

VI. PHASE THREE: IRAN ATTEMPTS TO CONQUER IRAQ: JUNE, 1982- MARCH, 1984

6.0 Iran's First Major Offensives Against Iraq

It is unclear how serious a debate Khomeini and his supporters really conducted over their decision to invade Iran.

Some reports emerged in 1988, at the time that Iran had already suffered major defeats, that Khomeini and others around him had originally states that they would not go on fighting once Iran's territory was liberated. This seems doubtful. While Khomeini had made some statements indicating that Iran would not invade Iraq earlier in the war, these were generally linked to the idea that Saddam Hussein would be removed from power and that some form of uprising would take place within Iraq that would change the character of its regime. Further, Khomeini clearly described his revolution in terms that implied that it would eventually have control of the main Shi'ite shrines in Iraq, and that this would be a major step in the liberation of Jerusalem.

By June, 1982, Iran's victories had also reached a scale where the temptation to attack Iraq must have been virtually irresistible. Iran had smashed through Iraq's defenses in Khuzistan. It had defeated, and in some cases broken, some of Iraq's best regular units. Iraqi airpower had failed to have a decisive impact on any battle, and it was clear that Iraq had begun to face financial problems because of its loss of oil exports. There were minor indicators of unrest in the Shi'ite cities in Southern Iraq, and Iraq seemed to lack any clear defense against Iran's revolutionary fervor.

June and July, 1982, were also scarcely a time in which any voice around Khomeini could have felt secure in advocating moderation. The near civil war in the capital, and repeated coup attempts, reinforced the tendency to encourage military action. This, in fact, was increasingly reflected in the statements of both senior Iranian politicians and military officers. Between late June and early July, both Khomeini and virtually every major spokesman for the Iranian government, began to hint at the fact Iran would soon invade Iraq.

6.1 The State of Iranian and Iraqi Forces at the Beginning of Iran's Invasion of Iraq

These hints soon became reality. The third phase of the war started when (See Figure 6.1 (Old 4.6.) Iran deployed the equivalent of more than five divisions in an attempt to capture Basra. By this point in the war, Iranian divisions had between 12,000

and 15,000 men each, depending on the amount of Pasdaran and Baseej that made up the "shock" or assault troops in each unit. They had both armor and artillery, but they essentially were heavy infantry forces designed to use frontal assaults and human wave attacks to overcome any opposition.

The Iranian formations were structured to allow their commanders to commit large amounts of infantry troops in repeated attack echelons or "waves", and were designed to use the same tactics that Iran had been successful with in retaking Khuzistan and Khorramshahr. These formations did, however, have a number of major disadvantages. First, they could not maneuver quickly or effectively, particularly once forces were committed to battle. Command and control was difficult. The Pasdaran elements leading an attack tended to be semi-autonomous and the coordination between infantry and artillery was usually poor. While the practice of moving up directly against Iraq's defensive lines early in the battle, and at night where possible, made it more difficult for Iraq to use its airpower and artillery, it also made it difficult for Iran to provide air support or use artillery at the breakthrough point except in preparation for the infantry assault.

Iranian organization and assault tactics also depended heavily on success. Once the waves of Pasdaran and Baseej began to advance, they were largely beyond the tactical control of the high command.

The unit commanders also were ideologically committed to achieving their objective or "martyrdom", often to the point where they had no alternative plan. It was difficult to recall forces once they were committed and if they were not trained to conduct a successful retreat. There often was no clear role that Iranian armor could play except to provide fire support for the infantry. Iranian armor could occasionally flank an Iraqi force, but could not maneuver in depth against Iraqi opposition without infantry support, and the bulk of Iran's infantry lacked the equipment and skill to operate as a mechanized force.

Further, Iran's tactics presented major problems in supply and in exploiting a breakthrough. Infantry forces generally carried their supplies, and only a rudimentary system existed to resupply the attacking echelons once they advanced. This system worked on the basis of supply push as long as the Iranian units were not forced to retreat or alter their plan, but often broke down if they were forced to regroup or they advanced too quickly. There also was no echelon of mechanized assault infantry and armor to follow up after the Pasdaran broke the Iraqi defense line and to quickly exploit initial success.

