X. THE COMBINATION OF IRAQI OFFENSIVES AND WESTERN INTERVENTION FORCE IRAN TO ACCEPT A CEASE-FIRE: SEPTEMBER 1987 TO MARCH 1989

10.0 The War Enters Its Final Phase

Nothing seemed less inevitable at the beginning of 1988 than an Iraqi victory. Iraq had fought good defensive battles at Basra and against most of Iran's later Karbala offensives, but Iran had scarcely abandoned its calls for final offensives and was calling for still more volunteers. Iran had retained the initiative in most of the battles in 1987, and Iraq usually had showed only limited capability to counterattack. Appearances, however, were deceiving. The course of the war was to change radically in the spring of 1988, and to result in a series of Iraqi victories that ended in forcing Iran to reject the same kind of terms for a ceasefire that it had rejected in 1982.

Three sets of factors shaped this new phase of the war. The first was a series of important changes in Iraq's armed forces and methods of warfare. The second was a change in Iran's ability to continue fighting because of the cumulative political and military impact of Iran's losses and mismanagement of the war. The third, less tangible, factor was the Western presence in the Gulf and Iran's growing diplomatic isolation.

10.1 Iraq Prepares for Offensive Operations

For all their shortcomings and mistakes in previous years, Iraq's forces had steadily improved in experience and professionalism. They suffered from little of the turbulence and internal political conflict that weakened Iranian forces and kept the Pasdaran and Iranian regular forces from benefiting from their experience. Iraq also steadily improved its land and air tactics. It benefited from outside advice from a wide range of sources, and it had ready access to most of the weapons and forms of military technology it needed. From Western intervention in the Gulf, in large part because Iran's tactics resulted in its increasing diplomatic and strategic isolation and steadily escalated the Western pressure against it.

As early as 1984, Iraq also realized that it might not be able to survive a defensive war of attrition. This was one of the critical factors that led Iraq into the "tanker war", but it also led Iraq to to reorganize its land and air forces. During the periods when Iran was not launching major offensives, Iraq began to pull selected combat units out of the front line and started to train and organize them as elite forces that could be used in counterattacks and as special forces.

These efforts made only limited progress during 1984 and 1985, in part because Iraq was under constant pressure from Iran and was still struggle to
expand its total forces to match the expansion of Iran's Revolutionary Guards. By 1986, however, Iraq had built up to an Army of between 800,000 and 1,000,000 men. It now had seven active corps and had 50 divisions and roughly 77 division equivalents. All of its corps now had excellent barrier defenses and Iraq had completed a network of military roads that allow far more rapid movement along interior lines that Iran could hope to manage even in defense combat. Iraq had also steadily improved its combat helicopter forces, and air units.

Iraq also began to slowly improve the command and control, and overall battle management of its air force. It built new air bases in areas like Basra and Najaf, and had at least 15 major operating bases with shelters and full support facilities by 1988. Iraq also acquired more modern Soviet aircraft like the Su-22, Su-25, MiG-29 and MiG-25R, in addition to its Mirage F-1s. Iraq slowly improved its reconnaissance systems. Iraq had some aircraft equipped with SLAR reconnaissance radars, and had begun to use the French commercial satellite and U.S. LANDSAT to provide information like terrain imaging. It also retrained its helicopter forces to attack as more effective forward reconnaissance units and as artillery spotters -- correcting some of the problems it had previously had it using artillery at targets beyond visual range and in shifting fires rapidly in response to changes in the tactical situation. This latter development proved particularly effective during the fighting in the north.

Although the constant pressure of Iranian offensives limited Iraq's ability to full develop these assets during 1986 and 1987, and to regroup and retrain its forces, Iraq did succeed in steadily expanding its elite Republican Guards and other forces it needed to launch successful counterattacks. There were only seven Republican Guards brigades at the start of 1986, but Iraq had at least 28 brigades by the beginning of 1988, with a total of 100,000 men. These units were given extensive training in offensive operations, and mixed armor, mechanized, and special forces units.

The Republican Guards units were given the best available weapons. For example they received Iraq's T-72s. They were given special treatment like the supply of bottled water, and they were given large numbers of trucks to provide the logistic support for mobile and offensive operations. By late 1987, they were organized into six commands or divisional equivalents of three to four brigades

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1 The total manpower, including the Popular Army, was over 1.3 million men. Some 500,000 of this total was Popular Army forces, but not all of the Popular Army forces were active at the same time. Some performed internal surveillance and fund raising work. Chubin and Tripp, Iran and Iraq at War, p. 93.
2 The Corps areas from north to south were: V, I, II, I Guards, IV Corps, VI Corps, III Corps, and VII Corps. Saddam Hussein claimed to have deployed 50 divisions along the front after the battle of Majnoon in June. Jane's Defense Weekly, July 9, 1988, p. 14.
3 There are unconfirmed reports Iraq had some SU-24 long range fighter bombers.
4 Some sources indicate the Republican Guards had 33 brigades by August, 1988.
each. These commands allowed tailoring of the force mix to support given types of operations and had independent artillery and helicopter units, and some times had independent chemical Corps support units."

Iraq created similar elite naval infantry brigades that sometimes trained with the Republican Guards units, and it aggressive trained these forces for the two kinds of operations it generally had failed to conduct successfully during the period from 1983 to 1987: Aggressive infiltration and assault operations, and operations in wetlands and across water barriers. While Iraq's claims to have built training grounds with life-sized models of the area to be attacked cannot be confirmed, it is clear that Iraq began to conduct extensive training under trying weather and terrain conditions, and practice offensive operations of the kind it would need to counterattack at Faw, around Basra, and in mountainous terrain.

Iraq increasingly turned its chemical corps into an elite force. Although it had begun to use chemical weapons in 1983 and 1984, Iraq at first experienced severe problems in using its weapons effectively. Further, it found mustard gas to be too persistent to attack through. During 1985-1986, however, Iraq steadily improved its targeting and delivery means, and ability to predict wind patterns. By mid 1987, Iraqi also began to produce enough nerve gas to give it large stocks of highly lethal non-persistent agents. Unlike mustard gas, Iraq could use non-persistent nerve gases relatively near to its own troops and during the initial assault phase. This allowed Iraq to introduce a weapon that had a major impact both in inflicting casualties and in inflicting panic."

Iraq also carried out intensive training exercises during much of 1987. It had withdrawn elite units for special combined arms training in 1985 and 1986, but this kind of combined arms training took on a far more serious character in the summer and fall of 1987. Iraqi armor and infantry was given special training in maneuver and combined arms operations. The commanders at every level in carefully selected units -- including the Republican Guards -- were allowed far more freedom of command in these exercises, and Iraq conducted Corps level exercises

5 Based on interviews in Iraq in November, 1987.
in fluid defense and counter-attack tactics. Iraqi artillery units were given special training in concentrating and shifting fire, and in providing fire at the call of FACs in the forward area, rather than prepared fire. These measures scarcely restructured the entire Iraqi Army, but they did make a major improvement in a number of key Iraqi corps and divisions.

Iraq improved its tactical intelligence capabilities. It made better use of night vision devices, improved its use of electronic warfare in the form of direction finding and radio intercepts, and improved its ability to use tactical radars to locate Iranian forces and artillery units. It also improved its use of helicopters and aircraft for reconnaissance, and cut the number of bureaucratic barriers to the rapid transfer of information to field commanders.

While the exact nature of the changes involved is still unknown, Iraq also seems to have reorganized its Supreme Defense Council in 1986 and 1987 to give its field commanders and fighting officers a much stronger voice. These reorganizations seem to have been particularly important after the fighting in Basra in 1987, and they helped reduce the over-centralization of the Iraqi command structure, and give professionalism more weight over politisation. One of the most obvious lessons of war is that politics kills effective command, as does over-centralization and management of the war that does not give combat commanders a major voice in decisions making. It is a lesson that many nations ignore, but Iraq had learned it at least in part by the beginning of 1988.

Iraq had always had good logistics capabilities and mobility. Nevertheless, it continued to increase its numbers of tank transporters, and trucks during 1986-1987. Iraq raised its number of tank transporters from 1,000 to 1,500, and created a new road network to allow units to redeploy from the Central to the Southern front in 12 to 24 hours. To ensure that Iranian forces could not cut Basra off from Baghdad by thrusting through the north-south roads on the Western Bank of the Tigris, Iraq completed a new six lane highway from Safwan on the Kuwaiti border, past Zubair and Nasiriyah, and then north towards Baghdad. Given the fact that Iraq had still another road and a railway along the Euphrates, which were much further to the West, this mix of north-south lines of communication gave Iraq considerable insurance against an Iranian breakthrough. It also improved Iraq’s ability to rapidly mass and sustain its forces in offensive operations.

These changes scarcely led to overnight shifts in Iraq’s effectiveness, but were part of a massive national effort that lasted for several years. While their importance was overshadowed by Iran’s constant offensive pressure during the first six months of 1987, it was already clear that some aspects of Iraqi performance were improving. Iraq’s new elite forces showed increasing capability to act as a strategic reserve during Iran’s offensives during early and mid-1987. Iran’s growing problems in launching major offensives in the second half of 1987
then gave Iraq a vital breathing space which it used to fully organize its new forces and capabilities. By late 1987, Iraq reached the level of land and air strength where it finally had the forces it needed to conduct successful counteroffensives.

At the same time, Iraq also prepared for a massive change in the way it conducted the war against the cities. It obtained large numbers of long-range Scuds from the USSR, and the USSR provided substantial technical advice and actual support during their use in combat. Iraq also improved the mission planning and organization of its offensive air units. It continued to obtain more advanced weapons like cluster bombs and air-to-surface missiles, and built up massive stocks of bombs loaded with nerve and mustard gas. This gave Iraq the capability to conduct both a major missile war, and more effective interdiction and strategic bombing efforts.

10.2 Iran's Political and Strategic Mistakes

In contrast to Iraq, Iran had suffered significantly during the course of 1987. Iran's repeated offensives began to exhaust popular support for the war, and Iran's ability to substitute ideological fervor for military professionalism and modern weapons. Even so, Iran pressed on with badly planned offensives that continued to emphasize popular warfare and revolution fervor at a time it was clear than it needed more military professionalism and that much of the previous popular support for the war had begun to decline. Iran's leaders lost touch with the feelings of its people and troops. Iran's leaders forgot a major lesson of war - much as did the leaders of the U.S. during the Vietnam conflict and the Soviet leadership during the war in Afghanistan. Regardless of the type of regime, any war dependent on large scale mobilization and national sacrifice can only be sustained through continued popular support.

Equally importantly, Iran continued to make major strategic mistakes. It continued to provoke a series of naval encounters with U.S. and other Western naval forces that were to make it brutally clear to Iran that it could never succeed in forcing a partial cease-fire that ended the war at sea without accept a cease-fire on the land. This helped increase Iran's growing diplomatic and strategic isolation.

These factors were to have a catalytic effect on Iran's ability to continue the war that went far beyond the tactical and strategic impact of the battles involved. In fact, the end of the Iran-Iraq War was to again demonstrate another important lesson of war: That few wars ever end in the destruction of the enemy's forces, they end when a combination of political and military factors destroys the enemy's ability to continue fighting.

Equally important, Iran continued to experience growing problems with chemical warfare. Iran did not make effective offensive use of gas weapons before
1987, and it then only seems to have been able to make limited use of gas during a few battles in the Fish Lake area and near Mehran. There were growing reports during early 1988, that Iran had begun to manufacture its own chemical weapons in significant amounts at its chemical weapons development facility near Shiraz. Nevertheless, Iran lagged badly behind Iraq in producing and using chemical weapons. Iran only seems to have made limited use of gas weapons in 1988 -- most notably at Halabjah. Even in 1988, it is unclear whether Iran could make enough phosgene, chlorine, hydrogen cyanide, or mustard gas to carry out any large scale chemical warfare operations.¹

Iran did improve its chemical defense gear during 1986 and 1987. Iranian troops were extensively equipped with improved gas masks, protective clothing, decontamination kits, and atropine and amyl nitrate as antidotes to nerve gas. This equipment, however, only offered moderate protection against mustard and nerve gas, and even fully equipped troops suffered large numbers of casualties when they were exposed to Iraqi gas attacks. Iran also lacked the detectors, command and control system, and equipment to provide effective protection from nerve gas. ¹

10.3 New Iranian Mobilization and Arms Procurement Efforts, And an Emphasis on Campaigns in the North

The land war remained unusually quiet on the land during the final months of 1987. Iran did continue to launch small offensives after its major attack on Basra. It conducted roughly a dozen small "offensives" along the border -- with names like "Nasr", and "Najaf" -- but these were generally limited attacks, and many did little more than try to seize a given ridge line or position in the mountains.

Iran was most successful in its attacks in the Kurdish sections in the North. It used its own forces, anti-Iraqi Kurdish forces, and a small unit of Iraqi prisoners of war that had agreed to fight Iraq. These forces did not dominate the countryside in the north, but they were able to occupy many villages at night. They often hit Iraqi convoys and closed roads during the day, and sometimes were able to cut electric power to major cities like Kirkuk.

Iraq was forced to send some elements of its fourth division from the 7th Corps in the south into the area, but it did not have to commit major numbers of additional troops. Iraq instead relied heavily on bombing or bombarding Kurdish villages and on the ruthless relocation of the people in the villages under its control, and demolishing the homes and agricultural infrastructure that remained. This sometimes created more new enemies than such efforts eliminated, but Iraq was more irritated by the Kurds than threatened by them.

In the late fall, Iran again carried out its seasonal mobilization. It built up its artillery and ammunition supplies in the Southern Front north of Basra. Iranian
In fact, however, the Iranian build-up seems to only reached 60,000 to 100,000 men, allowing for rotations. This mobilization was not enough to fill out the force of roughly 20 Iranian combat formations or "divisions" claimed to be in the Southern sector. The impact of Iran's casualties during 1987 began to have a powerful effect on Iran's mobilization efforts. The total number of volunteers seems to have dropped from 80,000 in 1986 to 40,000 in 1987, and forced Iran to extend its conscription period from 24 to 28 months in early January, 1988. According to some estimates, Iran only built up a force of 300,000 men, versus the 700,000 it mobilized for its push against Basra.7

Further, figures like Kamal Kazzari -- a member of the Supreme Defense Council and its chief military spokesman -- stated that Iran would make a series of major tactical thrusts, rather than carry out a single large offensive. These statements reflected the fact that Iran was actually shifting a substantial amount of its new manpower, and some of its most experienced units, to the north in late 1987. These shifts may partly have been a response to the rains, which were late, and allowed Iraqi to use its armor effectively much later in the season. More probably, they was a response to the size of Iranian losses opposite Basra in early 1987, and to the reluctance to take more casualties in attacking a front whose defenses had been greatly improved.

Iran may also have been affected by Syrian and other pressure to avoid further attacks that would alienate the Arab world, and by the fear such attacks would lead to Soviet and PRC support of a UN arms embargo. Finally, the move may have been the result of internal political divisions within the leadership around Khomeini, the desire to avoid any bloody defeat with Iranian elections coming up in the early Spring, and from Iranian calculations that there was little real chance of victory. Further, a shift to campaigns in the north offered Iran some advantages because Iraq's pipelines at oil fields at Kirkuk could be approached through rough and mountain terrain that denied Iraq the ability to take full advantage of its armor and the open killing grounds in front of its barrier defenses in the south.

