

## **XV. CONCLUSION**

### **15.0 The Major Lessons of the Iran-Iraq War**

Any study of the lessons of war runs the constant risk of oversimplifying one of man's most complex activities. The Iran-Iraq War was an exceptionally complex conflict, and one which can only be understood by a close examination of its history and of the many shifts that took place during the course of the war. There are, however, several lessons that do clearly stand out from the rest:

- *Few wars have successful outcomes that are not based on a clear grand strategy and which are not forced on one or more of their participants in ways that make war an unavoidable alternative.* The Iran-Iraq War is a classic demonstration of the cost of an inadequate grand strategy. The ambitions of two competing autocrats, and more than eight years of war, did nothing to give one side a triumph over the other, or even to resolve the centuries long squabble over control of the border area and the Shatt al-Arab. In spite of all their ideological ambitions and claims, the war left both Khomeini's Islamic fundamentalism and Saddam Hussein's Ba'ath Socialism weaker in terms of both domestic and foreign influence than when the war had begun. Few wars in modern history did less to further the ambitions of the leaders that started them at so high a cost to their peoples.
- *Force ratios are a remarkably uncertain measure of military strength both in terms of battles and in terms of the strength and weakness of a nation.* Iraq learned the hard way that a state in the middle of a popular revolution is far less vulnerable than the size and readiness of its military forces may make it appear. Iran learned the hard way that it could never exploit its potential superiority in manpower. Both sides found that there was little real correlation between the forces and firepower they possessed at any given time and the actual outcome of battles. The reality of war involves far more complex variables than war games or military plans which only examine force ratios.
- *Military professionalism remains a critical variable in war.* For all of Iran's revolutionary fervor, it could not overcome the fact that the very fervor destroyed its ability to conduct a war with the military professionalism it needed to win. Iraq, in contrast, solely acquired much of the professionalism

it lacked at the start of the war, and this eventually enabled it to win. In Third World states, however, military professionalism is highly dependent on a realistic and objective approach to allowing professionalism to exist at all levels of command and on honestly and objectively dealing with the problem of technology transfer. Most such states will find this difficult or impossible, and this will sharply degrade both their professionalism and their military effectiveness.

- *All of the military forces in recent wars have found it very difficult to effectively use combined arms and combined operations. Most have found it very difficult to use maneuver warfare effectively in any form.* Both Iraq and Iran had to struggle with their weaknesses in these areas for nearly a decade. Iran actually lost capability as the control of its forces passed into the hand of senior political officials. Iraq gradually acquired the level of capability it needed to defeat Iran, although at great cost and without achieving the level of effectiveness common in Western and Soviet-bloc forces.
- *Sheer mass, whether in terms of weapons or manpower, is no substitute for effective organization and command and control.* Time and again, it was the effectiveness of organization and leadership, not numbers, that shaped the outcome of battles. At the same time, the ability to find ways of improving targeting, battle management, and damage assessment proved equally critical. Iraq benefitted greatly from acquiring superior technology to manage its firepower and maneuver capabilities, and from being able to adopt superior tactics.
- *Infantry remains a critical aspect of modern war.* For all of Iran's advantages in weapons numbers and quality, it could not ignore the impact of effective infantry forces. Particularly at the time it invaded Iraq, Iraq suffered badly from ignoring the need to support its armor with infantry and to have the ability to deal with infantry in urban warfare. Regardless of the advances in armor, firepower, and airpower, infantry strength is often still the most important single factor in shaping the outcome of combat.
- *Airpower remains one of the most difficult aspects of modern war to use effectively, and an area where most military forces tend to sharply exaggerate the effectiveness of their forces.* Both sides in the Iran-Iraq War found it difficult to use their airpower to do more than deny the other side its ability to

use its airpower. The strategic bombing, interdiction, and close air support efforts of both sides had remarkably little overall impact on the battle, given the resources each side invested, particularly before the war. Iraq did slowly improve its capabilities, but it took nearly half a decade to make the Iraqi Air Force effective, and it still had grave shortcomings when the war ended. Iraq's experience is also far from unique. Virtually all of the air force's engaged in recent large scale combat have tended to grossly exaggerate their capability to influence the land battle at the time the war began, and their actual impact on the land battle as the war proceeded.