These problems were not critical to Iran as long as it could both afford to expend large amounts of manpower and equipment, and achieve a high ratio of concentration of force and local superiority to Iraq. The favorable force-to-space ratio in Khuzistan, and Iraq's static defensive tactics, had given Iran these advantages in liberating its own territory. So had the fact that the Iraqi troops in Iran were fighting for an objective that was relatively abstract, while the Iranian troops were fighting for their homeland. While no one can quantify the ideological and morale aspects of war, there is no question that

Iranian troops had fought during 1981 and 1982 with a willingness to die that often frightened or awed their Iraqi opponents.

Iraq now, however, was fighting for its own soil -- although it continued to hold defensive terrain on Iranian soil near Qasr e-Shirin, Naft e-Shah, Sumar, Mandali, Mehran, and Musian. As was the case with the USSR in World War II, the war had ceased to be Saddam Hussein's war and had become a national conflict which every Iraqi soldier could now understand. For all its losses, Iraq also still had a major advantage in air power of nearly 4:1, a superiority in operational armor and artillery of nearly 3:1, and superiority in infantry arms and area munitions. Iraq also was now fighting in defense of positions with excellent lines of communication and which allowed far faster resupply and reinforcement. Iraq also had roughly the same force strength in its Third Army around Basra that Iran had in its attacking forces: About 70,000 to 90,000 men.

Iraq had purged the Popular Army units of their worst commanders and had learned to subordinate them to the regular forces, rather than commit them to the front lines in places where they furnished natural points of vulnerability for Iran to attack. It also had learned from its experience in Khuzistan and around Khorramshahr. Iraq had turned the entire front south of the Hawizeh marshes into a fortress.

A line of massive earth berms was set up along the border area east of Iraq's main north-south roads. A large number of lateral roads reached to the forward lines with smaller north-south roads immediately behind the berms. There was a cleared "fire zone" in front of the berm, and the berms had observation points and fire points all along their top. They were defended by dug in tanks, and large numbers of anti-aircraft machine guns and cannon which could be used to "hose" attacking Iranian infantry. Iraq made extensive use of mortars, minefields, and barbed wire. Where possible, Iraq also began to divert water into the area to create further defensive barriers.

Major artillery complexes existed to rear of each berm, which had the range to reinforce each other in an emergency. Central supply depots and hospitals existed in echelons to the rear, and all positions were overstocked to allow supplies to be fed into the front on a supply push basis and to prevent positions from running out of ammunition. The defenses immediately around Basra and some of the other urban areas in the south were also set up in rings or semi-circles. While Iraq did not establish a broad system of defense in depth at this time, Basra had such defenses by mid-1982.

This structure also simplified Iraq's command and control problem as long as Iraq understood where Iran would begin its main attack, and as long as Iran attacked fully manned large-scale Iraq defenses. Iraqi commanders could use artillery against pre-surveyed points. Fighters and helicopters had a well defined fire zone. The barrier defenses gave Iraq time to move reinforcements north and south, and Iranian forces were too far from their rear areas and lines of communication to quickly exploit any tactical breakthrough.

In short, many of the conditions that had led to Iranian success

in the previous months no longer really applied. It is also important to note that both sides were largely incapable of modern maneuver warfare. Relatively small movements and increases in distance meant considerable disorganization and supply and command problems.

6.2 Iran's Operation Ramadan Against Basra

The first major Iranian attempt to conquer Iraq was called Operation Ramadan al-Mubarak (Ramazan-ol-Mobarak). It began during the month of Ramadan on the night of July 13-14, 1982. Elements of four divisions, led by the Pasdaran, assault the Iran border defenses near Shalamcheh, with the obvious goal of cutting the main roads north from Basra and isolating the city. The Iranian attack was relatively well prepared. It began at night and attacked across the wetlands north of the Hawizeh marshes. The Iranian forces quickly penetrated past Iraq's screening defenses at the border, and thrust up against Iraq's main defense line to the rear. In the process they advanced a little less than 20 kilometers in a relatively narrow thrust of less than 10 kilometers in depth.