Iran's new emphasis on the north did, however, ignore several important strategic considerations. One was that any major advance in the north had to be fought ridge line by ridge line and still offered Iraq the ability to make good defensive use of natural terrain, and its vast superiority in helicopters and artillery. Second, Iraq's lines of communication into the north were far better than Iran's and Iraq could redeploy reserves far more quickly to threatened areas than Iran could strengthen its offensive. Finally, and most important, Iran's redeployments to the

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north locked a very substantial amount of its army in mountain warfare at a time when Iran lacked any significant manpower advantage over Iraq.

The net result was to leave Iran's positions in the south understrength and vulnerable at a time when Iraq was finally ready to exploit that vulnerability. Iraq maintained some 900,000 men all along the front versus around 600,000 full time actives for Iran. It deployed up to 250,000 men in the south around Basra. It completed three rings of defensive positions around the city, and completed a series of parallel north-south defensive lines to provide defense in depth all along the Southern and Central fronts.

In spite of its new emphasis on campaigns in the north, Iran seems to have tried to convince Iraq that it could still attack in the south. Iran carried out some of the seasonal shifts in equipment and supplies to the south it normally deployed before a massive offensive. Iran was also able to use Chinese, Austria, and North Korean artillery deliveries to virtually double its artillery strength at the front, and reduce its ratio of inferiority from roughly 3:1 to 2:1. It added some armor, and built new roads to help it rapidly redeploy and reinforce during attacks. Nevertheless, it did not deploy the normal number of tents, trucks, and support equipment.

Iran's military problems during the course of 1988 do not seem to have been the result of a shortage of arms, although Iran was having growing problems in getting Western parts, ammunition, and replacement systems. Iran obtained roughly $1.5 billion worth of arms, and got 60-70% of its arms from the PRC and North Korea, 20% more from Eastern Europe, and 20% from the rest of the world. During 1986 and 1987, Iran was able to obtain large numbers of new tanks, armored fighting vehicles like the BMP-1, and towed artillery. Iran ALSO DOUBLED ITS DOMESTIC ARTILLERY SHELL PRODUCTION DURING 1987, AND CLAIMED TO BE FULLY SELF-SUFFICIENT in small arms and small arms munitions. Its main problems were its dependence on foreign suppliers for fuzes and propellents.

The PRC supplied some $600 million worth of arms in 1987, largely artillery, ammunition, and missiles. China also sold equipment for the manufacture of arms and missiles. It shipped another $200 million worth of arms in January, 1988, and had agreements to provide $400 million more during the rest of 1988. North Korea sold another $400 million worth of arms in 1987, including artillery, fast patrol boats, and Soviet-designed Scud surface-to-surface missiles. New North Korean arms shipments, including Scud and Silkworm missiles arrived in January, 1988. The Warsaw Pact shipped some $350 million worth of arms, including a large number of troop carriers and some self-propelled artillery. None of these countries, however, seem to have delivered jet fighter aircraft, in spite of new rumors of sales by North Korea and the PRC.

Western supplies to Iran included some $150 million worth of ammunition and explosives from Spain and Portugal, at least some of which were actually made by France's Luchaire and the National Power and Explosive Company, and sold with
the same tacit knowledge of senior French defense and intelligence officials under a conservative government that had permitted them under a socialist one. These orders included up to 200,000 shells to be delivered during 1987-88, 200,000 detonators, 2,500 tons of TNT, and 650 tons of powder.¹

Japanese firms sold $100 million worth of trucks and spare parts to Iran, and private Swiss and West German firms continued to sell chemical warfare equipment. Iran’s major free world supplier, however, was Brazil, which sometimes used Libya to act as a Third Party. This meant Iran was now experiencing far more serious difficulties in getting Western arms and parts, particularly critical aircraft parts like those for the F-5.¹

10.4 The Fighting in the North in Late 1987

The only significant land action in the south during late 1987, occurred on December 20-21. Two Iranian brigades carried out a limited attack on the northern edge of the Hawizeh marshes in the south-central front. Iran attacked along a river in the Fakkeh border area, near the border outpost of Zabaidat and east of the Iranian town of Misan (formerly Amara).

While both sides made the usual conflicting victory claims, Iran seems to have lost several thousand men and Iraq only several hundred. A brigade or division of Iranian troops seem to have tried to find a gap in Iraqi defenses, and to have been caught up in a minefield. Iraqi was then able to use its advantage in artillery to inflict serious causalities. The experience was scarcely one that encouraged an Iranian attack on Basra.¹

The broader political and economic situation remained confused during early 1988. UN Secretary General Cuellar virtually gave up on his cease-fire negotiations with Iraq and Iran on December 10, 1987, and turned the issue over to the Security Council. Iraq remained unwilling to compromise on the timing of a cease-fire and withdrawal, and Iran insisted that Iraq be identified as the aggressor before the cease-fire. Getting the Security Council to act, however, presented two problems. The first was that it was unclear the PRC would agree to an arms embargo without or without Soviet support of such an embargo, or that either the PRC or USSR would honor an embargo if they did agree to it.

The USSR continued to be torn between trying to court Iran and seeking some kind of formal Western agreement to a Soviet role in the Gulf as the price of its support of an embargo. It called for a United Nations flagged force in the Gulf as the price of support for an embargo, and the UN force concept was clearly designed to limit Western freedom of action. By the end of December, the Security Council could only agree on an announcement that it would move towards drafting and adoption of an arms embargo. On December 25, the permanent members of the Council agreed to start drafting a resolution early in 1988, but this agreement
ignored the fact that several drafts already existed. Eight months after the UN had passed the original cease-fire resolution, there still was no formal agreement over enforcement.8

10.5 The Fighting in 1988 Begins

The land and air war remained relatively quiet during the first months of 1988. Iran claimed to have raided Iraq's inactive Al Bakr and Al Amaya oil terminals in the Gulf, and to have destroyed missile and radar sites, and to have killed at least 100 Iraqis. These claims, however, seem to have been exaggerated. Further, Iran claimed to have destroyed three Iraqi frigates, none of which were at sea in the Gulf at the time.9

Iran did launch a more serious offensive, the "Bait-ol-Moghaddas 2" attack, on January 15, 1988. This attack took place in the Mawat border area in Northern Front, east of Sulaimaniya. Iran had been fighting in this area since the Spring of 1987, with mixed success. Iran claimed to have taken 42 square miles of new territory, including 11 heights and 29 peaks, to have killed or wounded some 3,500 Iraqi soldiers, and to have taken 750 prisoners. Iraq denied these Iranian victory claims, but Iran does seem to have scored some gains. While the area involved was sparsely populated, and involved heights of 2,950 to 6,500 feet, it had some strategic value because it allowed Iran to improve its position in future attacks on the northern front, and again strengthened its ability to supply anti-Iraqi Kurds.10

As for the air war, Iraq continued to strike both at ships and at targets like dams, bridges, and refineries throughout December, January, and March. Iran could do little about this, although it did experiment in trying to use its F-4s to fire Maverick missiles at ships in early January. It seems to have concluded that the Mavericks were now so old they have to be used before they became totally inoperable. In practice, however, the Maverick's small warhead and decaying guidance systems made them ineffective.

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Iraq hit Kharg Island on February 7, 1988 -- for the first time since November 4, 1987 -- and continued to use bombing missions to probe at Iran's air defenses. This led Iran to commit its F-14s to a rare ambush on February 9, 1988. The F-14s were armed with AIM-9 missiles and were able to close on two Iraqi Mirage F-1s when they turned north into Iranian waters at Farsi Island. At least one Mirage F-1 was shot down. While Iran had lost most of its air power, it still seemed to have about 20 F-4s, 20 F-5s, and 7-9 F-14s operational.\(^{11}\)

10.6 The War of The Cities Turns into A Missile War

The most dramatic change in the air war, however, began in late February. Iraq carried out a major attack on the Rey oil refinery in Tehran on February 27, 1988. Iraq did not deliver an effective enough attack to knock out the refinery. Nevertheless, the raid did do serious damage and forced Iran to again start rationing petroleum products.

Iran replied to this Iraqi air raid by renewing the "war of the cities" and firing three Scud missiles at Baghdad. This was one of the largest number of missiles Iran fired at a single time during the war, and was the first Iranian use of Scud since November 8, 1987. It raised the total number of missiles targeted on Baghdad to between 21 and 37.\(^{12}\) The Iranian firings were also were significant because many experts believed that Iran was down to as few as 20-30 of the Scud missiles it had obtained from Libya and North Korea. The military effect, however, was negligible.

All three missiles struck in largely unpopulated regions south of Baghdad. Nevertheless, the new Iranian missile attack gave Iraq an excuse to sharply escalate the war. On February 29, Iraq launched five new long range missiles that it called the Al Husayn, and which seem to have been variants of the Scud-B or Scud-D.\(^{13}\) It then repeated these attacks day after day, and it soon became clear that Iraq had been preparing its missile barrage for months.\(^{14}\)

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\(^{12}\) Figures differ sharply. Some Iranian rockets which could not have hit Baghdad seem to be counted as failed missile strikes on the city in some source material.


Iraq's new long range missiles came as a surprise to both Iran and Western intelligence experts. They seem to have been modifications of regular Scud B missiles, which the Soviet Union calls the R-300 or R-17E. According to some experts they used a lighter warhead and more of the missile's propellant, although some experts feel they used a strap-on booster that was made in Iraq with East German or North Korean assistance. In any case, Iraq was able to give the Scud over twice its normal 300 kilometers, and some did missiles fly well over 500 kilometers. This was enough range for Iraq to reach Tehran and Qom from positions south of Baghdad.

Iraq seems to have had several motives in starting this new phase of the missile war. The "war of the cities" helped publicize the seriousness of the war and to push the UN cease-fire effort forward. It was a means of striking at Iran which presented less political complications than attacks on Gulf shipping, and which affected the Iranian people and their support of the war. Iraq was immediately successful in the former objective. The missile war achieved world wide attention.

Iraq’s attacks also may have been designed to divide the Soviet Union from Iran. If so, Iraq had some success. The Iranian government announced a few days later that it had discovered missile fragments showing the missiles Iraq had launched were Soviet and had been manufactured as recently as 1985 and 1986. They were probably part of a shipment of 300 Scud Bs that the USSR had delivered in 1986. Iran publicly blamed the USSR for supplying the missiles Iraq was using. The Iranian government allowed a carefully staged anti-Soviet riot to sacked the Soviet embassy in Tehran on March 6, and another riot attacked the consulate in Isfahan that same day.

Estimates of the overall pattern of strikes involved differ, but Figure 10.1 provides an estimate of the overall interaction between the tanker and missile wars between 1987 and 1988 based on Iraqi and Iranian claims. Many of these claims were exaggerated, particularly strikes on naval targets by Iraq and strikes on civil targets by Iran. Nevertheless, Figure 10.1 is valid in indicating the intensity of the sudden rise in Iraqi missile attacks and attacks on urban targets. Other sources indicate that Iraq had hit Tehran some 33 times and Qom three times by March 6, 1988.

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15 New York Times, March 6, 1988, p. 1; Economist, March 26, 1988, p. 34.
16 Baghdad has 23% of Iraq's population and is only 80 miles from the border. Tehran is about 290 miles from the front lines.
18 Soviet officials denied that the Scuds given Iraq could hit Tehran on March 10, 1988.
19 A popular poster in Tehran showed three flags. A U.S. flag largely burnt away, an Israeli flag half burnt away, and a Soviet flag with limited burn damage. Another poster showed a Pasdaran holding what could only be a U.S.-made Stinger missile and shooting down a U.S. minesweeping helicopter.
The variants of the Scuds that Iraq was using only seem to have had a 135-250 kilogram warhead, and were scarcely "city killers", but they were audible over wide areas as they neared their target, made a loud bang, and blew out windows over a wide area and produced nearly 60 killed and 130 wounded. Iran, in turn, had fired 16 Scud missiles at Iraq, 12 of which were targeted at Baghdad. Iraq was able to fire an average of three Scuds a day and Iran was at most firing one.

Iraq's success was due at least in part to Iran's failure to obtain resupply and to produce its own missiles. Iran did continue to fire its Oghabs, and launched some 104 missiles in 1988. The Oghab only had a range of 40 kilometers, however, and lacked the accuracy to hit anything other than large area targets. While the Oghab did have a 70 kilogram warhead, Iran had no way to target it and it was not particularly accurate or lethal. The most Iran could do was to launch the Oghabs at the Iraqi cities near the border. These targets included Basra, Abu al-Khasib, Al-Zuybar, Umm-Qasr, Mandali, Khanaqin, and Banmil, but the Oghab strikes had far less effect than artillery barrages.

Iran did obtain more Scud Bs from various sources. During the 52 days of the war of the cities in 1988, Iran fired at least 77 more Scud missiles which it had obtained from North Korea. Sixty-one were fired at Baghdad, nine at Mosul, five at Kirkuk, one at Takrit, and one at Kuwait. Iran fired as many as five missiles on a single day, and once fired three missiles within 30 minutes. This still, however, worked out to an average of only about one missile a day, and Iran was down to only 10-20 Scuds when the war of the cities ended.

Iran also began firing another missile of its own manufacture called the IRAN-130, although it failed to produce the IRAN-130 in any numbers. Some IRAN 130s were deployed to the Pasdaran, and the first such missiles were fired against Al-

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20 There are some indications that the modified Scud or Al-Husayn missile was test fired in 1987. Iraq announced it had completed such a missile in August, 1987, and that it had a range of 650 kilometers. Expert first hand observers estimated the explosive force as being roughly the same as that of a 500 pound bomb. The missiles impacted either in direct flight, or in a pattern where the missile seemed to halt its rocket engine and the war head/misssile would fall. According to some observers, the war head sometimes appeared to separate from the missile. This separation is characteristic of the Scud B. The warhead separates during the terminal dive to avoid the axial sway of a larger missile body, and this also allows the warhead to hit at speeds in excess of Mach 1.5. The impact would often come a few seconds after the warhead penetrated the earth and the explosive force would rise in a V-shaped cone. This often sheared the side off of buildings, rather than vectored the maximum force from the side.


22 Jane's Defense Weekly, June 20, 1987, p. 1289


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Amarah on March 19, 1988 and four more were fired against the city in April. These numbers were negligible, however, and it is unclear whether any of the IRAN-130s hit their targets or whether such hits had any tactical effect.
Figure 10.1

Strikes Reported by Iran and Iraq Affecting "The Tanker War" and the "War of the Cities" in 1987 and 1988 - Part One

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<td>Scud^5</td>
</tr>
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<td></td>
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</tbody>
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| Jan  | 1-15 | 5 | 3 | 30 | - | 3 | - |
|      | 16:31 | 2 | 2 | 18 | - | 15 | 3 |
| Feb  | 1-15 | 4 | 3 | 27 | - | 5 | 3 |
|      | 16:31 | 5 | 3 | 8 | - | 5 | 5 |
| Mar  | 1-15 | 3 | 1 | - | - | - | - |
|      | 16:31 | 5 | 3 | 4 | - | - | - |
| Apr  | 1-15 | 2 | 2 | 5 | - | - | - |
|      | 16:31 | 3 | 3 | 2 | - | - | - |
| May  | 1-15 | 4 | 4 | 4 | - | 1 | - |
|      | 16:31 | 2 | 6 | 1 | - | 1 | - |
| Jun  | 1-15 | - | 1 | - | - | - | - |
|      | 16:31 | 1 | 3 | 1 | - | - | - |
| Jul  | 1-15 | 5 | 3 | 6 | - | - | - |
|      | 16:31 | - | 2 | - | - | - | - |
| Aug  | 1-15 | - | 2 | 2 | - | - | - |
|      | 16:31 | - | 13 | - | 7 | - | - |
| Sep  | 1-15 | 22 | 10 | 35 | - | 8 | - |
|      | 16:31 | 19 | 7 | 19 | - | 3 | - |
| Oct  | 1-15 | 15 | 8 | 12 | - | 6 | - |
|      | 16:31 | 9 | 1 | 4 | - | 8 | 4 |
| Nov  | 1-15 | 18 | 3 | 14 | - | 9 | 1 |
|      | 16:31 | 12 | 7 | 10 | - | 2 | 2 |
| Dec  | 1-15 | 8 | 5 | 7 | - | 2 | - |
|      | 16:31 | 9 | 10 | 1 | - | - | - |
| TOTAL IN 1987 | 153^6 | 93 | 223 | - | 70 | 15 |
## Figure 10.1

Strikes Reported by Iran and Iraq Affecting "The Tanker War"
and the "War of the Cities" in 1987 and 1988 - Part Two

<table>
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</tr>
<tr>
<td>TOTAL IN 1988</td>
<td>74</td>
<td>48</td>
</tr>
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</table>

Source: Adapted from a working paper by Gary Sick.
1. Bombing and missile attacks as reported in daily war communiques and other sources.
2. Attacks on maritime targets and off-shore oil terminals as reported in Iraqi daily war communiques.
3. Iranian gunboat attacks on neutral shipping.
4. Includes all long range missiles.
5. Includes Scud B missiles fired at Baghdad and other Iranian cities.
6. 99 confirmed hits.
7. From beginning of the month to the Iranian acceptance of a ceasefire and UN Resolution 598.