- *Complex weapons systems like aircraft, helicopters, and surface-to-air missiles require far more extraordinary efforts at technology transfer than most buyer and supplier states seem to realize.* This is particularly true of sustained combat. Neither side was ever able to make its air control and warning, air battle management, and surface-to-air missile command and control systems effective. Neither side was able to fully solve the problems of maintaining complex systems like modern fighters and heavy surface-to-air missiles. Iraq benefitted greatly, however, from access to external resupply as a substitute for internal capability and from a steady improvement in its internal maintenance and support capabilities as well. It seems clear that the strength and effectiveness of most Third World states that acquire complex and high technology weapons systems will be a function of the quality of their technology transfer effort and not a function of the quality or quantity of what they buy.
- *Barrier defenses and combat engineering can be extremely important in shaping the outcome of combat.* Many of the battles of the Iran-Iraq War were decided as much by the quality of the barriers and combat engineering efforts on both sides as any other aspect of their forces.
- *Logistics and supply are critical factors in any conflict, and expenditure rates may be far higher than most forces now plan for.* Iraq, for example, consistently expended far more ammunition per gun in battle than Western armies plan to fire. It also consistently benefitted from providing over-supply, rather than trying to predict or service demand. At least in this respect, the Soviet doctrine of "supply push" that Iraq built upon in structuring its logistic

and supply system seems consistently more effective than the U.S. doctrine of "demand pull".

- *Power projection in "low intensity combat" remains one of the most critical and complex missions for Western forces.* It is clear that this requires a great deal of flexibility and improvisation, and that even a power as large as the U.S. will often be dependent on regional allies and other Western states for its success. It also is clear that any Western power that is forced to project power into Third World conflicts is likely to have to send forces designed for other types and combat and other missions, and send them into very uncertain political and military conditions.
- Under these circumstances, it is critical to allow the forces deployed to act on the basis of military professionalism and to avoid over-managing the forces at the political level or expect military forces to substitute for successful political goals and capability. The U.S. benefitted a great deal from luck in terms of allied support, in terms of having the time to use its professionalism to adapt to military conditions for which it was not ready when it entered the region, and in terms of Iran's self-destructive actions and willingness to isolate itself in the international community. As Vietnam and Lebanon have shown, however, luck is not always a substitute for competence.

### **15.1 The Future of Iran and Iraq.**

While this book is not a study of the future of the Gulf region, of its politics, or of the West's relations with the Gulf, it is obvious that the tensions between Iran and Iraq are likely to shape the region's security problems for decades to come. It is equally obvious that the West cannot decouple its military planning from the need to secure its sources of imported oil

Regardless of what regime is in power in either country, it is virtually certain that Iraq and Iran will continue to drive the arms race in the region during the next decade, as they have since the late 1960s. Even the best peace between Iraq and Iran is unlikely to prevent a continuing political struggle between the two states, and a continuing struggle for influence over the Southern Gulf states.

Iraq is almost certain to try to consolidate its present military superiority over Iran, to try to become the dominant military power in the region, and to try to

expand its influence over the Southern Gulf states. While Iraq may not radically expand its army, it is almost certain to try to obtain the most modern air defense and air attack systems available. It will continue to attempt to build-up a long range missile strike force, expand its chemical warfare capabilities, and develop at least some form of biological and/or nuclear weapons capabilities.

The U.S. defeat of Iran's navy -- and Iran's nearly decade long lack of ready access to parts, munitions, and weapons modernization -- will soon transform the naval balance in the region. A full cease-fire will mean Iraq's modern major combat ships in Italy can transit to ports in Iraq. Iran will have little choice other than to seek to rebuild its naval power and former supremacy.

At the same time, Iraq will still face serious military problems. It cannot increase its limited strategic depth. It cannot secure the Shatt al-Arab against the growing threat of Iranian missiles, or ensure Iraqi access to the Gulf. Iraq will lack naval bases and sea ports that give it a secure ability to use the Gulf even if it should somehow obtain access to Bubiyan or Waribah. While Iraq's pipelines to the West offer an alternative to the Gulf, they will become progressively more difficult to defend as Iran rearms with long range strike systems.