The Iranian forces then, however, came up against Iraq's main defense line. The result was that Iran had to repeatedly attempt to break directly through a position where Iraq had good defenses and a massive superiority in overall firepower, particularly artillery firepower. While both sides took heavy losses, the Iranians lost three to four times as many men as the Iraqis. The Iranian offensive also quickly bogged down. This allowed the Iraqi armor to flank the Iranian force from both sides. While the Iraqi maneuver lacked speed and "elegance", it was highly effective. The Iranian force was caught in a three-side trap and driven back to a point near their starting point.

The battle then became a battle of attrition versus firepower. This was a battle that Iraq was well equipped to win. Its superior artillery and armored strength could be used against Iranian forces which had lost much of their cohesion and which moved and reacted slowly. Iraqi fighters and helicopters did not produce major casualties, but they did present open movement and major resupply. There are also indications that Iraq began to use artillery to fire CS "tear gas", or incapacitating gas, during this period. This use of gas seems to have been effective in breaking up at least some Iranian assaults, and may have contributed to Iraq's later decision to use poison gas.

While Iraq suffered serious damage to at least two armored brigades, Iran lost major elements of both an armored and infantry division. Iran also lost a significant amount of artillery and armor, as well as men. Iran almost certainly should then have paused and rethought its attack. Instead, it quickly regrouped, and began a similar attack from a position near Zaid on the Iraqi border about 15 kilometers further south on July 21.

This Iranian attack again came at night, but involved two thrusts, rather than one. It was somewhat more successful and broke through part of Iraq's defense line, Iran again failed to secure its flanks and lacked the armor to defend against Iraq's slow moving

counterattack. Iran was driven back with only minimal gains, and lost well over 10,000 killed to around 3,000 killed for Iraq.

In spite of its losses, and the fact that Iran did not receive any significant sign of popular support from Iraq's Shi'ites, Iran tried a third time on August 1, 1982. By this time, however, Iran's forces had taken major manpower and equipment losses, and had lost most of the momentum they had possessed when the attacks began. Iran's new thrust took place against Iraqi positions between Zaid and Mashwa and collapsed within days. By this time, Iran had lost between 20,000 and 30,000 killed and critically wounded and about 20-25% of its equipment.

These losses were so great that they meant that Operation Ramadan cost Iran more manpower than Iraq had lost at Khorramshahr, that Iran lost a great deal of its trained and experienced manpower, and that Iran suffered serious equipment losses. In fact, these losses forced Iran to halt major attacks for the rest of the summer. They also led to new reports about feuding between the regular army commanders and the Mullahs, and to reports of Iranian problems in recruiting volunteers.

Nevertheless, some elements in the Iran leadership seem to have viewed Operation Ramadan as a victory in the sense that it had begun to force Iraq into a battle of attrition that they felt Iraq could not sustain. Operation Ramadan also established a pattern of massive Iranian offensives that continued through the beginning of 1988.

The problem was that limited tactical success never meant strategic success. Iran had created forces that could be very real threat to Iraq, and could make token gains on Iraqi territory. Iran's basic strategy, however, was roughly equivalent to trying to use a hammer to destroy an anvil. Iran eventually broke its forces on this anvil by hammering away at Iraqi defenses, scoring largely symbolic gains, and then pausing for months while it recovered its offensive capabilities. These repeated attacks also depleted Iran's cadre of leaders, skilled manpower, and equipment. They deprived it of the tools it needed to take advantage of its superior manpower and they undercut popular support for the war, military morale, and Iran's recruiting base.

It is also important to note that Operation Ramadan seems to have reflected a major shift in the belief structure of the autocrats leading Iran and Iraq. Iraq's successes in early 1982, seem to have convinced Khomeini that revolutionary forces could eventually be successful using tactics that emphasize sacrifice and martyrdom. This view was almost certainly reinforced by his religious convictions and constant problems with the loyalty of the regular Iranian military forces. While some of those around Khomeini may not have fully shared his belief structure, and leaders as diverse as Montazari and Rafsanjani clearly showed more caution in given instances, it seems likely that both they and many Pasdaran commanders and officials shared enough of this belief structure to make it extremely difficult for Iran to make major changes in the way it fought or the way it organized its forces.