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By March 10, Iraq claimed to have fired 47 missiles, all but five at Tehran, and Iran claimed to have fired 25 missiles at Baghdad and several at other Iranian cities. Both sides also made use of their air power. Iraq hit as many as ten Iranian cities a day. Iran could little more than launch a few token sorties, but Iran did renew heavy of shelling of Basra. This helped lead Iran and Iraq to reached yet another short lived cease-fire on attacks on the cities on March 11, but by then Iran had already lost 165 killed and 440 wounded.¹

The impact of Iraq's new missile and air strikes on Iran was far different than in the past. Where the Iranians had previously been able to adapt to the relatively limited and short lived Iraqi bombing efforts, the constant pounding of missiles, and the growing fear that Iraq might use chemical weapons, had a major impact on Iranian morale. So did the rumors and reports than senior Iranian officials -- including Khomeini -- had left Tehran. According to some reports, nearly a million Iranians had fled Tehran by mid-March and several million more had fled by late April.²⁴

The Iraqi missile strikes did not do serious physical damage to any Iranian target, and killed substantially less than an average of two dozen people a missile. The bombings were more lethal, but still did not provide anything like the damage that occurred in Beirut during the Lebanese civil war. It is unlikely, therefore, that the missiles and bombing alone would have had a severe impact on morale.

In practice, however, the Iraqi missile barrage acted in in combination with a number of other variables, including a growing fear of chemical weapons. the impact of Iran's military casualties during the previous year, growing popular and military exhaustion with the conflict, Iran's inability to retaliate, reports of internal divisions within Iran's leadership, serious economic hardship and growing prices on the black market, and the knowledge that Iran would no longer be threatened if it halted its offensives, and the fear of gas weapons.²⁵

The "war of the cities", however, scarcely pushed Iran's leaders towards trying to negotiate an immediate peace. In the diplomatic arena, Iran made new efforts to counter the Iraqi effort to push towards a cease-fire. It took new steps to try to block any efforts at a UN arms embargo by claiming to accept the UN resolution in a way that was so ambiguous that it did not commit Iran to anything. The U.S., Britain, and France tried on March 5 to get Security Council support for an arms embargo with a 30 to 60 day waiting period, but could not obtain either Soviet or

²⁴ Based on discussions with Iranians present in the city at the time, Australian intelligence officers, and Robin Wright.

²⁵ No missiles with chemical warheads were launched during the conflict, although Iraq did make extensive use of bombs, canisters, mortars, and 130mm and 155mm artillery shells. (UN working paper.)
Chinese support. The USSR then proposed a limited cease-fire on missiles, which Iraq angrily rejected. This again left the UN paralyzed, and the Secretary General could do little more than invite both sides to send their foreign ministers to New York for intensive consultations.26

As for the situation in the Gulf, there were no attacks reported on shipping between February 12, and March 6, one of the longest lulls since the beginning of Western intervention. On March 6, however, Iran naval Guards units fired on routine U.S. helicopter reconnaissance missions from both boats and a naval oil platform. On March 8, Iraq hit the first Iranian ship since February 9, 1988. It previously had claimed 23 attacks since the beginning of 1988, but only nine had been confirmed by shipping companies. Iraq now, however, began to hit Gulf targets regularly and most of its strikes were confirmed by insurance groups or shipping agencies. Iraq also launched a major new raid on Kharg Island on March 19, burning two tankers and killing 46 sailors. Iran responded by launching a series of new Pasdaran attacks in the Gulf. Iran did little more than probe Kuwait’s defenses. A minor clash took place between Kuwaiti troops on Bubiyan and Iranian gunboats on March 30, 1988.

10.7 New Land Battles in the North Begin in March

On March 13, the first reports began to surface of new land battles in the North. Iran had now carried out its redeployments and build up in the north and began an attack on the northern front in the area of the Iraqi border towns of Halabjah, Khurmal, Kholmar, Dojaila, and Darbandkihan, just west of Nowsud in Iran and about 150 miles north of Baghdad.

Iran carried out major artillery barrages against both towns, and a mix of Pasdaran forces, Kurdish rebels, and Iraqi rebels and ex-prisoners of war captured seven border villages and 15 square miles of Sulaimaniya Province. Iraq claimed to have repulsed the attack, and to have thrown back two attacking brigades and to have killed 1,000 Iranians. It was clear, however, that the Iranian attack had scored some gains. Further, the attack to the break down of a temporary cease-fire in the "missile war". The same day that Iran attacked in the north, Iraq fired seven missiles at Tehran and used its aircraft to strike at six other Iranian cities.

Iran pressed on with the attack. Iranian forces struck at the southern edge of the most mountainous part of the border, near the Darbandikhan Lake or reservoir. Iran’s goal was to take enough territory in Northern Iraq to be able to advance on Sulaimaniyah and to seize control of the Darbandikhan Reservoir. This reservoir was created by one of the largest dams in Iraq and fed hydroelectric power to much of Northeast Iraq and Baghdad.

26 New York Times, March 6, 1988, p. 1; Economist, March 26, 1988, p. 34.
While Iran was forced to attack through mountains and using poor lines of communication, the attack offered Iran the possibility of opening an attack route into Iraq in an area where it could use terrain and Kurdish support to help offset Iraq's superior firepower, and it allowed Iran to achieve tactical surprise in a relatively lightly held area. As a result, Iran's attack produced substantial initial successes. Iraq kept most of its best forces in the south both to prepare for its own offensives and because of its fear of another "final offensive". It had only two divisions in the forward area and these were of mixed quality. Iraq's forces also did not position themselves well for mountain warfare.

Iraq also made some important tactical mistakes. Its units withdrew from many of the heights and ridges in the area, but then deployed forward to defend the towns at the border. Giving up the rough mountain terrain allowed the Iraqi forces to be outflanked, and several towns could not be held without defending the surrounding heights. Sending troops so far forward over-dispersed the Iraqi defenders and meant they could not concentrate against the main lines of attack. Iraq's forces had further problems in dealing with Kurdish infiltration behind their lines of communication, and according to some reports, Iran even managed to use speed boats to move its troops through part of the reservoir.

The end result of these mistakes was that Iraq lost much of its 43rd division, from 1,500 to 4,000 men, and large amounts of tanks, armored vehicles, artillery, support vehicles, and ammunition and spares from its 1st Corps. As in its Faw offensive in 1986, Iran found it could obtain substantial supplies when it overran Iraqi positions. Nevertheless, Iran could not advance fast enough to prevent Iraqi from reinforcing along superior interior lines of communication. Iran could not sustain its gains or achieve a breakthrough that led to any major tactical or strategic advantage. Further, Iran locked many of its best troops in mountain positions in the north, and failed to mobilize enough new forces to properly defend its southern front.

10.8 The Use of Chemical Weapons Escalates to the Level of Atrocity

More happened at Halabjah and Dojaila, however, than another Iranian mountain offensive. These towns were largely Kurdish and their population had often supported the anti-Iraqi Kurds in the area. Iraq treated them as being little more than centers of treason, and made heavy use of poison gas the minute its forces were forced to abandon the towns. Iraq also seems to have made extensive use of gas as a terror weapon. Rather than simply try to defeat Iran, or punish the residents of Halabjah and Dojaila for their lack of support, Iraq used gas as a broad threat to the Kurds to stop challenging Iraqi control of the northeast. Kurdish forces had scored some important successes during the winter, in spite of a bloody Iraqi campaign to control, relocate, and/or eliminate any Kurdish towns or population groups that showed any signs of support for the Kurdish rebels.
Kurdish forces had briefly occupied the Iraqi town of Kanimasi near the Turkish border in September, and Kurdish and Iranian forces had taken some 100 square miles of Iraqi territory in the area northeast of Kirkuk near Mawat, including some 29 heights and six villages on either side of the little Zab River. Kurdish forces occupied the border town of Deirlouk in January, 1988, and had conducted a massive raid on the Iraqi resort of Sari Rash, northeast of Arbil. Travel to the city of Rawanduz had become unsafe, and more raids, ambushes, and assassinations occurred throughout northeastern Iraq. Jalal Talabani's Kurdish Patriotic Union of Kurdistan (PUK) had also began to cooperate more effectively with Barzani clan's Kurdish Democratic Party (KDP). This cooperation may have been the result of negotiations which Rafsanjani had conducted in Iran in late 1987.27

Iraq was still able to secure much of the area with a mix of its regular troops, Kurdish security forces that still supported the government, and local militias. Iraq had to redeploy some of its troops and paramilitary forces to the north, however, and had to put sandbagged fire bases along the major roads in the area and to mine Kurdish rebel infiltration routes. The Kurdish guerrilla campaign was also a violent one, with ambushes, assassinations, and large numbers of civilian casualties. Like most such wars, it was a war of intimidation and there were atrocities on both sides.

Most people outside the region, however, only understood that poison gas had been used against civilians. Iran rapidly gained a major propaganda advantage. It released horrifying TV films showing that up to 4,000 civilians had died of mustard gas and other agents, possibly including phosgene, nerve gas, and/or cyanide.28 As a result, it brutally clear that Iraq had made extensive use of gas warfare against women and children. While evidence later persuaded American experts that Iran had also fired gas shells into the town of Halabjah during the struggle for the town, it was Iraq that faced worldwide condemnation.29

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27 Some cooperation began in 1986, after the failure of talks between Talabani and the government. The KPUK normally is strongest in the area around Sulaimaniyah and the KDP is strongest to the north and west. The Barzani clan is now head by Massoud Barzani, the son of the former leader, Mustafa Barzani. See Patrick E. Tyler's excellent analysis in the Washington Post, February 19, 1988, p. A-15.

28 Some reports indicate that Iraqi bombers dropped cyanide gas in 100 liter containers that vaporized on impact. An Iraqi general captured in the fighting, Brigadier Nather Hussein Mustafa, claimed on Iranian TV on March 24, 1988 that he saw clouds of gas arise over Halabjah. Two other captured Iraqi officers confirmed this. The casualty figures are very controversial. So are data on the population of the towns involved. Halabjah is said to have had a population of up to 70,000, but nearly half the population seems to have fled after an uprising against the Iraqi military authorities failed in May, 1987. Dojaila has a population of around 20,000.

29 It is easy to underestimate the importance of the moral sanctions against the use of gas. In the 35 years between the end of World War I and the end of the Korean War, there were only two confirmed uses of lethal gas -- Italian use of mustard gas against the Ethiopians during 1935-36 and Japanese use of gas against the Chinese during 1937-1942. Washington Post, March 24, 1988, p. A-37; Economist, April 2, 1988, pp. 35-37.
This mix of a limited victory and a favorable foreign reaction may have deceived Iran into exaggerating the importance of its victories in the area. Khomeini made a rare public appearance on March 20, and said he would press on for “final victory”. That same day Iran claimed it fired 13 missiles at Iraq.

Iran then resumed its offensives north east of the Kurdish town of Sayyid Sadiq. Iraq had deployed some 7,200 troops (four battalions) from its 7th Army Corps in the South, and counterattacked, but its was repulsed by roughly 30,000 Iranian attackers. Iran then advanced up to 16 kilometers through the Rishan mountains and captured Sayyid Sadiq. The seriousness of this fighting is illustrated by the fact Iraq claimed it flew some 224 combat sorties per day. Iraq also lost up to three planes per day, although Iran may also have lost some of its few remaining F-5s.

Once again, however, the end result of Iran’s victories was that they forced Iran to commit more troops from the south to the north, caused Iran more casualties, and did not produce any major breakthrough that Iran could exploit. As the fighting went on, Iraq was also able to bring more and more of its superiority in air power and firepower to bear. It reestablished its defensive lines by early April, and gradually began to push the Iranian forces back. While it is impossible to determine how much use it made of poison gas, it seems to have recaptured Sayyid Sadiq—which according to some reports Iraq then evacuated and leveled.

Iraq retook Iranian positions around Qara Dagh, about 20 miles west of Lake Darbandikhan. Iran was conspicuously silent about Iraqi claims to have recaptured most of their losses and to have inflicted serious losses on Iran position. While the exact details are unclear, the Iraqi in the Northern and Central fronts seems to have become much more secure by the first week in April. As had been the case in several previous offensives, Iran lacked the technology and firepower to continue its advances, and even hold most of its gains, once Iraq adjusted for its initial tactical mistakes.30

10.9 New Developments in the "War of the Cities"

Iraq also continued its missile strikes and the war of the cities. It announced on March 22, that it had fired 106 missiles against Iranian cities. Iraq fired 10 missiles a day against Iranian targets. On March 27, 1988, Iran claimed that Iraq had started to use a new and heavier missile. This started new speculation about possible Iraqi use of the SS-12, although the missile involved was almost certainly a Scud with a still smaller warhead or a heavy air-to-surface missile launched from Iraq's Soviet-made Tu-16 bombers.

Iraq launched missiles at targets like Qom as well as Tehran, and conducted major air raids at four Iranian cities. These missiles attacks and bombing sorties

were still relatively ineffectual on an individual basis, and only about 18% of the 
strikes hit a target. Nevertheless, Iraqi missiles and aircraft had now hit some 37 
cities, and Iraq scored many hits on a cumulative basis. Iraq also no longer gave 
Iran time to recover from the Iraqi air attacks on its refineries and petroleum 
distribution points.

By April 7, 1988, Iraq had raised its total missile attacks on Iranian cities to 140. 
Iran had replied with some 65 Scud attacks, but virtually all have missed their 
target or failed to do significant damage, and Iran seems have used up most of its 
missiles.\footnote{31} Iran was forced to use a few of its remaining aircraft to launch an air 
raid on Baghdad on April 7, 1988. This raid had little effect, however, and one 
Iranian aircraft seems to have been shot down.\footnote{32}

Iran's propaganda about Iraq's use of poison gas at Halabjah, and continuing 
reports from the front of the further Iraqi use of gas, also increasingly backfired 
against Iran. The fear of Iraqi gas attacks rose steadily among both the population 
of Iranian cities and among Iranian troops at the front. It was clear that the fear of 
gas warfare was having a significant effect on Iranian recruiting and the flow of 
volunteers and on the popular support for the war.