These Iraqi problems raise several interesting issues for the future. One is whether Iraq understands the limitations to any minor territorial gains either in its conflict with Iran or in dealing with Kuwait. Another is whether Iraq will chose to build on its greatly improved relations with the Southern Gulf states, or will return to its past political and strategic ambitions, and attempt to to dominate them. Iraq also faces the problem of deciding how to deal with its war debts and oil export policy.

The way in which Iraq handles these decisions could lead to added military tensions throughout the region, although the most likely near-term prospect is that Iraq will seek to form a political block with the Southern Gulf states -- not threaten them. Iraq seems likely to solve many of its debt problems by transforming its regional debts into grants or un-repaid loans, and is likely to be content with export parity with Iran and the preservation of reasonable levels of oil prices. It is the long term impact of Iraq's military power that is far more uncertain.

Iran is more of a "wild card". It is still in the grips of a revolution which is only now beginning to deal with the internal issues it ignored during the war and

whose long-term outcome is still very unpredictable. For more than a decade, its military forces have suffered from a lack of ready access to Western and Soviet military exports, from the collapse of its advanced training system, from the failure to develop modern logistic and support capabilities, and from an ineffective and divided command system.

Iran's defeats in mid-1988 crippled its land forces and resulted in the loss of more than one-third to one-half of their major weapons. Iran now needs thousands of armored and artillery weapons and hundreds of modern combat aircraft. It will require time, and at least \$15 to \$25 billion worth of investment, to recover its past military power.

At the same time, Iran's future approach to military modernization is unclear. In spite of the fact that the Revolutionary Guards have lost much of their status as a result of their defeats in 1988, Iran's forces seem likely to remain divided into pre-revolutionary "regular" forces, and revolutionary forces. The future mission and organization of Iran's revolutionary and regular forces is highly unpredictable, however, and Iran still has to make hard choices as to how it will allocate resources between conventional military, popular warfare, and internal security elements.

Given the events of the last few years, it seems unlikely that any outcome of the struggle for the leadership of a post-Khomeini Iran will result in an attempt to produce Iranian forces which rely largely on popular warfare. If anything, the near collapse of Iran's Revolutionary Guards in the face of the Iraqi offensives of 1988, and Iran's losses to a high technology U.S. Navy, seems likely to push Iran in the direction of finding some reliable supplier of high technology military equipment for both its revolutionary and regular forces, although Iran may well find some mix of PRC and European imports and domestic production to be an adequate substitute for dependence on either the West or the Soviet bloc.

## **15.2 Key Military and Strategic Uncertainties**

There is no way to estimate how this complex mix of trends will shape the future structure of Iranian and Iraqi forces. It is clear, however, that these trends will lead to dramatic changes in the military forces of both countries, in the regional military balance and in the risk inherent in any resumption of large scale fighting.

There are several key factors that will help shape the future military trends in the Gulf:

- No one can predict how, and how fast, Iran will rearm. It is important to note, however, that Iran successfully operated about 450 modern combat aircraft at the time of the Shah's fall and retains the basing and infrastructure to support a first line fighter force.
- In spite of the near collapse of its training and logistic program, the Iranian Army has extensive combat experience and has operated a force of about 1,700 main battle tanks, or four times the present strength of Saudi forces. Its current Army manning is close to 20 times that of Saudi Arabia. If Iran can acquire major new sources of arms, sufficient sea or airlift, or the ability to drive through Southern Iraq, it will be a serious threat to the Southern Gulf states.
- The Iranian Navy has lost many of its most modern missile equipped ships and most of the rest are largely inoperable.<sup>1</sup> It does, however, retain large numbers of smaller ships, Hovercraft and landing ships. It has extensive numbers of anti-ship missiles and missile sites covering the Straits of Hormuz, and Kuwait and the Iraqi coast. It can be expected to rebuild its navy and to steadily improve its anti-ship missile and mine

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1 During the battle with the U.S. on April 18, 1988, the Iranian Navy lost the frigate Sahand and

the guided missile patrol boat Joshan. The frigate Sabalan was severely damaged by a hit from a

laser guided bomb.