As a result, Iran failed to give the proper emphasis to military professionalism, and did so even in recruiting, training, and organizing its Pasdaran. It relied on revolutionary fervor and ideological pressure to support its recruiting until virtually the end of the war, and never properly exploited its far larger population and manpower pool. It never brought an end to the feuding and lack of coordination between the Pasdaran and regular forces, and it continued to reward loyalty and belief, rather than professionalism. In many ways, the very adaptations of military organization and tactics that allowed Iran to succeed in early 1982, limited its success for the rest of the war.

In contrast, many of the problems in Saddam Hussein's approach to war that had cost Iraq so dearly during its invasion of Iran were far less serious once Iraq went on the defensive. While Iraq's static approach to war was to prolong the war for at least several years -- and cost it dearly at Majnoon, Faw, and the later battles around Basra -- it was increasingly able to exploit its superior access to arms deliveries. It also was able to exploit its advantage in firepower with far greater success.

While neither side ever developed a political leader that exhibited any great aptitude for war, it must be said to Saddam Hussein's credit that he understood the supply and technical issues in war better than his Iranian opponents. Iraq continued to improve its defenses and fortifications throughout the war. It built up immense stocks of weapons and supplies and consistently sought to improve their technical quality. Iraq steadily increased its road net, and numbers of vehicles and tank transporters, and its ability to rapidly redeploy and supply its forces. While Iraq had only limited success until the last year of the war, it also constantly tried to improve the training of its armor, infantry, artillery, and airpower. Iraq's secular leadership not only aided its ability to develop and improve its forces, it ultimately was substantially more pragmatic in adapting to changing conditions than the religious leadership of Iran.

At the same time, Iraq's defensive victory had several additional strategic effects. It demonstrated that Saddam Hussein had the popular support and military capability to continue the war. It showed that Iraq's Shi'ites were no more ready to support Iran than Iran's Arabs had been to support Iraq. It showed the rest of the world that Iran both did intend to try to conquer Iraq, and that Saddam Hussein and his regime were worth supporting. This later provided critical in terms of Arab aid, and in terms of Western and Soviet efforts to ensure that Khomeini would not conquer Iraq and dominate the Gulf. It helped lead the USSR to tilt back to Iraq, partly because of Iran's increasingly anti-Soviet attitude and persecution of the Tudeh. It helped lead France to provide more equipment and support, and it helped lead the U.S. to conduct a much more concerted effort to block arms transfers to Iran called "Operation Staunch".

6.3 Iran's Fall Offensives of 1982

Iran's next offensive came against its own Kurds, rather than Iraq. The Kurds in the KDPI were now the only major ethnic group still at a war with the Khomeini government, and it was clear that they were increasingly becoming a tool for Iraq. Iran

reinforced its forces near Urmiyah, and in September, Iranian regular army forces and Pasdaran launched a major attack on the KDPI. This offensive turned into a guerrilla battle that lasted until the weather forced a near halt to the fighting in November. The attacking Iranian forces pushed the KDPI forces back, and took a number of towns and roads, but left the Pesh Merga in control of the mountains along the border.

Iran's next offensive against Iraq came on October 1, 1982. It was called the Muslim Ibn Aguil (Moslem Ibne Aqhil) offensive, and was intended to improve Iran's position near the border approaches to Baghdad by conquering some strategic heights in Iran overlooking the Iraqi town of Mandali about 65 miles from Baghdad. The attack took place in the area around Naft e-Shah. This area, like that around Qasr e-Shirin, is one of the few parts of the border in the north where there is a large plain on the Iranian side and a good road net leads from Iran towards the plains to the north of Baghdad. If this area is taken, an attacking force can drive southwest towards Mandali and Baghdad, or north towards As Sa Diyah and Kirkuk.

There were roughly 40,000 men in the Iranian attack force, including Pasdaran brigades, and a regular Army armored brigade. This force took time to assemble Iraq detected it several days in advance, and built up the forces available to the Iraqi 2nd Army in the area. The Pasdaran countered this by attacking on a broad front and were able to infiltrate close to the Iraqi positions they planned to attack by taking advantage of the cover provided by the relatively rough terrain.