10.10 Iraq Retakes Faw

It was at this point, that Iraq began a series of land offensives that reversed the 
course of the war. Iraq suddenly shifted from defense to launching major counter-
offensives. There was only limited visible warning of this shift. While Iraq had made 
no great secret about the advanced training counter-offensive combat described 
earlier, it had conduct similar training since 1984 and it drew only limited Iranian 
attention.

During early 1988, Iraq supported new attacks on Iran by the People's 
Mujahideen National Liberation Army on a 14 mile front near Shush. At the same 
time, Iraq begin to build up its forces in the south. This Iraqi build-up, however, 
initially appeared to Iran to be a routine strengthening of its defensive positions. 
While Iranian aircraft took the unusual step of beginning to to attack Iraqi 
concentrations south of Basra on March 26, 1988, Iran does not seem to have 
taken the risk of an Iraqi counter-attack seriously. Iraq had conducted a major 
deception operation for nearly a month before the attack began. It had kept moving 
troops around the country, generally giving the impression that it was deploying its 
forces north.

When the Iraqi attack did come, it was one of the largest Iraqi offensives since 
1980. Iraqi forces had trained for months near Lake Habaniyah and Al Hara. Iraq

\footnote{31} Iraq had fired 160 missiles by April 18, 1988.  

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had reinforced its 7th Corps and redeployed much of its Republican Guard and newly trained attack forces. It had built up large stockpiles of artillery and chemical weapons, and about two weeks before the attack had quietly deployed massive stocks of ammunition. Iraq also waited until April 17, the first day of Ramadan and the beginning of the annual month of fasting. This was a period when Iran was rotating its troops and had left positions like Faw undermanned. Some reports also indicate that the Iranian garrison at Faw had slowly been reduced from a peak of 30,000 men to only 5,000 to 8,000 in preparation for a rotation of its troops.  

Most reports indicate that the garrison was manned with relatively low grade older troops and volunteers, and that its commanders were slow to react. Further, the Iranian defensive positions were surprisingly badly developed. They lacked depth and were not particularly well sheltered or reinforced with tank barriers. The only major sheltered area was the central Iranian command post in the town of Faw. Many defensive facilities had been left unfinished, and there seems to have been little training or preparation for gas warfare.

Iraq's "Blessed Ramadan" offensive was carefully timed to achieve almost complete tactical surprise. At the moment the attack started, most of the Iranian defenders were celebrating the last evening before the Ramadan fasting with a feast. Iraq built up for its attack at night without alarming them, and then began to advance at 5:00 AM. Forces from the 7th Corps, under the command of Major General Maher Rashid advanced down the bank of the Shatt al-Arab waterway. Iraq also conducted two amphibious attacks to flank Iran's main defenses and made extensive use of gas weapons.

Republican Guard forces, including many of the elite units that had received advanced combined operations training during 1986 and 1987, pushed south down the center of Faw some 21 miles southeast from positions between Zubair and Umm Qasr, and Iraq achieved a superior force ratio of roughly 6:1. Third Corps forces attacked down the other side of Faw, and special forces attacked through the marshy tidal flats, or "Great Salt Lake", west of Faw. Iraq used non-persistent nerve gas to help smash through Iran's defensive lines, took advantage of relatively dry terrain conditions and good weather, and quickly made major gains.

At the same time, Iraqi forces launched successful amphibious attacks on the Western side of the Peninsula from Umm Qasr. These forces fought their way through minefields and barbed wire as well as complex water barriers with considerable success, although they took significant casualties. Iraqi artillery was also effective, and clearly benefited from its improved training in 1987. Iraqi artillery

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34 This center had a communications cable under the Shatt to a microwave relay tower and direct command links to Tehran.
35 Philadelphia Inquirer, June 5, 1988, p. 20A.
moved more quickly, was more responsive to commanders in the forward area, and did a much better job of shifting and concentrating fires.

Although Iraqi forces took casualties in penetrating the minefields and other defenses around the now virtually destroyed town of Faw, particularly the 7th Corps forces, the Iranian forces never recovered from the initial assault and could not regroup. Many Iranian forces put up only a brief defense, and the local commanders showed little ability to rally their troops. Few units showed any sign of the willingness to die that had characterized Iranian forces in previous campaigns. The Iranian defenders began to pour back across the Shatt, but Iraqi fighters also knocked out two of the three pontoon bridges across the Shatt al-Arab from Iran to Faw. This still allowed Iranian troops to retreat, but forced them to retreat in disarray and without their equipment. Iraq claimed that its air force flew 318 fighter and gunship attacks in support of the offensive on the first day.

Only 35 hours after the beginning of the attack, Iraq's flag again flew above Faw. Iraq also captured virtually all of the major combat equipment, armor, artillery, and stocks on the Faw Peninsula. This further weakened Iran's forces in the south.

Iran's dismay over the course of the attack is indicated by the fact that on the 18th, it charged Kuwait with allowing Iraq to launch part of its attack from Bubiyan and a claimed that U.S. helicopter gunships have supported Iraq. At the same time, rumors surfaced that both Rafsanjani, and Mohammed Rezai, the commander of the Pasdaran, had been sent to the Faw area to save the situation and that Khomeini refused to see them on their return.

The only immediate political result of Iran's defeat, however, was that Brigadier General Esmael Shorabi, the Chief of Staff of the Armed Forces, was replaced with Brigadier General Ali Shahbazi, and was reassigned to the largely symbolic post of "military consultant" to the Supreme Defense Council. President Khomeini also stated in swearing in Shahbazi that, "The Pasdaran and the army must work closely together to coordinate their operations in every area. At present, more than any other time, the army is need of sincere efforts." The change in command gave every appearance that the Mullahs were blaming the military for problems that they had created.

10.11 New Naval Conflicts Between the U.S. and Iran

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36 Experts differ over how much the Iraqi use of gas influenced the near panic on the part of some Iranian defenders.
38 Shahbazi was born in Qom. He entered staff college at 22, and was a junior officer at the time of the revolution. He had very close links to the Pasdaran and was considered a complete Khomeini loyalist. Jane's Defense Weekly, May 21, 1988, p. 995.
The naval fighting in the Gulf reached a new peak at virtually the same time that Iraq reconquered Faw. Iran first escalated tension in the Gulf by supporting pro-Iranian terrorists in seizing a Kuwaiti B-747 airliner, while on a flight from Bangkok to Kuwait, on April 5. The hijackers took advantage of the almost non-existent security at Bangkok airport and were able to take over 100 hostages. They immediately demanded that Kuwait free the 17 pro-Iranian terrorists it had convicted of acts of sabotage, and began a cycle of killing and intimidation that took the aircraft from Tehran to Larnaca in Cyprus, and finally to Algeria. Iran may well have allowed added hijackers to board the aircraft while it was in Tehran and seems to have given them grenades and machine guns in addition to the pistols they used to seize the aircraft. The hijackers also showed some indications of advanced training, since they quickly revealed an expert knowledge of both the layout of the aircraft and its technical details.39

On Thursday, April 13, 1988, Iran took a far more serious step. Small ships of the Iranian Revolutionary Guard laid a new minefield in the Gulf. The next day, the U.S. frigate *Samuel B. Roberts*, hit one of the mines as it was returning to Bahrain after completing the 25th convoy of 1988.40 The *Roberts* was one of 25 U.S. ships still operating in the Gulf, and the mine explosion lifted the ship's stern 15 feet, and blew a massive 22 foot hole. Ten American sailors were wounded, and the engine was flooded.41

Like the attack on the *U.S.S. Stark*, the explosion illustrated the critical importance of modern damage control and fire fighting capabilities. The explosion not only ripped a hole in the ship, it broke its keel, ripped the ship's engines from their mounts, and sent a fireball 150 feet up its stack. Fuel lines ruptured and major fires broke out. There were no fatalities because the engine room was fully automated and no crew were present.

The crew did, however, face a series of massive problems. It had to lace the ship together with steel wire to keep it from breaking up and had to reinforce the compartments with wood timbers to prevent flooding. Steel plates had to be welded over massive cracks in the deck house. The ship was surrounded be mines and providing assistance was difficult.

At the same time, the *Samuel B. Roberts* had important advantages over the *Stark*. The crew was able to save the ship because it was fully deployed at battle stations. It had won an award for best performance for advanced damage control control control

40 The *Samuel B. Roberts* was an Oliver Hazard Perry-class guided missile frigate. It was 453 feet long, displaced 3,740 tons at full load, and had a crew of 225. It was armed with SAMs, SSMs, a 76 mm gun, torpedoes, and a close in weapons system (CIWS). It has active sonar on the hull and towed array sonars.
41 The *Roberts* was towed to Bahrain by the *USS Wainwright* and arrived on April 16, Three of the ten wounded were seriously injured.
training before its deployment that was partly the result of the lessons from the Stark. The Gulf was calm when the mine explosion took place, and all fire fighting equipment was dispersed and operational.

The U.S. rapidly discovered firm evidence that Iran had deliberately placed the mines in the convoy channel. The U.S. recovered several of the mines, and they were Iranian-made copies of the Soviet M-08 mine, and the divers who inspected them found Iranian serial numbers and clear evidence that the mines had been newly planted. European minesweepers later found a number of other mines and that there was more than one new field.  

On April 14, the National Security Planning Group (NSPG) met at the White House and considered several options. It eventually decided on a strike at three Iranian oil platforms in the Gulf, all of which were used by the Iranian naval Guards. The NSPG chose this option because it avoided any strike on Iranian land targets, was far from the fighting in the upper Gulf, and demonstrated Iran's acute vulnerability to any interruption to its oil exports. President Reagan approved the drafting of contingency plans the same day, and then the suggested strike plan at a meeting at 8:30 PM on April 17. The President briefed the leaders of Congress at 9:00 AM on April 18. It is important to note that the U.S. did not know that Iraq planned to attack Faw the same day.

Early in the morning, the U.S. set up an extensive air screen over the Gulf, using aircraft from the carrier Enterprise. This air screen included E-2C Hawkeyes in addition to the regular E-3A patrols. It also included F-14A on combat air patrol. The E-3As performed both long range warning functions, and attack coordination for A-6Es armed with Harpoon missiles, laser-guided weapons, and Mark 20 Rockeye cluster bombs. A-7E light attack aircraft were on standby alert.

At 9:01 AM on April 18, the U.S. gave Iran's Saasan oil platform several minutes warning. The 20-40 Guards on the Platform abandoned it, leaving four ZSU-23 anti-aircraft guns and several SA-7s. At 9:17 AM, they shelled the platform, and then blew it up with explosives. The U.S. used three ships in the attack, the Merrill, Lynde McCormick, and the Trenton. The Trenton was an amphibious ship which carried a 400 man Marine Corps unit which included AH-1T, UH-1N, and CH-46 helicopters. It was part of the Contingency Marine Air Ground Task Force (CM) 2-88. The Marines boarded the platform at 10:39 AM, and blew up the remaining installations.

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42 The U.S. had found 44 mines in the Gulf, and 16 of them in 1988. The most recent mine detection was on April 9, 1988. All of the previous mines were encrusted with marine growth and showed signs of having torn away from their moorings. New York Times, April 15, 1988, p. 3.
44 The Merrill was a destroyer, the Lynde McCormack was a destroyer, and the Trenton was an amphibious transport. The Simpson was a guided missile frigate, the Bagley was a frigate, and
At 9:32 AM, three additional ships, the Simpson, Bagley, and Wainwright, gave a similar warning to Iran's Nasr oil platform off of Sirri Island. Iranian forces started firing ZSU-23-4 anti-aircraft guns at the U.S. ships. The Wainwright fired several shells in return and the Iranians abandoned the platform. The U.S. ships then shelled and destroyed the Nasr oil platform by 10:25 AM. The two oil platforms were roughly 100 miles apart.45

The Iranian Navy ship Joshan, carrying Harpoon and Sea Cat missiles closed within 10 miles of the U.S.S. Wainwright and the American ships around the Nasr oil platform at 1:01 PM. The Wainwright warned it to remain clear or come under fire at 1:15 PM. The Joshan then fired what seems to have been a Sea Cat at the Wainwright. The Wainwright fired chaff to counter the missile, and moments later the U.S. ships replied with four missiles and hit the Joshan, which sank less than an hour later. At 1:52 PM, the Wainwright fired two missiles at two Iranian F-4s closing on the ship after they fired a missile, and may have damaged one aircraft. Iranians in a Boghammar speedboat then fired on a helicopter from the Simpson. The only other Iranian aircraft in the area on that day were a P-3 and a C-130, which took no aggressive action.

These attacks led the U.S. to break off the attack on a third oil platform because it was obvious that the fighting might escalate to further naval conflict, and the U.S. did not want to raise the threshold of conflict. Nevertheless, Iran took several other steps to escalate during the morning and early afternoon. At 12:15 PM, three Iranian speedboats fired on a helicopter from the U.S.S. Simpson, and then on the American tug Willi Tide, a U.S.-registered supply boat off the coast of the UAE. An Iranian vessel then attacked the 113,000-ton British flag tanker, York Marine, and at 2:26 PM it attacked the Scan Bay, a U.S.-operated oil platform in the Mubarak oil field about 15 miles off the coast of Abu Dhabi.46

At 2:23 PM, U.S. A-6 jets spotted three Iranian Boghammar speedboats attacking the Mubarak oil platform. The resulting command sequence provides an important lesson in the importance of satellite communications. The A-6s radioed the carrier Enterprise, which radioed the commander of the Middle East Task Force aboard the Coranado in the Gulf. He he radioed the commander of USCENTCOM in Tampa, Florida, who contacted the Secretary of Defense and the Joint Chiefs in the National Military Command Center in the Pentagon. The

45 Sources differ as to whether the two platforms were then producing 30,000 or 150,000 BPD.
46 The field was operated by the Crescent Petroleum Company and was owned by Sharjah, one of the most pro-Iranian members of the UAE.
Chairman of the Joint Chiefs contacted the President's National Security Advisor who asked the President for permission to attack the ships. The President approved and the A-6s used laser guided bombs to sink one and disable another. The fate of the third was unknown. The entire command sequence from the A-6 to Presidential approval was conducted in near real time using global secure communications. The transmittal of the President's approval to the lead A-6 pilot came less than three minutes after his original request.

The U.S. then intercepted communications that two Iranian frigates had been ordered to attack the U.S. force. The Iranian frigates kept closing on the U.S. force, and the U.S. warned them away at 3:59 PM. At 4:00 PM, the Iranian frigate Shahand, which had long been one of the ships firing at cargo carriers in the Gulf, appeared south of Qeshm Island in the Strait of Hormuz. At 4:21 PM, the Shahand fired on three Navy A-6 attack fighters and the U.S. ships in the area. Between 4:34 and 4:43 PM, the U.S. aircraft fired laser guided Skipper 2 bombs, and the frigate U.S.S. Strauss fired a Harpoon missile. By 5:06 PM, the Shahand was dead in the water and afire. The Iranian frigate sank that night.

At 6:18 PM, the Iranian frigate Sabalan, fired a missile at the U.S. frigate Jack Williams, and a second missile at U.S. Navy attack jets in the area. Both missiles missed, but a U.S. A-6 attacked the Sabalan with laser guided bombs and seriously damaged it. Although the Sabalan was notorious for its strikes on Gulf shipping, Secretary of Defense Carlucci halted further strikes and at 8:00 PM, the U.S. allowed the ship to be taken under tow by two Iranian tugs and to limp home to Bandar Abbas. By the time the smoke cleared, the U.S. had scored a major victory, and its only loss was one Marine Cobra attack helicopter from the Trenton, and its crew of two, that seem to have been lost because of an accident.