warfare capabilities. It will be a growing threat to Gulf shipping, with growing Gulf-wide coverage.<sup>2</sup>

- Iran's Air Force is now reduced to substantially less than 100 fully operational combat aircraft, none of which have been modernized for nearly a decade. Nevertheless, Iranian acquisition of several hundred modern Soviet fighters, or Mirage F-1/Mirage 2000 equivalents, would restore its air power. This would allow it to challenge the Southern Gulf states even if they were equipped with all the aircraft they are now requesting. The Saudi Air Force will be vulnerable to saturation by high intensity bombing raids on key targets, and the other Southern Gulf states lack the air and sea power to cover the Eastern or lower Gulf.
- Iran was arming for its own missile war at the time Iraq successfully launched its massive missile attacks. It is virtually certain to acquire missiles capable of striking at all the oil and urban targets along the Southern Gulf coast at some point in the 1990s.
- Iraq's trend towards political maturity, and friendly relations with the Southern Gulf states, began in the mid 1970s, and before the Iran-Iraq War. This trend has been reinforced by the painful lessons of that conflict, but there is no guarantee that the present Ba'ath regime will remain in power. There is a good chance that Iraq's considerable military forces could come under hostile or radical control during the late 1980s to mid 1990s.
- Iraq now has about one million men under arms, and some 4,500 tanks, 500 combat aircraft, and 150 armed helicopters. It has 8 Tu-22, 8 Tu-16, and 4 CH-6D bombers, some armed with AS-4 Kitchen and AS-5 Kelt air-to-surface missiles. It has 94 Mirage F-1s (some with Exocet and others with extended range fuel tanks), 150 MiG-21/J-7s, 40 J-6s, 70 MiG-23BNs, 15 MiG-25s, 30 Su-7Bs and Su-20s, 25 MiG-29, and 30 Su-25 fighters. It has R-530, R-550 Magic, AA-6, AA-7, and AA-8 air-to-air

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<sup>2</sup> See the IISS, Military Balance, 1980-81 and 1984-85 for details.

missiles, and AS-30 Laser, Armat, and Exocet AM-39 air-to-surface weapons. It will replace at least 100 of its current fighters with advanced types such as the Mirage 2000, SU-24, and MiG-29 by the mid-1990s. This will not only give it massive land superiority over Kuwait and Saudi Arabia, but air superiority--unless Kuwait and Saudi Arabia can obtain the the modern fighters and air defense systems they are now requesting.

- Iraq will soon take delivery on a significant number of new naval vessels, including four Italian missile equipped *Lupo* frigates and four 650 ton corvettes.<sup>3</sup> Iraq already has a major air capability to strike at tankers and targets in the Southern Gulf. By the early 1990s, it will have modern strike fighters equivalent to those in the French and Soviet air forces with a range of up to 800 miles and much heavier and more lethal surface-to-surface, air-to-ship, and air-to-surface missiles. Iraq also has vast supplies of modern land force armor, advanced munitions, and C<sup>3</sup>I equipment on order. Like Iran, it is certain to steadily expand its land and

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3 See Aharon Levran and Zeev Eytan, The Middle East Military Balance, 1986, Jaffe Center for

Strategic Studies, Tel Aviv University, 1985, and the IISS, Military Balance, 1987-1989, for details

on Iraq's current force strength.

air strike capability against the Southern Gulf states throughout the next decade.<sup>4</sup>

- Iraq and Iran are likely to emerge into a world "oil glut" with a massive need for revenue and substantial surplus oil export capacity--both can probably export at around 4 MMBD within a year to two years after the war versus current exports of under 2 MMBD. This raises the specter of major pressure on the Southern Gulf states to cut their production. While such "oil wars" are not a direct military threat, they certainly are viewed as one of the most serious strategic threats the region and the West may face in the near future.
- Both Iran and Iraq are certain to expand their gas warfare capabilities, and to conduct covert efforts to develop nuclear weapons. This will eventually give them the ability to add highly lethal warheads and bombs to their long range missile and air strike capabilities.

