Africa (Egypt, Tunisia, Algeria, Sudan and Morocco). The Quds has offices or "sections" in many Iranian Embassies, which operate as closed sections.

The Quds force controls Iran's training camps for unconventional warfare, extremists, and terrorists in Iran and countries like Sudan and Lebanon. The Quds force has a main training centre at Imam Ali University in northern Tehran, and there are training camps in the Qom, Tabriz, and Mashhad governorates, beside camps in Sudan and Lebanon. The Basij force is a paramilitary force with an active strength of up to 300,000, with the capability to mobilise one million men. It consists largely of youths, men who have completed their military service, and the elderly. It has up to 740 regional battalions with about 300-350 men each, which are composed of three companies or four platoons plus support. The Basij is increasingly being used for riot control purposes since 1994 and being given such training. Iran has created 36 specialised Ashura battalions for internal security missions.[24] The primary mission of the Basij now seems to be internal security, monitoring the activities of Iranian citizens, acting as replacements for the military services, and serving as a static militia force for local defence missions.

The Iranian Navy has some 18,000 men. The Naval Headquarters is located at Bandar-e-Abbas. The navy has 3 submarines, 3 frigates, 2 corvettes, 5 mine warfare ships, and 12 amphibious ships. Its naval aviation branch is one of the

24. Shtauber and Shapir, Ibid., pp. 264-265.

few air elements in any Gulf navy. It has a two-brigade marine force of some 2,600 men and a 2,000-man naval aviation force. The other naval bases are located at Bushehr, Kharg Island, Bandar-e-Anzelli, Chah Bahar, Bandar-e-Mahashahr, and Bandar-e-Khomeini. The Iranian Air Force has some 281 combat aircraft. Most of these aircraft are not operational or combat worthy. Iran has 9 fighter ground attack squadrons with more than 126 aircraft; 5 fighter squadrons with 74 aircraft; a reconnaissance unit with more than 6 aircraft; and a number of transport aircraft, helicopters, and special purpose aircraft.[25] The Iranian Air Force has its headquarters in Tehran with training, administration, and logistics branches, and a major central Air Defence Operations Centre. It has three major regional headquarters: Northern Zone (Badl Sar), Central Zone (Hamaden), and Southern Zone (Bushehr). Each regional zone seems to control a major air defence sector with subordinate air bases and facilities. The key air defence sub-zones and related bases in the Northern Zone are at Badl Sar, Mashhad, and Shahbad Kord. The sub-zones and bases in the Central Zone are at Hamadan and Dezful. Finally, the sub-zones and bases in the Southern Zone are at Bushehr, Bandar-e-Abbas, and Jask. Iran has large combat air bases at Mehrabad, Tabriz, Hamadan, Dezful, Bushehr, Shiraz, Isfahan, and Bandar-e-Abbas.[26]

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NUCLEAR CAPABILITIES

It is not known if Iran really possesses the capability to produce a nuclear bomb but over the years, it has substantially developed its nuclear capabilities. Many motives have been attributed to Iran's efforts to develop such a capability. During the period of the Shah, it was believed that Iran was trying to attain a great power status in West Asia by procuring or developing nuclear technology. In the post-revolution phase, it was thought that Iran wanted such technology because of the danger that Iraq might develop such capabilities. When Iraq underwent a decade of sanctions and its

25. Clawson and Rubin, n. 18, pp. 189-190.
26. Shtauber and Shapir, n. 20, p. 275.

technological capabilities severely declined, Iran's effort in this area was seen as an attempt to deter the Israeli nuclear threat though Iran publicly claimed that it was solely for peaceful purposes. In the present situation, excluding the threat from Iraq, all the other reasons can be considered to be motives behind Iran's effort to achieve nuclear power status. The objective here is to understand what nuclear capabilities Iran has today and how it can widen its military options.

According to IISS, Iran has significantly developed its uranium enrichment capabilities since the time of the Shah when it first got access to nuclear technology from the West for being an ally and signing the Non-Proliferation Treaty (NPT). During the 1990s, Iran received substantial help from Russia to develop the Bushehr nuclear power reactor and from China in the development of an industrial-scale uranium conversion facility. Iran also received assistance from both countries in the different areas of development of nuclear technology development like uranium mining, uranium milling, heavy-water production plants, heavy-water research reactors, laser enrichment, etc. until American pressure brought an end to such aid. Centrifuge assistance from the A.Q. Khan network of Pakistan helped Iran to begin the construction of an industrial-scale enrichment facility at Natanz around 2000. The exposure of Iran's nuclear capabilities by an opposition group led to negotiations between Iran and the European Union (EU) and the present crisis over Iran's nuclear programme.