Iran had lost a great deal of its operational naval strength. Its destroyers were largely inoperable and its other two frigates were in the process of a refit. U.S. weapons and countermeasures all functioned exceptionally well. There was, however, one major uncertainty as to what happened during the missile exchanges. The USS Jack Williams reported that it had been attacked by five Silkworm missiles, and had turned to fire chaff and optimize its ECM coverage each time. Department of Defense officials stated only that they had no evidence that Silkworm missiles were fired. Witnesses, including members of the press saw all five missiles, but it was not possible to confirm whether they had been fired from the mobile Silkworm sites near the Straits of Hormuz.

Iran's motive for taking on the U.S. Navy and losing nearly half of its operational major ships can only be guessed at. It is impossible to know if the Iranian government fully approved the new minelaying, although it later became apparent

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47 The Skipper 2 is a 1,000 pound bomb modified with a Shrike missile motor for greater stand-off capability.
that it was a major Iranian effort. New mines continued to be found, and the U.S. was still finding more as late as April 22.

Iran's mining of the Gulf, and willingness to commit its ships, may have been related to Iraq's war of the cities, the halt of its offensive in Kurdistan, and Iraq's increasing use of poison gas. These actions caused Iran's leadership to take progressively harder line positions regarding the continuation of the war. Khomeini received a strong majority in the first round of the Iranian election of a new Majlis on April 8, 1988. The also elections bolstered Rafsanjani and Mousavi, and the Majlis gained a number of new "hardliners". For example, Hojatolislam Mehdi Karrubi came in second in the voting. He was a strong advocate of exporting the revolution, and had been the main cause of the previous year's uprising in Mecca.48

Iran may also have misunderstood the nature of U.S. naval and air power. Commanders may have executed standard contingency orders without fully reassessing the situation. Iran may have been reacting to its defeat at Faw and some perception of U.S. and Iraqi collusion. Iran may have felt that such a clash would deter the USSR from agreeing to any arms embargo or build-up sympathy in the Third World. Finally, Iran may have hoped that even one successful strike would cause major damage, and that a large scale clash would force the U.S. to trigger the War Powers Act.49

If so, Iran must have been rapidly disillusioned: The Congress gave President Reagan almost universal support. The main Congressional response in terms of the War Powers Act was for several leading Democratic members of the Senate to suggest that it should be modified to remove the automatic withdrawal provisions, and to create an act that would remove any incentive for foreign blackmail or escalation and help create a true consensus behind U.S. action without tying the President's hands.

48 The war on the cities had done comparatively little physical damage, but many people had fled the cities. Iran forced them back by only issuing ration books to those who both returned and voted.
49 At this point in time, Iran still had three destroyers, but they were at best capable of limited service, if any. It had two frigates, two corvettes, eight fast attack craft, 10-12 Hovercraft, 1 minesweeper, 40-50 speed boats and 70 or more small fast motorcraft. The U.S. forces in the area had a total of 29 ships, with 21 in the Gulf and a carrier battle group outside it. The ships in the area included the command ship Coronado, the guided missile cruiser Wainwright; the guided missile destroyers McCormack and Strauss; two guided missile frigates including the Simpson, two frigates including the Bagley, two destroyers including the Merrit, the amphibious landing ship Trenton, six minesweepers, and one support ship. The carrier Enterprise was in support outside the Gulf. These ships were do for rotation of the carriers, with the carrier Forrestal and its task force replace the Enterprise, and five of the frigates being rotated. This gave the U.S. the option of nearly doubling its effective force.

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The Soviet press did attack the U.S. actions in the Gulf as "banditry", and the PRC announced that it could not support sanctions on arms sales as part of UN Security Council Resolution 598, but the Western European nations largely supported the U.S. and demanded a halt to Iranian ship laying. Prime Minister Margret Thatcher called the attack, "entirely justified." After consultation and a meeting within the WEU, the Europeans supported the U.S. action and returned their minesweepers into the area where the mines had been laid. The European ships had been withdrawn when the U.S. notified Belgium, Britain, France, Italy, and the Netherlands that it was about to commence combat operations in the area. The minesweepers found eight newly laid mines the next day.50

The regional reaction was more complex. Rafsanjani declared on April 19, that, "Time is not on our side anymore. The world -- I mean the anti-Islamic powers -- has decided to make a serious effort to save Saddam Hussein and tie our hands." Iran also fired a Silkworm missile into the desert near Kuwait City on April 20, from new positions inside Iran. It seems to have done this to show it could still cover the area after its loss of Faw.51

The Gulf states largely supported the U.S. action, but also expressed their dismay at the fact the U.S. had not provided protection for all merchant ships and oil facilities. The U.S. reacted to these complaints on April 21, by declaring that it would now come to the aid of any ship or target under attack at the time and place of its own choosing, and effectively warned Iran that there were no safe targets in the region. The U.S. also quietly stepped up its cooperation with its European allies in the Gulf, and they resumed more active minesweeping activity.

This increased Western involvement, and its victories at Faw, seems to have helped persuade Iraq that it could halt the "War of the Cities". Iraq declared a unilateral ceasefire on April 21, 1988, supposedly at the urging of the People's Mujahideen.52 By that time, Iraq had fired between 190 and 200 missiles, and Iran had fired nearly 50. Roughly 100 of the Iraqi missiles had landed in Tehran and virtually all had hit near population targets. Even so, it is unlikely that all the missile attacks on Iran between February 29 and April 21, killed more than 2,000 people, and that all the missile attacks on Iraq killed more than 100.53

52 Iran admitted to 1,509 killed in the missile war on this date, but foreign observers in Tehran said the figure was closer to 3,000. There were growing rumors of divisions within the Iranian leadership, and Iran was said to be down to $3-4 billion in reserves, although it claimed $5.5 billion.
The U.S. clash with Iran also helped influence the actions of the Southern Gulf states. Saudi Arabia took the step of breaking relations with Iran on April 25, 1988. Kuwait had long urged that Saudi Arabia take a stronger stand, and the combination of U.S. resolve and Iranian hostility evidently led to Saudis to calculate that they no longer had anything to gain from preserving relations. The Saudis went further and announced that they had acquired CSS-2 class IRBMs from the PRC with ranges of 1,600 miles, that these had been specially modified with conventional warheads, and that they were targeted on Iran. The Saudi Airlines office in Kuwait was bombed one day later.  

10.12 Iraq Retakes Salamcheh and the Area Around Basra

There was comparatively little major fighting during most of the rest of April and through the first three weeks of May. Iran did, however, hold a major naval exercise called Zolfaqar-3. According to Iran, some 50 ships were involved, including destroyers, frigates, minesweepers, anti-submarine, amphibious, and logistic ships. The navy was supported by air, army, naval Guard, and marine units, and the 55th Shiraz Airborne brigade. The exercise was obviously intended as a show of strength, although it was not particularly convincing. By this time, Iran's three WWII-vintage destroyers -- the UK-built Damavand and U.S.-built Babr and Palang -- had been out of operation for more than a year because of problems with spares and their missile systems. While Iran put on a display involving dividing, transit of mineswept channels, F-4 flights, and other naval activities, it did little to convince anyone that Iran still had a Navy that could put up any kind of resistance to the Western forces in the Gulf.

Iraq kept its strategic bombing against economic targets, and its attacks on Iranian shipping. Iraq also used the period to deploy a large part of its forces for an attack on the Iranian forces opposite Basra. Iraq had begun to drain much of Fish Lake earlier in the year, and Iranian attempts at counterflooding in the area were not successful. This dried out the area near the Iranian positions opposite Basra, and allowed Iraq to make far effective use of its armor in attacking the Iranian positions in the area.

56 The UK-built destroyer was a 3,360 ton ship built in 1945. It was believed to be out of commission. The two U.S.-built ships were 3,320 ton Sumner-class vessels.
57 It is not clear how serious Iran was. It did create water barrier defenses for Ahwaz after the ceasefire.
Iraq strengthened its Third Corps forces around Basra to the point where it deployed 105,000 to 135,000 men. These units included many of the new Republic Guards units and elite elements Iraq had given special counterattack and mobility training. While it is unclear that Iraq built live size models, as some Iraqi officers later claimed, they conduct extensive sand tray modeling and trained with mock-ups of some areas. Iraq also again conducted a deception operation and tried to convince Iran that it might be preparing to attack at Majnoon. It also built up massive ammunition reserves.

In late May, Iraq built up its armor, Republican Guard, and naval infantry forces in the forward area. It established attack routes for its forces to use in moving through its defenses -- which had now been strengthened to the point where Iraq had established concentric rings of earthen berms, concrete bunkers, and 30 foot high mounds with observation and artillery points throughout the forward area. Iraq also concentrated enough artillery in the area where it planned to attack to give it overwhelming superiority in firepower.

At 9:30 AM on the morning of May 25, Iraq’s Republican Guards and 3rd Corps forces attacked along a 15 mile corridor to the east and southeast of Basra.\(^{58}\) The Iraqis were supported by one of the most intense artillery barrages in history, and again made heavy use of nerve gas during the initial attack phase. They took advantage of the fact that the ground had now dried out extensively, as well as Iraq’s massive superiority in armor. The attacking Iraqi forces showed the same professionalism in the speed with which they attacked, and in their use of combined arms, that they had first exhibited in retaking Faw.

The Iraqi forces hit Iran at southern edge of Fish Lake, and about six miles south of Basra, and launched another small attack to the north. At the time they attacked, they had built up a local superiority in the battle area of nearly three or four to one. They drove across the Jassem River on the eastern bank of the Shatt al-Arab waterway, and cleared a 15 mile corridor to the east and southeast.

The Iranian defenses in the area involved a well designed mix of trenches, sand mound fortifications, barbed wire, tank snares, and mine fields. The Iranians also initially fought well. Iraq took significant casualties in penetrating the Iranian defenses, even though it had attempted to flank some of the best defended positions, and many Iranian dead were found later beside their guns. Iraq also had to fight off at least one Iranian counterattack, which succeeded in taking some Iraqi POWs. Iraqi attack helicopters were called in for emergency close support missions, and at least one Iraqi armored unit ran into major problems when it advanced without proper infantry support.

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\(^{58}\) Saddam Hussein and Defense Minister Adnan Khairullah were at the front during the entire battle.

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Iraq continued to send in armor, however, and made effective use of its artillery, often using helicopters as "spotters" for targeting purposes. As the Iraqi attack gathered momentum after the Iranian counterattack, the combination of Iraqi mass and the use of chemical weapons finally broke the Iranian resistance. Nearly five Iranian divisions began a rapid retreat. Some Iranian troops abandoned their artillery and forward machine gun and other fire posts after expending only a relatively small part of their ammunition. Many Iranian defenses and gun emplacements were later found to be filled with unused ammunition, grenades, bullets, gas masks, personal effects, and small rockets. 59

There is no way to determine how much of the Iranian retreat was driven by the Iraqi use of gas, panic, or loss of morale. The Iranian forces were driven out of their forward positions within five hours of the second major Iraqi wave of attacks, however, and quickly fell back towards Ahwaz and Khorramshahr, often commandeering private cars and passenger buses. Many of the retreating Iranian troops did not even remove their personal effects and reporters who examined the battlefield after the Iraqi attack found little evidence of either an orderly withdrawal, or high casualties. Iran took between six to eight times more casualties than Iraq, and at least 350 Iranians surrendered without significant resistance. Iran also captured significant numbers of artillery weapons, a number of other armored vehicles, and as many as 90 tanks. -- many of which abandoned without any sign of combat damage. 60

After a total of ten hours of combat, the Iraqi flag was flying over the desert border town of Salamcheh, some 15 miles east of Basra. Iran's gains of 1987, which it had achieved at a cost of 50,000 dead, had been lost in a single day. Tehran radio could do little more than announce a "withdrawal".

It was clear that Iran had suffered its second major defeat of the year, and there was little that Iran could do in response. It had already lost at least 10% of its major combat equipment, and while it could get replacements for some of the 150 artillery pieces, it could not obtain armor. According to some sources, recruiting also dropped off by nearly 70%. 61 The defeat also led Khomeini to issue an appeal to the Iranian troops. On May 28, he told them their losses did not matter because when they "began treading in this holy path, they have lost nothing to be worried about, nor have they suffered any loss of which they should repent." He also made it clear that the war would continue: "The fate of the Iraq-imposed war will be determined on the battle fronts, not at a negotiating table." 62

61 These were Iranian sources critical of the regime and cannot be regarded as reliable.
Iraq also scored gains in the north during this period. It did not launch a single major offensive, but conducted a series of attacks throughout the Kurdish areas that Iran had taken in 1987 and 1988. Iraq scored a series of small victories and drove the Iranian forces back, along with the supporters of Barzani and Talabani. In some cases, it took Kurdish villages and bases it had not occupied since 1986.

10.13 The Uncertain Situation in June, 1988

At the beginning of June, 1988, there still were few signs that Iran's defeats on the land and in the Gulf were pushing it towards a ceasefire. While Iran obviously lacked the public support for the war that had existed in early 1987, its new elections for the Majlis had increased the power of pro-war radicals, and Khomeini seemed no closer to agreeing to a cease-fire than in 1987. This seems to have led senior Iraqi officials, like Defense Minister Adnan Khairallah, to threaten to go on the offensive and seize the cities Iran was using as staging areas near the border. Iraq also threatened to keep up its missile and air attacks on Iran's cities and oil targets until it forced an end to the war.

The war in the Gulf was equally uncertain. Western ships found more than 13 newly laid mines. Iran had hit 31 tankers since the beginning of 1988, versus 20 for Iraq. This compared with 92 Iranian attacks and 87 Iraqi attacks in all of 1987. There were 30 U.S. ships still in the Gulf, including the carrier Enterprise. Britain had one destroyer, two frigates, four minesweepers and two auxiliary vessels. Belgium had two minesweepers and one auxiliary ship. France had one destroyer, one frigate, and one minesweeper. Italy had three frigates, three minesweepers and two auxiliary ships, and the Netherlands had two minesweepers.

Iran also received new Silkworm ships from the PRC, or similar Styx missiles from North Korea. Iran also expanded its new Silkworm sites along the Gulf, including building a new set of cement platforms, storage sheds, concrete bunkers that could hold four missiles, and support facilities at Kuhestak, a town near the Straits of Hormuz. It was clear that Iran had not abandoned its effort to threaten Gulf shipping, and that it might complete a sheltered launch facility near the Straits by the fall of 1988.

The U.S. responded by deploying the USS Vincennes, an AEGIS cruiser with countermeasures and weapons systems designed to defeat the Silkworm, to the area just inside the mouth of the Gulf. It also seems to have deployed a specially modified form of the Tomahawk sea-launched cruise missile with a penetrating warhead that could be used to strike at sheltered missiles. Further, the U.S.
improved its airborne electronic countermeasure capabilities and deployed improved electronic warfare aircraft to its carriers.

As for the UN peace effort, it was still unclear whether the new fighting would move both sides towards a cease-fire, or would make Security Council Resolution 598 as ineffective as resolutions like 435 (Nambia) and 242 (Arab-Israeli). Secretary General Javier Perez de Cuellar began a new cease-fire initiative in late May, and asked both Iran and Iraq to send representative for intense new negotiations in early June. Neither side, however, responded with great initial enthusiasm. Iraq demanded that Iran's leadership publicly accept all the terms of 598 before it would agree to even a temporary cease-fire. Iran showed increased signs of internal political and social stress, but its leaders remained silent. Russia and China continued to stand aside from any effort to enforce sanctions.