### **15.3 Iraqi and Iranian Progress in Creating Weapons of Mass Destruction**

All of these trends may prove to be important, but the most dangerous trends may well prove to be the expansion of each side's capacity to use chemical weapons and other weapons of mass destruction. Both Iraq and Iran have used poisoned gas in the Iran-Iraq War. While chemical warfare was only one of the factors that contributed to Iran's defeat, it became increasingly important to the outcome of the war. Iraq acquired sufficient amounts of chemical

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<sup>4</sup> For an analysis of the threat to Gulf tankers, see Dr. Raphael Danziger, "The Persian Gulf

Tanker War", Proceedings of the Naval Institute, May, 1985, 160-176, and the author's article in

the February, 1988 edition of Seapower magazine.

agents to make mass use of such weapons, and the threat of gas attacks had a powerful impact on the morale of both Iran's troops and civil population.

Neither Iraq or Iran will ignore these trends in shaping their forces, and a future conflict could be far more serious than the fighting between 1980 and 1988. It seems, highly unlikely, for example, that Iraq would risk an invasion of Iran instead of a massive strategic bombing effort, or that it would fail to use chemical weapons, and biological weapons if it can develop them. Iran seems likely to make equal efforts to develop its own biological and chemical weapons, and seems equally likely to use them if a future war escalates beyond limited border clashes.

The major weapons systems affecting each country's current and future capacity to deliver weapons of mass destruction are summarized in **Figure 15.1**. It seems almost certain that both sides will try their best to improve these capabilities unless they are far more successful in agreeing on a peace than seems likely. This, in turn, may drive other nations in the region to follow in their footsteps, and may ultimately confront the West with the problem of trying to intervene in such a conflict.

While it seems impossible to learn some lessons from history, one clear lesson that emerges out of both the Iran-Iraq War and the recent trends in the region is that everything possible must be done to contain the violence in the area, and to fight the proliferation of weapons of mass destruction. Tomorrow's wars may be infinitely more dangerous to the West, and infinitely more tragic for the peoples of the region.

**Figure 15.1**

**Iranian and Iraqi Progress in Creating  
Weapons of Mass Destruction - Part One**

IRAN

Delivery Systems

- o Scud B (R-17E) missiles with 230 KM range.
- o Possible order for PRC-made M-9 missile (175-375 mile range).
- o Iranian made IRAN 130 missile with 150+ KM range.
- o Iranian Oghab rocket with 40+ KM range.
- o F-4D/E fighter bombers.
- o HY-2 Silkworm missiles.
- o Multiple rocket launchers and tube artillery.

Chemical Weapons

- o Production of nerve agents has started or is nearing completion.
- o Stockpiles of cyanide and mustard gas weapons.
- o Substantial assistance in some aspects of production may have been provided by Japanese companies.

Biological Weapons

- o Extensive laboratory and research capability.
- o Active research effort may have begun in 1987.

Nuclear Weapons

- o Has revived nuclear weapons production plant begun under Shah.
- o Significant West German and Argentine corporate support in some aspects of nuclear weapons effort.
- o Stockpiles of uranium.

**Figure 15.1**

**Iranian and Iraqi Progress in Creating  
Weapons of Mass Destruction - Part Two**

IRAQ

Delivery Systems

- o Tu-16 and Tu-22 bombers.
- o Acquiring MiG-29 fighters and Su-24 fighter-bombers.
- o Mirage F-1, MiG-23BM, and S-20 fighter attack aircraft.
- o Extended range Scuds and other missiles called Al-Hussein (390 KM) and Al-Abbas (540 KM). Some reports of ranges up to 800 kilometers.
- o Possible cooperation with Egypt in paying for development and production of "Badar 2000" long range missile. This is also reported to be a version of the Argentine Condor II or Alcran missile. Ranges have been reported from 480 to 900 kilometers or of the Brazilian SS-300 Avibras with a range of 300 kilometers.
- o FROG 7 rockets with 40 kilometer range.
- o Multiple rocket launchers and tube artillery.

Chemical Weapons

- o Massive production facilities and stockpiles of mustard, nerve, and cyanide agents.

Biological Weapons

- o Major research effort. Production may have begun of at least one highly lethal weapon.
- o Laboratory capability to make biological agents.