Iran is developing uranium mining and milling facilities to produce natural uranium in the form of yellowcake. At the Uranium Conversion Facility (UCF) which is located at the Esfahan Nuclear Technology Centre (ENTC), Iran has begun testing the capability to convert uranium yellowcake into uranium hexafluoride (UF6) which is the feed material for Iran's pilot-scale and industrial-scale centrifuge enrichment facilities under construction at the Natanz enrichment facility.[27] If the suspension of nuclear related activities is lifted, the pilot scale enrichment facility at Natanz could be completed within a few years, but the larger industrial-scale enrichment plant is probably a decade or so from full operation. The completed Natanz facility could produce low enriched

27. The International Institute for Strategic Studies, *Iran's Strategic Weapons Programme: A Net Assesment* (Routledge: Oxfordshire, 2005), pp. 33-34.

uranium (LEU) to fuel light-water power reactors or highly-enriched uranium (HEU) to fuel nuclear weapons. Iran has begun construction of a 40MW heavy-water research reactor at Arak which is scheduled for completion in 2014. On completion, this reactor could produce enough plutonium for military use.[28] It is generally believed that Iran would try to opt for a simple implosion device with a core of fissile material which will either be plutonium or highly enriched uranium.[29] Based on available information, it would take Iran several more years to develop nuclear weapons capability.

CHEMICAL AND BIOLOGICAL WEAPONS CAPABILITIES

Less information is available on Iran's chemical and biological weapons capabilities than on its nuclear programme. The first time that Iran seriously started thinking about acquiring chemical weapons was after facing Iraqi chemical attacks during the Iran-Iraq War. Iran claimed that it produced World War I era blood and blister agents but never actually used them. These were reportedly destroyed after the end of the war. It is suspected that Iran has developed dual-use civilian chemical and biotechnical civilian infrastructures which provide it the option of resorting to a chemical and biological weapons (CBW) development in a short period of time, according to its needs. This lessens the risks associated with developing and maintaining an exclusive CBW arsenal. Both the US and Russia have claimed that Iran continues to produce nerve agents and blister agents. Both these countries have accused Iran of weaponising these agents. According to the IISS, Iran's chemical weapons stockpile is not likely to have included nerve agents because of the technical complexities involved in their manufacture. When it comes to the development of biological weapons capabilities, it is much more difficult to monitor such activities because of the inability to distinguish between research and development on protection against biological weapons (allowed under the Biological Weapons Convention that Iran has signed) and research and development of offensive biological weapons. As Iran has a fairly developed

28. Al J. Venter, *Iran's Nuclear Option: Tehran's Quest for the Atom Bomb* (New Delhi: Manas Publications, 2005), p. 127.
29. Shtauber and Shapir, n. 20, p. 63.

biomedical and biotechnological sector, it probably has the capability to develop biological weapons in a short period of time.[30]

BALLISTIC MISSILE CAPABILITIES

Being in a region where ballistic missiles were not widely used in conflicts till at least the beginning of the 1980s, Iran did not feel the need to acquire such a capability when it was building its armed forces during the 1960s and 1970s. The scenario changed with Iraq using Scud missiles to bomb Iranian cities during the war. Iran did not have much operational aircraft to strike deep into Iraqi territory. That is when Iran began to build up its ballistic missile capability. By the mid-1980s, with help from China, Iran developed the capacity to produce short-range, unguided solid propellant artillery rockets – the Oghab (Eagle) with a 40 km range and Iran-130 with a 130 km range. As mentioned before, in the same decade, Iran obtained a small number of Soviet produced Scud-B (280-300 km) missiles from Libya and Syria.[31] Towards the end of the war, Iran purchased a large number of Scud-B missiles from North Korea. Iran used its experiences gained from the development of the Oghab and the Iran-130 to further improve its ballistic missiles programme. Iran is presently continuing in its efforts to produce solid propellant motors for longer-range missiles. This is because solid propellant systems have many operational advantages over liquid propellant systems, including a much shorter launch sequence time. Iran has a significant stock of short-ranged solid-fuelled rockets.