Iran's losses near Basra did, however, lead it to make new changes in its high command. On June 2, Khomeini formally announced that Rafsanjani had been appointed the commander in chief of all Iranian forces. This was in theory at the urging of President Khameini, the head of the Supreme Defense Council. It is hard to tell exactly what motives were involved. Rafsanjani had actually occupied the same position on a de facto basis for several months. Rafsanjani had long had the title of Khomeini's representative on the Supreme Defense Council and had certainly played a powerful role in the redeployment of Iranian forces to the north and other shifts in Iran's military position that had contributed to the loss of Iran's positions at Faw and around Basra. Like the earlier replacement of Brigadier Ismael Sohrabi with Col Ali Sahbazi after Iran's loss of Faw, Rafsanjani's appointment seems to have been more a political act to assure absolute revolutionary loyalty than the result of an effort to make major changes in the leadership and organization of Iran's forces.

Some sources did indicate at the time, that the shift was intended to prepare Iran for some form of compromise and that Iran had dropped its goal of insisting on an Islamic republic in Iraq and would accept a pro-Western replacement for Saddam Hussein. They also indicated that Rafsanjani want to concentrate on the internal revolution in Iran and to end the war. This explanation seems doubtful. Rafsanjani immediately expressed his support for the war, and stated that there would be, "no compromise, no submission, and no backing down." Tehran radio also announced on June 5, 1988 that thousands of new 18 year-old volunteers had left for the front.

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64 For example, see the Washington Times, June 9, 1988, p. A-7.
Other senior leaders around Khomeini also issued messages that indicate that Rafsanjani may have received the appointment largely to cope with the rising popular concern over Iran's defeats. Mehdi Karrubi, a member of the Majlis and head of the Martyrs Foundation, called for an investigation of the recent defeats. The Ayatollah Montazari called for Rafsanjani to unify and reorganize the armed forces, and stated that their disorganization had "made the war most costly." In short, Rafsanjani's appointment seems to have done little more than strengthen the leadership's commitment to the war, and the existing bias towards revolutionary orthodoxy at the expense of military professionalism.

There was growing reason for Iran's leadership to be concerned about Iran's internal politics and popular support for the war. Protests against the war had become more frequent and protest rallies had been put down by troops at Komeinyshahr and Isfahan. The same day that Rafsanjani was appointed, ex-Prime Minister Mehdi Bazargan attacked Khomeini for continuing the war. In an open letter, he stated that, "Since 1986, you have not stopped proclaiming victory, and now you are call upon the population to resist until victory. Isn't that an admission of failure on your behalf?...You have denounced the policy of the U.S. and they are now installed solidly at our gates in the Persian Gulf. You have spoken of the failure of Iraq, and the crumbling of its regime, but thanks to your misguided policies, Iraq has fortified itself, is economy has not collapsed, and it is we who are on the edge of bankruptcy." Almost immediately, 40 of Barzargan's top supporters were arrested.

This mix of pressures seems to have led Iran's leadership to attempt to show that it could still conduct a major offensive. On June 13, 1988, it launched an attack on the Iraqi Third Army positions in the Salamoheh area east of Basra. A force of at least 20,000-25,000 Revolutionary Guards, in formations of as many as 50 battalions, forces attacked before dawn in two thrusts in the area around Salamcheh. The Pasdaran forces seem to have penetrated the initial minefields and barbed wire, but Iraq did not lose all its forward defenses. Iran quickly claimed to have killed or wounded 19,000 Iraqis and to have taken some 2,100 prisoners.

The fighting unquestionably was intense. Iraq reported that it flew nearly 300 fighter ground-attack sorties and another 650 helicopter gunship sorties during the three day battle. At the height of the Iranian advanced, Iranian forces

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67 According to some reports, Montazari was trying to manipulate Rafsanjani into getting the blame for the war, and called upon him to "devote all his time" to unifying the Guards and regular Army. *Washington Post*, June 3, 1988; p. A-21; *New York Times*, June 5, 1988, p. 6, and June 19, 1988, p. 11.

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seem to have penetrated yp to 10 kilometers inside of Iraq. The Third Army had some 40,000 troops and 11 brigades in the area, however, rapidly redeployed its reserves and Iraq counterattack with chemical bombs and shells. After about 19 hours of intense fighting, the Iranian forces were driven back. While they took significant numbers of Iraqi prisoners, they also suffered heavy losses and took several thousand casualties. If the battle was somehow supposed to be a symbol of Rafsanjani’s new military leadership, it succeeded to the extent that it showed Iran could still attack Iraq. At the same time, it cost Iran more loses and did little to show that Iran was improving its military capabilities.70

Iraq also continued to make slow but significant progress in recapturing its territory in the north. This seems to have led Iran to attempt to organize the anti-Iraqi Kurds into a 50,000 man army, and the Revolutionary Guards Minister Mohsen Rafiqdoust, and Commander of the Guards Corps Mohsen Rezai, offered to provide the necessary arms. This had little military effect, and Iran continued to retake a number of heights. On June 14, for example, Iraq recovered five heights in the area around Sulaymaniya. Iraq’s victories in the south had allowed it to reinforce its positions in the north, and to deploy more helicopter gunships and artillery. Iran had lost the initiative in the area and could not regain it.71

10.14 Iraq’s Offensives at Mehran and Majnoon

The diplomatic struggle in June was complicated by a number of contradictory trends. No progress occurred in moving towards an arms embargo in the UN, although the Secretary General did quietly continue to encourage movement towards a ceasefire. The USSR continued to quietly support Iraq with more arms while occasionally calling for U.S. forces to leave the Gulf. Iran showed signs that it was trying to reestablish good relations with Britain and France, but move slowly on key issues like hostages. Iran also declared on June 15, that no Iranian pilgrims would be permitted to go to Saudi Arabia for the Haj.

While Iraq continued to seek U.S. support, its Foreign Minister Tariq Aziz cancelled a meeting with Secretary Shultz when he learned a U.S. State Department official had met with Talabani. Iran and Iraq also squabble noisily over oil quotas in a meeting of OPEC, and Iraq, Iran, and Saudi Arabia kept up the propaganda attacks that had begun the previous year.

Iraq, however, was concentrating on the land war and not on diplomacy. In mid-June, it deployed large amounts of armor and substantial forces from its Chemical Corps to the area near Mehran -- which by now was little more than an abandoned mass of rubble and dead palm trees. On June 18, it launched a new offensive it

called "Forty Stars".\textsuperscript{72} A combination of Iraqi forces and Mujahideen e-Kalq forces, which had been trained and supported in Iraq, attacked the Iranian positions in the area.\textsuperscript{72} Supported by the use of nerve gas and some 530 sorties of fighters and helicopter gunships, the attacking forces captured the city and took several positions in the heights near Mehran.

In part of the battle, the Mujahideen e-Khalq came close to wiping out an entire Iranian Pasdaran division and was able to take most of its equipment intact.\textsuperscript{74} All in all, the Iran regular forces seem to have lacked the supplies and support to fight effectively because so many resources had earlier been shifted to the Pasdaran forces in the North. Iran suffered at least 3,000-5,000 casualties and lost more major equipment.\textsuperscript{75} The advancing Iraqi forces captured virtually all of the major Iranian equipment in the area -- roughly two divisions worth -- and took the Iranian logistic depots intact, including a large number of Toyota trucks.

The Iraqi forces withdrew from the area after three days, but left the Mujahideen e-Khalq or National Liberation Army forces in the area. At this point, Iran had only limited forces left in the area between the front and Kermanshah. Iran was forced to rush what reserves it could to the area, although it had few surplus forces left and even less major combat equipment.\textsuperscript{76}

Iran's response to this victory was to claim that it had scored a major victory of its own by repulsing an Iraqi attack on Iranian positions at three points in the area near Mawat, and Iraqi border town in Sulamaniyah, about 200 miles northeast of Baghdad. Iraq does seem to have taken some minor reverses, but Iraq continued to make gains in the north. The same day Iraq attacked Mehran, it claimed to have taken 13 peaks, and Iraq claimed to have captured 25 peaks since March. Iraq also seems to have shot down at least one Iranian F-5 during this fighting.\textsuperscript{77}

Iraq also launched a new set of strategic bombing attacks on Iranian oil targets. Iraqi fighter bombers launched their heaviest attacks in two months on June 23. They set 10 oil installations on fire, including six crude oil production units in Ahwaz, two pumping stations in Bibi Hakemeh, and other facilities at Kaj Saran. These were the first major raids on Iranian economic targets since the truce in the "war of the cities" on April 19. Iraq had then reserved the right to hit economic targets, but the only other major raid after April 19, was a strike on the power

\textsuperscript{72} Jane's Defense Weekly, July 2, 1988, p. 1352.
\textsuperscript{73} The "National Liberation Army" had been formed on June 20, 1987, and was said to total 20,000 men.
\textsuperscript{75} Some Iraqi estimates indicate that there were 8,000 Iranian killed and wounded and 1,500 Iranian POWs, and that 32 Iranian battalions were routed during the battle.

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station at Neka, northeast of Tehran, on May 25. Iraq kept up these raids during late June and early July, and hit an Iranian natural gas plant and offshore oil facility on June 31.\textsuperscript{78}

Iraq's key activity during June, however, was to prepare for an attack on the remaining Iranian positions in Majnoon and to the rear of the Majnoon Islands. Once again, Iraq built up a massive set of attack forces supported by artillery and supported forces. It also built mock-ups of the area and used them to train forces for the assault. It prepared for both a front assault on the remaining Iranian positions in the northern island and a massive armored assault around the marsh areas to strike at the Iranian rear.

Iraq attacked on June 25, in its fourth major offensive of 1988. The offensives was called the "On God We Rely (Trust)" offensive, and it attack both the Iranian forces in the islands and in the positions around them. The Iraqi forces assaulting the Iranian positions in the Majnoon islands attacked at 3:30 in the morning, and consisted largely of infantry in small boats and specially trained Republican Guards units equipped with amphibious armored vehicles. These assaults seem to have preceded by at least some use of chemical weapons, and the Iraqi forces were supported by literally hundred of artillery weapons and tanks that had been carefully positioned on built up positions in the marsh to provide direct fire.

Iraq followed up its initial assaults by quickly using bridging equipment and bulldozers to establish access to the territory it won. The Iranian forces in the islands had little ability to reply to this kind of military sledge hammer, and Iraq's superiority in firepower is indicated by the fact Iraq felt safe enough to allow Saddam Hussein to appear on Iraqi TV leading a charge against the Iranian forces. The Iranian forces put up only a token defense, and their resistance had totally collapsed about eight hours after the beginning of the Iraqi attack.

Iraqi forces from the Republican Guards and Third Army, equipped with several thousand armored weapons, then attacked across the border. According to some U.S. estimates, the Iraqis had nearly 2,000 tanks and 600 artillery pieces in the area versus less than 60 Iranian tanks and a few artillery pieces. This gave Iraq a superiority in major weapons of roughly 20:1.\textsuperscript{79}

The Iraqi assault forces were supported by massive reserves and the forces of Iraq's Chemical Corps. Some reports also indicate that a brigade of Iraqi paratroops were dropped in the rear of the Iranian forces, which would have been the first use of airborne troops since the start of the war.\textsuperscript{80} The Guards attacked to

\textsuperscript{79} Jane's Defense Weekly, July 2, 1988, p. 1352.
the north and Third Army forces to the South. Iraq quickly enveloped the Iranian positions in both Majnoon and the Hawizeh marshes, and drove some 30 kilometers into Iran with only token opposition.

Iran suffered thousands of casualties and many Iranians surrendered to Iraq. Iran also claimed that 60 soldiers have been killed, and 4,000 injured, by attacks with nerve and cyanide gas. These claims were almost certainly true, and Iraq no longer even made a pretense that it did not use such weapons. On July 1, Tariq Aziz, the Iraqi Foreign Minister, acknowledge that Iraq had used chemical weapons. He also went on to claim that, "Iran started its use. We were victims many times since the early beginning of the conflict." While the charge Iran had used gas first was almost certainly untrue, Tariq Aziz dealt with Western criticism as follows, "There are different views on this matter from different angles. You are living on a civilized continent. You are living on a peaceful continent."

Once again, Iraq took virtually all of the supplies and equipment of the Iranian forces. Further, it may have inflicted major losses on the Iranian Air Force when Iran committed up to 35 of its planes to trying to halt the Iraqi advance. Iraqi fighters and helicopter gunships seem to have flown over 400 sorties, and Iran was simply overwhelmed. Further, on the same day that Iraq took Majnoon, it claimed to have taken a total of 40 heights in the north since it had begun its counteroffensives there in March.

Saddam Hussein celebrated these victories by stating that, "Today's battle was the last and hardest link in the chain. Final victory is very near, if God wills." Tehran radio, in contrast, appealed for more troops to come to the front, and said the nation, "must give priority to sending trained fighters to the front, and to place all our capacities in the service of the war effort."

Iran responded by claiming that it had won a compensating victory in the north. It stated on June 28, that it had defeated Iraqi attacks in the Shakh-Shemiran heights and in the area near Darbandiknan, and that Iraq had lost 70% of three army brigades and two battalions and thousands of casualties. In fact, Iraq seems to have used chemical weapons in both assaults, to have taken the entire Mawat (Awat) basin area, to have taken four positions along the Shehabi ridge, and to have scored minor advances with limited casualties. Iran no longer had any of the

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81 Iraq claimed after it took Dehloran in the final phase of this offensive that it had taken 5,150 POWs, and had inflicted 28,000 killed and wounded on Iran. Jane’s Defense Weekly, July 23, 1988, p. 120.

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offensive capabilities in the north that it had shown during its advances on the Darbandikhan area in March.85

It also seems clear that these new Iraqi victories raised additional concerns on the part of Iran's leadership about the reliability of Iran's armed forces and splits between the Pasdaran and regular forces. The Ayatollah Montazari called on June 30 for merger of the regular forces and Pasdaran: "The issue of the armed forces and revolutionary guards is now the issue of the day...This difficulty should be solved in a sensible way by creating a single, powerful military organization, under whatever name, to prevent this duplication. We should solve this problem once and for all." This was good advice in theory, but it was impossible to implement in the middle of a series of major defeats. The most that Iran could do was to establish a new command headquarters that combined the regular forces, all the branches of the Pasdaran the Baseej, Kurdish irregulars, and units of Iranian-based Iraqi opponents of Saddam Hussein. Rafsanjani announced the creation of this command on July 2, and it was far too little far too late.86

10.15 A New Clash Between The U.S. and Iran and the Shooting Down of Iran Air Flight 65587

These new Iranian defeats seem to have led the naval branch of the Guards to initiate a new series of attacks on shipping in the Gulf. The first attack came near the Straits of Hormuz on July 2, when Iranian gunboats fired on a Danish freigher. These attacks halted when the USS Montgomery arrived on the scene and fired a warning shot.88 The second Iranian attack came the next day and was to have far more tragic consequences.

On the morning of July 3, 1988, the USS Elmer Montgomery was patrolling the northern portion of the Straits of Hormuz. At 0330 Zulu time, the Montgomery observed seven small Iranian gunboats approaching a Pakistani merchant vessel.89 The small boats had manned machine gun mounts and rocket launchers. Shortly thereafter, the Montgomery observed 13 Iranian gunboats breaking up in to three groups. Each group had 3 to 4 gunboats, and they took position off the Montgomery’s port quarter.

At 0411Z, the Montgomery heard the gun boats challenging merchant ships in the area, It then heard 5 to 7 explosions coming from the north. At 0412Z, the AEGIS cruiser USS Vincennes was directed to proceed north to the

87 The technical and military issues surrounding the shooting down of Iran Air 655 are discussed in depth in Chapter XIV.
89 Local time was three hours ahead.
area of the *Montgomery* and investigate. The *Vincennes*’s Lamps Mark III helicopter, which was already on patrol, was directed to observe the gunboat activity. Meanwhile, the *Vincennes* continued to observe an Iranian P-3 patrolling to the north.

At approximately 0615Z, the *Vincennes*’s helicopter was fired upon by one of the small boats. The *Vincennes* then took tactical command of the *Montgomery*, and both ships closed on the location of the firing at high speed. As the two U.S. ships closed on the area, two Iranian gunboats turned towards the U.S. ships. They continued to close and the *Vincennes* was given permission to fire. This surface action continued during the entire time between the take off of Iran Air 655 and its downing. Another U.S. ship, the USS *Side* was transiting from east to west through the Straits of Hormuz and was about 18 miles to the east at this time.

The *Vincennes* was now about one mile west of the centerline of the civilian air path from the joint civil-military airport at Bandar Abbas to Dubai. Iran Air 655 took off at 0647Z as part of a routinely scheduled international airline flight to Dubai. At approximately 0647Z, and while still engaged with Iranian gunboats, the *Vincennes*’s AN/SPY1A radar detected Iran Air 655 at a bearing of 025 degrees, 47 nautical miles. The size of the aircraft could not be identified by the digital radar processing on the *Vincennes*, which does not show a "blip" in proportion to target size. It was simply assigned the digital identification code TN 4131.

The aircraft continued to close on the *Vincennes*, which was right on the flight path, with a constant bearing and decreasing range. It was at this point that the IDS or identification supervisor on the *Vincennes* checked the airline guide to see if the aircraft could be commercial. Iran Air 655 was 27 minutes late, however, and the IDS incorrectly concluded that the aircraft could not be flight 655. At 0649Z, the *Vincennes* issued warnings of the Military Air Distress (MAD) frequency of 243 mhz. At 0650 it began warnings of the International Air Distress Frequency (IAD) of 121.5 mhz. The airliner was then about 40 nautical miles from the *Vincennes*.

The *Vincennes* began to issue continuous MAD and IAD warnings when the airliner closed to within 30 miles of the *Vincennes*. The ship issued a total of five warnings on MAD and four on IAD. At this point, the ship experienced a foul bore in mount 51, and full rudder was applied to unmask the after gun mount in the midst of an ongoing surface action. This further increased tension in the CIC. The *Vincennes*’s warnings to Iran Air 655 continued, but there was no response.

At 0653Z, with the aircraft at a range of 15 to 16 nautical miles from the *Vincennes*, and 3.35 nautical miles to the west of the centerline of the air corridor, the *USS Side* gave the last IAD warning to the aircraft. At 0654Z, the
commanding officer of the *Vincennes* turned the firing key. The U.S. missile intercepted Iran Air 655 at a range of eight miles, and the aircraft crashed about 6.5 miles east of Hengham Island. Some 290 people from six different nations died in the crash.

This tragedy led to a storm of controversy, including false reporting from the *Vincennes*, based on the false beliefs of the officers inside its combat information center that had been generated by their interaction and tensions during the intercept. The personnel inside the CIC translated various oral reports to believe that they had a firm indication that the aircraft had an F-14 IFF signal, that it was descending rather than climbing, and that it was off the standard flight path. As is discussed in detail in Chapter 14, this misleading information was not provided by the ships' sensors. The Iranian aircraft was on a normal commercial air flight plan profile, was transmitting the commercial Mode III IFF signal common to such air flights, and was in continuous ascent from its takeoff at Bandar Abbas to the point where it was short down.

The situation was made even worse when several Iranian officials charged that the U.S. had deliberately shot the plane down, and some U.S. commentators began to charge that Iran had somehow deliberately martyred the plane. In fact, however, the tragedy was the result of an unfortunate mix of combat conditions, sheer chance, and human error.

The *Vincennes* not only was shooting at Iranian gunboats, there were other gunboats in the area. Its commander also had to consider the fact that Iran had conducted some 88 ship attacks in 1987, and 72% of these occurred in the shipping routes between the UAE and Abu Musa. All the Iranian ship attacks from November 1987 to April 1988 had been conducted in the southern Gulf and nearly 50% were conducted at night. During the U.S. clash with Iran in April, the *USS Wainwright* had also encountered an aircraft that failed to respond to repeated warnings. The missile hit and damaged the aircraft which turned out to be an Iranian F-4.

Although the F-14 is not normally used to deliver ordnance against ships, it can do so if it closes to a range of about two miles. The use of the F-14 was credible because of intelligence warnings that such modifications might take place and the fact Iran had had to conserve other air assets since August 1986, although most of the 187 attacks Iran had made of shipping between March 1984 and October 1986 were made by aircraft using iron bombs and Maverick missiles.90

90 The Maverick has a range of 0.5 to 13 nautical miles. It is TV-guided and the pilot must track the missile and control it until it hits the target. The F-14 cannot deliver the Maverick.
The situation was further complicated by the fact that F-14s had recently been transferred to Bandar Abbas, and Iranian Air Force had changed it operating patterns at Bandar Abbas significantly during the month prior to July 3, 1988. Iraq F-14s had also flown six patrol missions out of Bandar Abbas in June and have already flown two in July. Iranian F-14s were observed flying at air speeds of 250 to 400 knots while climbing to station, and at 500-550 knots during air intercepts.

The U.S. command in the Gulf had issued warnings about more "aggressive behavior" on June 18, and then on June 30 and July 1 that that U.S. should anticipate more aggressive Iranian attacks on ships because of Iraq's gains on the ground and Iraqi air attacks on shuttle tankers. These warnings were accurate. The problem of tracking the commercial air liners in the area was also extremely complex. There are 18 air corridors across the Gulf, covering 50% of its navigable waters. A total of 12 of these routes cross the southern Gulf and Straits of Hormuz area. Seven go to the Dubai/Sharjah terminal control area and five to the Abud Dhabi terminal control area. At least 1,775 commercial air line flights passed through the Oman control center area during the week ending July 13, 1988.

This made it almost impossible to track all of the civil air flights going over the combat area, and forced commanders to rely on radio warnings. These, however, presented problems because they interfered with air traffic control. For example, when the USS Halyburton warned away British Airways flight 147 on June 8, 1988, the airliner immediately came into a near miss situation with another airliner and Dubai's air traffic control filed a formal protest.

The U.S. Navy inquiry into the shooting down of Iran Air 655 found that all of these circumstances combined with human error. The tapes recording all the data registered by the ships sensors and consoles showed that the operators misread the speed and altitude provided to them and showed the aircraft descending from 7,800 feet and flying at 445 knots. At least four members of the CIC crew had this impression, although it was not justified from the data provided. Similarly, the Identification Supervisor (IDS) made an error in reading IFF data that was not a result of sensor information. The commanding officer of the Vincennes had only three minutes and forty seconds of time to make up his mind from the first identification of the aircraft to the point he had to fire, and it is scarcely surprising that he acted as he did.

At the same time, Iran had to bear a considerable amount of the blame as well as the U.S. Even given the pilot workload during take-off, the pilot of Iran Air 655 should have monitored the IAD warning frequencies. Similarly, Bandar Abbas, Approach Control, and Tehran Center either did not monitor or ignored the IAD warnings. Iran also allowed an airliner to fly at low altitude in close proximity to hostilities that had been underway for several hours. While it is...
unclear that the IRGC gunboats were in communication all of the time, they were certainly in communication with the military base at Bandar Abbas, and had ample time to warn Iranian civil aircraft.91

The initial Iranian reaction, however, was to put all the blame on the U.S., and to attempt to use the incident to revive support for the war. Khomeini issued a statement that, "We must all be prepared for a real war and go to the war fronts and fight against America and its lackeys." Khameini and Montazari denounced the U.S., and Tehran radio stated that, "The criminal United States should know that the unlawfully shed blood in the disaster will be avenged in the same blood-spattered sky over the Persian Gulf."92

This reaction was softened the next day when Rafsanjani cautioned against extreme reactions. While he stated that the incident was probably a "calculated plot", he obviously wanted to avoid any provocation of the U.S. that would lead to still more trouble in the Gulf. Tension was also eased somewhat when President Reagan expressed his regrets and indicated that the U.S. was considering compensation. The tragedy also failed to produce the kind of mass support for the war that Khomeini may have expected. If anything, it tended to bring home to the Iranian leadership and people the extent of their isolation, and of their inability to break out of the vice created by the Western presence in the Gulf and Iraq's growing military success.

10.16 Iraq's Offensives on the Central Front Force Iran to Accept a Cease-Fire

Iraq kept up its pressure on Iran. By the time the fighting at Majnoon was over, Iraq's land offensives had driven Iran out of virtually all of its significant gains since 1982, and it was clear that Iran's troops no longer had the will to resist. Iraq had not only inflicted a massive set of defeats, it had taken vast amounts of equipment and supplies and the mere threat of gas sometimes panicked Iranian forces.

On July 12, Iraqi forces shelled the Iranian positions around the Zubaidat border area of Iran, a group of oil fields east of Al Amarah. These were some of the last positions on Iraqi territory, and the shelling was soon followed by a new Iraqi attack with a force of about five divisions. At 7:30 AM, Republican Guards forces, and forces from Iraq's 4th Corps, advanced on the Iranian positions. It is unclear whether Iraq used gas, but the Iranian defenses quickly collapsed. Within a matter of hours, Iraq was in control of virtually all of the Iranian positions on its territory, and took roughly 2,500 Iranian prisoners.

91 According to some reports, Iran had shot down two of its own aircraft because of IFF problems -- an F-4 and a Falcon jet. Washington Times, July 11, 1988, p. A-1.

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The Iraqi regular Army seems to have depended on logistic support from the Pasdaran and did not receive the reinforcement and support it expected. Further, the Iraq forces then advanced almost unopposed some 40 kilometers into Iran, and took Dehloran and some 1,500 square miles of Iranian territory. While Iraq withdrew from these gains after several days, it had proved that Iran was now virtually defenseless.93

The same day, two U.S. Army helicopters exchanged fire with two Iranian gunboats in the Gulf about 25 miles west of Farsi Island, but the only result was to force the gunboats to break off their attack on a tanker called the Universal Monarch. In spite of their losses, the naval Guard kept up occasional raids, striking at another tanker on July 15. Iraq, in turn, bombed two-oil pumping stations near Dezful.

A few days later, Iran's growing weakness received yet another public demonstration. On July 13, Iraq threatened Iran with an invasion of southern Iran if Iranian forces did not evacuate Halabjah and its remaining positions in Kurdistan. After its recent defeats, Iran was virtually defenseless in the south. It was down to less than 200 tanks and light tanks versus thousands of Iraqi tanks and still more thousands of other Iraqi armored vehicles.

In fact, Iraq had captured so much equipment that it was able to put on an incredible show on the outskirts of Baghdad. Iraq set up a large compound filled with captured Iranian equipment. This compound held tens of thousands of abandoned Iranian assault rifles, over 570 tanks, over 130 BMP-1 and Scorpion MICVs, well 300 more armored personnel carriers, over 320 towed artillery weapons, roughly 45 self-propelled artillery weapons, and well over 300 anti-aircraft guns and machine guns. Virtually all of this equipment was intact and functional, and much of it looked brand new. Rather than include all of Iraq's gains, it included the equipment that could either be used immediately or be easily reconditioned. Iraqi sources claimed that since March, Iraq had captured a total of 1,298 tanks, 155 armored infantry fighting vehicles, 512 heavy artillery weapons, 6,196 mortars, 5,550 recoilless rifles and light guns, 8,050 rocket propelled grenades, 60,694 rifles, 322 pistols, 6,156 telecommunications devices, 501 items of heavy engineering equipment, 454 trucks, 1,600 light vehicles and trailers, 16,863 items of chemical defense gear, and 16,863 caskets.94

Tehran replied within hours that it would withdraw. Rafsanjani announced on July 14, that all Iranian forces would pull back form the occupied Iraq territory north of Haj Omran, which Iran has first occupied in 1986. The town, which was about 80

94 The author visited the area for several hours in November, 1988. These statistics were provided by Iraqi officers, and confirmed by the author and U.S. experts on the scene.
miles north of Sulymaniyah, was the last major piece of territory Iran held on Iraqi soil.95

On July 18, on the 20th anniversary of Ba'ath rule, Saddam Hussein again called for peace negotiations, stating that Iraq had no ambitions to take Iranian territory. He also warned, however, that Iraq would not give Iran time to rebuild its forces and would continue to strike against economic targets. This time, Iran had to listen. Iraq's victories, the growing pool of Iranian losses, the fear of chemical weapons and of the renewal of the "war of the cities, the threat of Western naval power, and diplomatic isolation, finally drove Iran to formally request the UN to implement Resolution 598.

On July 17, 1988, President Khameini of Iran sent UN Secretary-General Javier Perez de Cueller a letter requesting a ceasefire. The letter blamed Iraq for starting the war, and the U.S. for killing 290 innocent civilians in shooting down the Airbus, but it also went on to state that, "we have decided to officially declare that the Islamic Republic of Iran -- because of the importance it attaches to saving the lives of human beings and the establishment of justice and regional and international peace and security -- accepts UN resolution 598."96

According to one press report, the decision to accept the ceasefire only occurred after an eight hour meeting that Khomeini called with nearly 40 of his top officials. Khomeini was supposedly ill, and his son Ahmad presided over the meeting. Khomeini supposedly agreed to the cease fire only because Mohsen Rezai, the commander of the Pasdaran, had said the war could only be won after five more years of conflict, and Iran would have to fight a defensive war until 1993. Supposedly, Iran could then only go on the offensive because it increased the Pasdaran by 700% and the regular army by 250%.97

In any case, the Iranian regime not only had been defeated on the battlefield, it was nearly bankrupt. Iran had used up most of its foreign exchange reserves, its industry was in near collapse, its currency threatened to become worthless, and its markets were in a state of near collapse. Regardless of the views of individual personalities in the Iranian leadership, it must have been clear to virtually all of Iran's leaders that Iran not only face the threat of far more serious Iraqi military action, but sufficient unpopularity to make it impossible to go on with the revolution.98

98 Press reports at the time were filled with the usual reports of splits within the senior Iranian leadership, and that Rafsanjani had moved for a cease-fire as a moderate, or had been forced into it by Montazari and others.
Iran did not accept the initial Iranian ceasefire proposal, however, and stated that Iran's acceptance was far too ambiguous, the Khomeini had not publicly indicated that he would agree to a ceasefire, and that Iraq would not tolerate an Iranian mobilization. On July 18, Iraq also made its views known with something more forceful than words. It launched a major series of strategic bombing raids at industrial plants at Bandar Khomeini and Ahwaz, and struck again at Iran's nuclear reactor project at Bushehr. Iran replied with small air raids on target near Faw and Kirkuk, but lacked the air and missiles forces to make any serious response to the Iraqi raids.\footnote{New York Times, July 20, 1988, p. A-1; Washington Post, July 20, 1988, p. A-1.}

Iran was forced, after boycotting it for seven years, to appeal to the UN Security Council. Then, on July 20, Khomeini made a statement indicating that he too accepted the ceasefire. Excerpts from his speech over Tehran radio made his reluctance very clear, but at the same time responded to some of the Iraqi demands:

"Taking this decision was more deadly than taking poison. I submitted myself to God's will and drank this drink for his satisfaction..."I had promised to fight to the last drop of my blood and to my last breath...We formally announce that our objective is not to have a new tactic for continuation of the war....To me it would have been more bearable to accept death and martyrdom....(But, I had to accept the advice of) all the high ranking military experts."