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The Oghab artillery rocket is capable of carrying a 70 kg warhead to distances of 40-45 km. Iran is capable of producing 600-1000 Oghabs per year. The Fajr-3 is likely to be based on the North Korean 240mm M-1985 multiple rocket launcher,

30. Shtauber and Shapir, Ibid, pp. 69-78.
31. Navias and Hooton, n. 11, p. 21.

which was exported to Iran in the late 1980s. The Iran-130 or Nazeat rocket can place a 150 kg warhead to ranges of 90-120km. The Zelzal (Earthquake)-2 rocket is very likely an indigenous version of the Luna-M or FROG-7 with a range of 150-200 km. In 1999, Iran claimed that Zelzal was in mass production. The Fateh-110 rocket has a range of 170 km. Iran also possesses about 30 launchers for around 175 Chinese-origin CSS-8 missiles, which are armed with a 190 kg high-explosive warhead deliverable to a range of 150 km.[32]

In the area of liquid propellant systems, Iran, with North Korean assistance, developed an indigenous capability to produce Scud type missiles. The Shahab (Shooting Star)-1 and Shahab-2 missiles are reverse-engineering copies of the Scud-B and Scud-C systems. The Shahab-1 can deliver a 1,000 kg payload to approximately 300 km and the Shahab-2, which carries a payload of about 800 kg, can reach 500 km. Iran likely possesses a few hundred Shahab-1 Shahab-2 missiles distributed among at least three and possibly five missile battalions, each outfitted with around three to five transporter-erector-launchers (TELs) or mobile erecter-launchers. According to the IISS estimates, Iran deploys a single Shahab-1/2 missile brigade comprising three or four battalions, for a total of 12-18 mobile missile launchers and 48-72 missiles in the field and about 200 additional missiles held in reserve, assuming that Iran (like North Korea) organises its missile forces along Soviet lines. In the 1990s, Iran purchased limited supplies of No-dong components, production equipment and technical assistance from North Korea. The No-dong is a liquid-fuelled missile derived from Russian technology with a range of approximately 1,300-1,500 km.[33] It is reported that Iran deploys at least a single Shahab-3 missile battalion, which would typically consist of 6 launchers and 24 missiles in the field, with an unknown number of missiles in reserve.

On two occasions, in 2004, Iran successfully test launched a new version of the Shahab-3 with a 'baby-bottle' nose and named the Shahab-3M. It has been noticed that the base of the conical nose has the same diameter as that of the Shahab-1/2 missile body. A matching warhead diameter would allow Iran to

32. Shtauber and Shapir, n. 20, pp. 91-92.
33. Shtauber and Shapir, Ibid., p. 89.

develop a single warhead design for all of its Shahab missiles. The position of the instrumentation raceway points to the fact that the instrumentation package which includes the navigation, guidance and control equipment may be designed to remain with the warhead after separation from the main missile body. This points to the possibility that the Shahab-3M may be intended to perform several new missions, including airburst detonations, at a specified altitude, or the effective and efficient dispersal of submunition packages. Either of these new capabilities would enhance the dispersal of chemical or biological agent. If the option is to mount a nuclear weapon on the missile, a sophisticated safety-arming and fusing system – capable of initiating before the warhead impacts the ground – would be needed to maximise the effect of such a weapon.[34]

IRAN'S LESSONS FROM THE IRAN-IRAQ WAR AND THE 1990-91 GULF WAR

One of the lessons that Iran learnt from the Iran-Iraq War was the futility of directly taking on the might of the US Navy. As mentioned before, such a step resulted in the loss of one-third of Iranian naval assets. But what naval strategy is Iran bound to use in the future and is it making attempts to acquire capabilities in accordance with its intentions? In the event of a probable attack on Iran, it is bound to attack commercial shipping in the Gulf without directly engaging the navy of the US or any other powerful external actor. The commercial importance of the Straits of Hormuz has not declined even now, almost two decades after the end of the conflict. Besides its shore-based anti-ship Silkworm missiles, Iran has acquired Chinese Hudong-class missile patrol boats which can carry four anti-ship CS-801 and CS-802 missiles.[35]

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The navy has a large number of patrol craft and fast attack craft. Iran has considerable mine warfare capabilities in the form of mine-laying ships and

34. Shtauber and Shapir, Ibid., p. 101.
35. Shtauber and Shapir, Ibid., p. 270.

different varieties of mines. Iran has three Kilo-class submarines which were acquired from the Russians. In April 2006, Iran test-fired rocket-powered torpedoes thought to be based on the Russian-made Shkval. This torpedo is capable of reaching 359km/h, four times the speed of conventional torpedoes and it has a range of seven kilometres.[36] It is noticeable that Iran has concentrated its anti-ship capabilities in its naval arm. This might be because of its inability to upgrade its air force due to the lack of accessibility to advanced defence hardware. At the same time, Iran's development of unconventional naval capabilities, coupled with experience gained from the "Tanker-War" of the 1980s, has given it considerable capability to harass commercial shipping and wage a kind of guerrilla war at sea in the Gulf.

During the Iran-Iraq War, the Iranians had used the strategy of launching human-wave attacks because of their lack of military technology. But such a strategy did not ensure victory and was highly dependent on the revolutionary fervour and motivation that existed in Iranian society during that time. As the political and social conditions in Iran have changed a lot since then, the Iranian leadership has realised the lack of practicability in solely depending on such sentiments to fight future conflicts. The need to invest in sophisticated military hardware dawned on the Iranian leadership in the ending years of the war itself. Events in the wider region have also contributed to such a change in the thinking of the Iranian political and military leadership. Since the end of the Iran-Iraq War in 1988, the region has witnessed two major conflicts, the 1990-1991 Gulf War and the 2003 Iraq War.

As both the conflicts were fought in the neighbourhood of Iran and involved Iran's erstwhile foe – Iraq – Iran is understood to have watched them closely. If the Iran-Iraq War convinced the Iranians of the need to attain the technological advantage of the Iraqis, the Gulf War of 1990-1991 proved that even that capability was not enough to face the technological superiority of the US. The United States' command and control, communications, intelligence and joint operations capabilities had helped it to win the war and not just superiority in the number of tanks and planes. Far from attaining such capabilities, Iran has not

36. http://www.globalsecurity.org/wmd/library/news/iran/2006/iran-060404-voa01.htm

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even been able to arm its forces up to the level of the Iraqi armed forces on the eve of the Gulf War. Though the focus of the international community shifted to Iraq because of its invasion of Kuwait and weapon of mass destruction (WMD) programmes, Iran was not given the freedom to develop its armed forces. In such circumstances, Iran tried to acquire not just the weapon systems but even the capability to indigenously produce them from countries like Russia, China and North Korea.

There are serious problems of compatibility between the Western hardware acquired during the time of the Shah and the Russian and Chinese weapon systems which Iran got after the revolution. Most of the American and British weapon systems have not been upgraded because of the lack of spare parts and have, therefore, become outdated. The division of the armed forces between the Regular Armed Forces and the Revolutionary Guards has created further problems. Iran has to divide its scarce number of weapon systems between these two forces which decreases its combat effectiveness and makes integration all the more difficult. These factors have seriously downgraded efforts to develop a joint operations capability among not just the three Services but even among the ground forces. Though Iran has the capability to fight and sustain a war with any country from the same region, it doesn't have much worth in a situation in which the US is in occupation of Iraq and any Iranian attack on a West Asian country can result in US intervention.

But the 1990-1991 Gulf War also proved the inability of the US Patriot anti-ballistic missile system to defend against Scud missile attacks by Iraq. This despite the fact that the Scud was a primitive ballistic missile system.[37] The conflict also proved the deterrence value of chemical and biological weapons due to the amount of panic that was caused in Israeli urban centres because of the

37. Theodore A. Postol, "Lessons of the Gulf War: Experience with Patriot," *International Security*, vol. 16, no. 3, 1991, p. 170.

fear of the use of chemical weapons by Iraq. The lack of any real defence against ballistic missiles, which was proved by the Iraq War and Iran's own experience, convinced Iran to build up its own ballistic missile programme, as mentioned earlier in this paper. The defeat of Iraq in that war did not lessen Iran's threat perception. The conflict signalled the growing involvement of the US in the affairs of the Gulf and the emergence of an increasing threat to Iran in the form of Israel. While Iran has had strained relations with the US since the revolution, Israel is a political and ideological rival of Iran. Therefore, Iran's missile programme has the objective of deterring not just one rival but two. The Shahab-3 has the capability to strike targets in Israel. This has put Iran in a place where it can use the same tactic as the one used by the Iraqis who fired missiles at the Israelis in order to instigate retaliation and secure the support of Muslim countries. Though the Iraqi tactic failed, it is hard to predict how things would move if Iran uses the same tactic, particularly when it faces the threat of an attack from the US. Iran has also decentralised its nuclear programme keeping in mind the Israeli attack against Iraq's nuclear reactor. As the gap between the US and Iran in terms of command and control, communications and intelligence is not bound to go away, Iran's attempts to acquire WMD capabilities are aimed at compensating for its lack of conventional military capabilities vis-à-vis the United States.

WARS IN IRAQ AND LEBANON

One of the other means of deterring Israel from Iran is the presence of the Islamic resistance movement, Hezbollah, in Lebanon. Starting with the dispatching of 1,500 Revolutionary Guards to Lebanon to develop a Shia resistance movement to the regular airlifting of arms and ammunition to Hezbollah, Iran has had, and continues to have, a significant influence over Hezbollah. Iran had created Hezbollah because of political and ideological reasons which was to fight a guerrilla war against the Israeli occupation of Lebanon and create conditions for the establishment of an Islamic republic in that country. It is not important here to go into the feasibility of achieving Iran's second objective. But the 2006 conflict between Israel and Hezbollah has signalled a marked change in the attitude of

Iran towards the resistance movement. Hezbollah launched as many as 3,970 to 4,228 rockets at targets inside Israel. Nearly 92 per cent of these were Katyusha type artillery rockets with ranges of 20 km. This was the first time that rockets were used on such a massive scale against Israel.