Khomeini went on to threaten the U.S. and state, "I hereby warn the American and European military forces to leave the Persian Gulf before it is too late and you are drowned in the guamgires of death." He also warned that the war might not be over, "Accepting the resolution does not mean the question of war has been solved. By declaring this decision, we have blunted the propaganda weapon of the world devourers against us. But one cannot forecast this course of events indefinitely."\footnote{New York Times, July 21, 1988, p. A-1.}

Iraq still, however, did not agree to a ceasefire. It now demanded face-to-face talks on all aspects of a peace settlement with Iran. It also became clear that there would be problems over the issue of prisoners of war. The Red Cross estimated that there were only 49,285 prisoners in 15 Iranian camps and 12,747 prisoners in 10 Iraqi camps. Both sides felt the number in the other's camps were much larger, and at least 4,000 Iraqi prisoners were unaccounted for.\footnote{Washington Times, July 22, 1988, p. 9.}

The end result was three weeks of rough negotiating punctuated by small military clashes. Iraq allowed an armored column of the Mujahideen e-Khalq
(National Liberation Army) to strike some 60 miles into Iran. This drive seems to have been a test by both Saddam Hussein, and the leader of the Mujahideen Massoud Rajavi, to see whether the Mujahideen could start a popular uprising in Iran.

The Mujahideen were initially given support by Iraqi armor and air, and Iraqi logistic support. They advanced towards Kermanshah (Bakhtaran) and drove some 90 miles into the country -- the deepest penetration of Iranian territory of the war. Iran then seems to have trapped the Mujahideen force in a mountainous area near Islamabad and Karand on July 29, to have inflicted several thousand casualties, and to have executed its prisoners. The incident also sparked a massive wave of new arrests of suspected Mujahideen sympathizers in Iran and several thousand more may have been killed.

Iran also claimed on July 31, that it had recaptured three towns in Western Iraq -- Oasr e-Shirin, Sar-e Pol-e Zahab, and Shirin. Iraq replied that it had simply withdrawn its forces from the towns after accomplishing its objectives in disrupting Iran's supply capabilities and ability to help the Kurds. Only August 3, Iranian gunboats fired on a Norwegian freighter, while Iran charged that Iraq had bombed its civilians with chemical weapons and injured 2,700 in two days.

Finally, on August 6, 1988, nearly a decade of agony ended. The Secretary General of the UN, the US and most European states, and pro-Iraqi nations like Saudi Arabia, had all put pressure on Iraq to accept a ceasefire. At the same time, the Secretary General was able to persuade Iran to agree to face-to-face talks shortly after the cease fire. As a result, Saddam Hussein announced that he was ready, "for a cease-fire on the condition that Iran announces clearly, unequivocally, and formally its acceptance to enter into direct negotiations with Iraq immediately after a ceasefire takes place." After another day of negotiations, Iran accepted these terms.

On August 8, 1988, the fighting came to a formal end. The Security Council of the UN met and announced a ceasefire effective dawn on August 20, 1988, but Iraq and Iran simultaneously announced an immediate halt to all fighting. It also was announced that Iranian and Iraqi representatives would meet face-to-face under the auspices of the Secretary General on August 25, 1988. U.S. Secretary of Defense Frank Carlucci announced that the U.S. would soon be able to cut its military presence in the Gulf. Finally, the UN announced that its observer force

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102 Philadelphia Inquirer, August 6, 1988, p. 8A.
103 The Mujahideen acknowledged the lost of 1,000 troops. Tehran claimed 1,734. Some sources feel the true number was closer to 2,500. Washington Post, August 24, 1988, p. A-1.
had been expanded to 350 men and would be called the United Nations Iran-Iraq Military Observer Group (UNIMOG), and would include an air unit to provide fixed wing aircraft and helicopters. \textsuperscript{107} Ironically, the same day, the \textit{USS Vincennes} saved five Iranian fishermen who had been drifting in a dinghy in the Gulf for more than a week.

\textbf{10.17 "Cold Peace": The Aftermath to the Cease Fire}

In the months that followed, the UN was able to implement most of the terms of the ceasefire with little more than the usual claims about minor incidents at the front, overflights, and shelling during the initial days before the UN peacekeeping force was put in place.

The first Iranian and Iraqi peace talks began on schedule on August 24, 1988. While the UN ceasefire talks made little progress towards a final peace during the rest of 1988 and early 1989, they also did not break up, and the issues between Iran and Iraq finally boiled down to squabbles over key points along the border and control of the Shatt al-Arab -- issues that bore a striking resemblance to those that had divided both countries before the Algiers Accord in 1975.

Iraq, perhaps in search of some material gain for eight years of war, insisted on total control of all waters in the Shatt, and threatened in September to create a massive new canal from Basra to Umm Qasr if it did not receive its demands.\textsuperscript{108} Iran insisted on the terms of the Algiers Accord. The prisoner of war issue remained deadlocked. Some 70,000 Iraqi POWs and 45,000 Iranian POWs were held hostage to the settlement of the debate over control of the Shatt, and even an attempt to exchange 1,500 sick and disabled POWs broke down on November 22, 1988.

The UNIIMOG force did, however, steadily establish its land, air, and naval presence, and even an air corridor for its aircraft to fly between Baghdad and Tehran. It also was able to function almost immediately after the formal ceasefire date, although the Iranian and Iraqi forces were only 50 meters apart and there were hundreds of petty complaints over minor incidents.

Iran did not challenge shipping outside the exclusion zone after the ceasefire. The naval branch of the Guards conducted only limited patrols, and the regular navy carried out only routine patrols and limited minesweeping activity. When the Iranian Navy did conduct an exercise in the Northern Gulf in November, it was


\textsuperscript{108} While technically feasible, such a canal would cost at least $14 billion. There is a small 25 foot deep canal from Basra to Khor Zubair, but such a canal would have to be a main shipping channel at least 35 feet deep and would still present the problem that Umm Qasr is not a full ocean-going port and only exists on the Khor Abdullah, whose main channel goes through Kuwaiti waters. The Shatt, however, was now filled with mines and had not been proper dredged in nearly a decade.
conspicuously careful to avoid any provocation. The Iraqi Air Force halted all flights into the Gulf after the ceasefire, and the Iranians limited air activity to routine patrols and training.

A "cold peace" set in that was only slightly short of "cold war". Both Iran and Iraq continued to produce well over 2 MMBD. Iran removed its flotilla of 20-25 naval Guards speedboats from Abu Musa in October. It opened Kharg Island to all oil shippers without incident on October 25, and steadily reduced its shuttle operations. It announced that it planned to end all shuttle operations in 1989, and that the resulting saving might be up to $300 million a year. It began studies of rebuilding its refinery at Abadan, and a serious debate of what the revolution finally had to mean in terms of an actual civil economy and political system.

Iraq started a massive rebuilding effort in Basra, and allowed consumer goods to come back into the country. It resumed shipping from its port at Umm Qasr. It began to load 18,000 ton tankers from a secret pipeline it had built to Umm Qasr in 1985, and began to try shuttle operations to move from Al Faw. It also began to examine ways to deploy the single point mooring buoys it had bought to start shipping from the Gulf during the time the war was still in progress. Commercial shipping insurance rates dropped to something approaching their pre-war levels, although the actual volume of shipping was still restricted because of the "oil glut".

Both Iraq and Iran continued to play their respective diplomatic games, but Iran almost immediately showed an interest in rebuilding its diplomatic relations with Bahrain, Kuwait, and Saudi Arabia. Kuwait soon restored its relations to the Ambassadorial level, and then Bahrain. Saudi Arabia offered to restore relations with Iran in early October, and then halted all media attacks on Iran.

Iran also began to court various European countries. It reestablished relations with Britain on October 1, 1988, and announced that it had abandoned the policy of using hostages. Iran still, however, seemed deeply divided over improving its ties to the West. While it immediately sought access to Western markets, its leaders could not agree on solving past hostage and diplomatic problems in ways that allowed it to quickly improve its relations with Britain and France.

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110 Any estimates of Iraq's exact economic position are uncertain. Iraq's public debt was estimated at $70 to $85 billion. Its citizens, however, were estimated to hold up to $60 billion abroad. Iraq had deferred some $50 billion in development projects between 1981 and 1988, and many -- including steel, aluminum, fertilizer, and cement plants restarted work shortly after the ceasefire. It announced plans to build a north-south pipeline and to reopen Faw at some point in 1989 or 1990. Estimates of its future export capacity rose to 5 MMBD. Iraq's current oil earnings, however, were only about $12 to $14 billion a year, and it was forced to spend at least $5 billion to keep its military forces going and another $2 to $4 billion on debt service.

111 Although the channel had been quietly widened before the war was over, it still could not allow economically viable ships to pass. Tankers of 18,000 tons are too small to be of any economic impact. New York Times, August 22, 1988, p. D-10.
The Western naval presence in the Gulf gradually ceased escort operations and most minesweeping activity came to an end. A few drifting mines were found after the ceasefire, but no signs of new minesweeping activity. The Belgian and Italian minesweeping forces left the Gulf well before the end of 1988, and British, French, and Dutch forces sharply reduced the scope of their operations.

France replaced the carrier task force led by the *Clemenceau* with a small task force of two frigates, a destroyer, three minesweepers, a replenishment ship and six support ships in October, 1988. The British Armilla Patrol ceased protecting ships in the Gulf on October, 1988, having participated in a total of 1,026 transits since it had started actively protecting ships in the Gulf, with 405 transits in 1987 and 621 in 1988. Britain did, however, leave three frigates in the Gulf. The U.S. shifted from escorting ships to accompanying them on September 25, and then simply to monitoring their movements. It also slowly reduced the number and size of the warships it had in the area. By January of 1989, the U.S. reached the point where it had reduced its strength in the Gulf to 14 ships, of which only six were destroyers and frigates. This was the lowest force level since July, 1987. In February, Kuwait deflagged six of the 11 tankers that had originally been reflagged.

The only fighting that continued was an immediate Iraqi effort to drive all pro-Talabani and Barzani Kurds out of Iraq, and to relocate their sympathizers far from the border area. This Iraqi attack on the Kurds followed a new wave of Kurdish bombings in Baghdad and Irbil, and the Iraqi government acted with considerable ruthlessness, and with the additional use of poison gas. Large numbers of Kurds were forcibly located to new settlements which often had minimal facilities at best. Some 60,000 Iraqi troops and large numbers of helicopter gunships moved into the border area, and virtually all anti-Iraqi Kurds suspected of fighting for the Iranians or against Iraq were executed as traitors whenever they were captured.

By the end of August, the Iraqis had shattered the Kurdish resistance, and had driven tens of thousands of Kurds into Turkey and Iran. Iraq also had stepped up its use of gas warfare, although the full extent of Iraq's use of gas was impossible

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114 There was a minor squabble within the U.S. over the command of the forces in the Gulf. They had been under a land commander because the area was part of USCENTCOM, and the U.S. Navy argued that the forces involved were actually naval forces and needed a naval commander who could work with the naval forces outside the Gulf. The ceasefire made the issue somewhat academic, and a U.S. Army General, Lt. General H. Norman Schwarzkopf, replaced Marine General George B. Crist on November 23, 1989.
to determine.\textsuperscript{116} Up to 15 villages were hit with gas attacks after August 24, and heavy fighting took place against the Kurdish positions around Zaho, Dahok, Mosul, and Irbil. While at least 400 Iraqi soldiers died during the fighting in the final week of August, Iraq claimed on September 3, that it had driven virtually all organized Kurdish forces out of a "liberated zone" that once had included some 4,500 square miles of Iraqi territory.\textsuperscript{117} Iraq, also, however, avoided any provocation of Iran.\textsuperscript{118} It did not cross the border in hot pursuit, and it reduced the activity of the Mujahideen e-Khalq's National Liberation Army to that of a small contingency force. Although it still claimed to have 10,000-15,000 troops, it ceased to conduct any operations.\textsuperscript{119}

Both sides also seemed to pay more attention to internal affairs than rearming. While Saddam Hussein did charge that Iranian forces were massing on the border in January, 1989, nothing came of the charge, and both sides agreed to resume their peace talks. Iran did claim in April, 1988 that it had fired a new surface-to-surface missile with a range of 800 kilometers called the El-Abbas, and Saddam Hussein claimed that he had developed a new "super weapon" on September 28. Nevertheless, Iraq seems to have sharply reduced its orders for military imports, and found itself involved in a major contract dispute with Italy over payment for the warships it had had on order since the start of the war.\textsuperscript{120}

Iran showed few signs of major arms deliveries other than new artillery, and possibly more Silkworm missiles.\textsuperscript{121} There were reports in January 1989, that Iran had concluded that it needed a minimum of 2,500 tanks, 2,000 artillery pieces, tens of thousands of mortars and anti-tank rocket launchers, and vast amounts of engineering equipment if it were to compete with Iraq and that this would cost some $15 to $25 billion.\textsuperscript{122}

\textsuperscript{118} Iran also avoided any provocation of Iraq. It waited until October 15, to indicate that it would accept up to 100,000 Kurdish refugees in the spring of 1989, and indicated that they would not be allowed to organize military forces.
\textsuperscript{120} Only three of the ships Iraq had ordered from Italy had been delivered --two corvettes and the supply ship Agnadeen. The remaining eight vessels -- four Lupo-class frigates and four Esmereldas-class corvettes remained at La Spezia as a result of the Italian embargo on arms deliveries. Foreign Minister Tarik Aziz and Trade Minister Mahdi Saleh visited Italy on January 24-26, 1989 to try to resolve a dispute over release of the ships and payment. Iraq claimed it had already paid some 600 billion Lira ($440 million) of the total cost of 3.6 trillion Lira. Jane's Defense Weekly, February 11, 1989, p. 205, and Washington Post, September 29, 1988, p. A-35.
\textsuperscript{121} Los Angeles Times, February 14, 1989, p. 7.
\textsuperscript{122} Such reports were leaked by the National Liberation Army and are uncertain. Jane's Defense Weekly, February 4, 1989, p. 167.
Iran simply did not have the money, or a clear source of such arms, and it
centered more on trying to solve its political problems, including the divisions
within its military command. On September 20, the Majlis dismissed Mohsen
Rafiqdust as Minister in charge of the Revolutionary Guards, and replaced him with
Ali Shamkhani, the deputy IRGC commander of ground forces.

While Khomeini assured the Pasdaran commanders on September 17, that,
"You are needed in time of peace, as you are in time of war," Rafsanjani had told a
assembly of hundred of Guard commanders only two days earlier that, they must
now enforce discipline: "Up to now, you have not had the opportunity to learn
military training and discipline. But from now on you must pay attention to hierarchy
and to orders."

In October, Defense Minister Brigadier General Hussein Jalali stated that "The
Army and the Revolutionary Guards Corps must be strengthened. This does not
mean reinforcement for an offensive, but rather the prevention of possible
aggression for defense."[123] Iran also announced that the Revolutionary Guards
had been reorganized into a far more orthodox order of battle. They had been
converted from 8-10 divisions and a host of independent brigades, into a force of
21 Infantry divisions, 15 independent infantry brigades, 21 air defense brigades,
three engineering divisons, and 42 artillery and chemical defense brigades, with
independent air and naval wings. While there was still talk of popular warfare and
an army of 20 million, it seemed the Mullahs were finally learning the importance of
military professionalism, although Iran's religious leaders conspicuously avoided
any blame for what in many cases were their own personal mistakes.[124]

While it was far too soon to predict a stable ceasefire or any kind of agreed
peace, by the Spring of 1989, the war Iran-Iraq War had at least paused. It also
had paused with few changes in the basic conditions both sides faced when the
war began. The ambitions of two competing autocrats and more than eight years of
war had done nothing to alter the basic balance of power in the Gulf, 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 had done less
to further the ambitions of the leaders that started them at so high a cost to their
peoples.


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