On the second day of the war, the Israeli Air Force destroyed 59 medium range missile launchers inside Lebanon. This accounted for as much as 70-90 per cent of Hezbollah's medium range ballistic missile arsenal. The Lebanese satellite TV station Al-Manar reported that the attacks had included a Fajr-3 and a Raad-1, both liquid-fuelled missiles developed by Iran. Hezbollah also used Chinese made, Iranian modified C-802 anti-ship sea skimming missiles and crippled an Israeli Navy corvette and sank a Cambodian merchant ship.[38] It is obvious that there has been a dramatic increase in the quantity and quality of weapons that Iran has supplied to Hezbollah. But what does this imply with regard to Iranian strategy in Lebanon? The military-strategic reasons for the Iranian support for Hezbollah are becoming as crucial as the political-ideological factors. Such a transformation could have taken place in the aftermath of the Israeli withdrawal from Lebanon in 2000 when the capability of Hezbollah became more evident and access to southern Lebanon made Israeli urban centres more vulnerable to missile attacks. The 2006 conflict has proved that Hezbollah will be taken into account when Iran prepares a strategy to deal with a probable Israeli attack.

The military-strategic reasons for the Iranian support for Hezbollah are becoming as crucial as the political-ideological factors.

In the context of Iran's military strengths and weaknesses, the Iraq War of 2003 and events after that should have been more interesting to the Iranians than the Kuwait crisis. As expected, the Iraqi armed forces crumbled in a short period of time in the face of the American military might. But what followed the American occupation of Iraq was a violent and bloody resistance movement targeting US troops. The situation in Iraq has now almost turned into an all out civil war between the Shias and the Sunnis. From the military point of view,

38. Air Commodore Jasjit Singh, "Interpreting the Lebanon War of 2006," *Air Power*, vol.1, no. 2, 2006, pp. 38-40.

what must have been interesting to the Iranians is the vulnerability of US troops to guerrilla movements in urban warfare. This is where Iran's links with Hezbollah and other extremist resistance movements and the Lebanese War become relevant once again.

There have been other wars like the Vietnam and Afghan Wars where relatively weaker forces have defeated superpowers using guerrilla tactics. But what makes the success of Hezbollah over Israel in the Lebanese civil war special for Iran is the fact that Hezbollah was created by Iran. As the Revolutionary Guards continue to be responsible for the training of the Hezbollah cadres, the Iranian armed forces will have considerable insight into the tactics used by Hezbollah in its war against Israel. The Revolutionary Guards have provided training, arms and ammunition to Hamas and the Palestinian Islamic Jihad. In fact, the Palestinian Islamic Jihad is close to Iran in political and ideological terms. Syria continues to be an important ally of Iran. Today, Iran has considerable influence among the Shia political and militant groups in Iraq. The Supreme Council for Islamic Revolution in Iraq (SCIRI) and the Dawaa Party were provided shelter by Tehran during the 1980s and 1990s. The SCIRI, whose armed wing is the Badr Corps, is an important force in the Iraqi government. There are reports of Revolutionary Guards and Hezbollah cadres actively assisting the Shia militant groups. The US and Britain have accused Iran of using Hezbollah cadres to train Shia militants in the making of improvised explosive devices (IEDs). In the event of any US attack on Iran, the latter can use its links with these various forces to stir up trouble not just in West Asia but also for US troops in Iraq.

CONCLUSION

From a military point of view, it is often believed that the Iranian Revolution prevented Iran from reaching its full potential and becoming a regional military power. But an Iran under the Shah would have become a regional power only in the Gulf. The revolution gave Iran the opportunity to assume the mantle of Islam and spread its influence even in the Levant and Mesopotamia among the Shia Muslims. In the event of an attack, Iran is likely to use a number of different options to retaliate, including its naval assets in the Gulf, ballistic missiles and

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militant groups in West Asia. This is far different from the situation in 1980 when Iraq invaded Iran. Moreover, Iran is a huge country, making it difficult for any power that makes an attempt to invade and occupy it. Iranians have strong nationalist sentiments and the country has a vibrant political system unlike most of the neighbouring Arab states. Iranians are likely to defend their country against any external attack regardless of who is in power. Such factors add to Iran's strengths besides its conventional and unconventional military capabilities.