The Pasdaran forces scored some initial successes, and forced the the Iraqi forces slowly back along the road from Sumar to Mandali. The Iraqi forces retreated slowly, however, and took advantage of the fact the Pasdaran had to expose themselves in order to use human wave attacks. Iraq also seems to have again used some form of gas to help break up the Iraqi assaults. The Iraqi forces also regrouped after each Pasdaran attack and counterattacked. The Iranian forces continued to press forward until October 6, but took heavy casualties and scored only token gains. At most, Iran gained about 50 square kilometers of the mountainous territory on the Iraqi side of the border above the Mandali plains.

Iran then launched another attack near Basra. This was called the Muharram al Haram (Moharram ol-Haram) offensive, and began on November 1. It was intended recapture the Iranian territory near the border that Iraq still held and to position Iran's forces to cut the Baghdad-Basra road between Kut and the area northeast of Al Amarah.

This time Iraq seems to have had little warning and the terrain did not permit rapid Iraqi reinforcement. The Pasdaran echelons also attacked at night. After about a week of fairly intense fighting, most of which was infantry combat, the Iranians crossed the Doverichj River and pushed to the Iraqi border near Beid. They gained about 350 square miles, of which about 190 were in Iraqi territory. Iran claimed to have taken some 3,500 prisoners of war, roughly 140 tanks and other armored vehicles, and 40 artillery weapons.

Iran attacked again to the north near Mandali on November 7, and sporadic

fighting took place near the border around Musain. The fighting continued for about ten days. Iran made limited gains, but did not achieve any decisive results. The rains then set in and largely halted offensive action, although small patrol actions continued along much of the front, and artillery exchanges were common.

This pause in the fighting tended to favor Iraq. Iraq continued to work on its network of defenses and extended them all along its border area as rapidly as possible. The Iraqi bunkers and fortifications became steadily more sophisticated. Many had recreation rooms, education rooms, small clinics, and even an occasional barbershop. The Iraqi regime also made sure that the forward positions were well supplied with both equipment and facilities like telephones and television.

As time went on, the Iraqi positions were defended by steadily greater numbers of mines and obstacles. The amount of supporting artillery increased, and more tanks were dug in to provide a direct-fire kill capability. While Iran also built barrier defenses, they never came close to the sophistication of the Iraqi defenses and never reflected anything like the same concern for the welfare and morale of individual soldiers.

The domestic conditions in Iraq also continued to be somewhat better than those in Iran, although both regimes were highly repressive. In Iran, a massive hunt for the Mujahideen continued throughout the summer and fall of 1982. Although the Iranian government claimed to have suppressed the Mujahideen by late July -- and some 5,000-6,000 people had been killed or executed during the fighting -- bombings and explosions continued into December. The local revolutionary committees that were organized through Iran also began to put more and more pressure on Iran's citizens to conform to Islamic standards and to be at least publicly loyal to the revolution. They put increasing pressure on young men to volunteer to go to the front, and began to raise money directly for the war.

At the same time, Khomeini expanded his crackdown on the Tudeh Party. The Iranian media began to publicly attack the Tudeh as anti-revolutionary in August, and mass arrests began in November. The Pasdaran continued to ruthlessly suppress any ethnic dissidents, and Pasdaran forces were brought into Tehran and Tabriz to help protect the regime.

On a more mundane level, the casualties from the war were now serious enough to affect many Iranian families. While the regime attempted to glorify martyrdom, and even set up a fountain of red colored water it called a "fountain of blood", it was obvious that many of Iran's ordinary citizens had no desire to lose their sons. The cost of the war also forced Iran to cut imports and a major black market built up that lasted throughout the war. Inflation became a serious problem, and so did corruption. By mid-1983, it had become obvious that the Khomeini regime was at least as corrupt in actual practice as the regime of the Shah.

Iraq too suffered from repression. The regime continued to try to court the Kurds and Shi'ites with high level government posts and by funding ethnic and religious projects. At the same time, the secret police ruthlessly suppressed any active political opposition. Living standards in Iraq, however, were now much higher than in Iran, and

consumer goods and services were cheaper and more readily available. The Iraqi government also continued to provide significant compensation to the families of those who had died in the war, although the quality of what was provided dropped and some special awards -- like cars for the families of dead officers -- often failed to be delivered.

6.4 The Impact of Arms Sales and New Developments in Iraq's Air Power

Iraq continued to have a distinct edge in terms of arms imports and resupply. Iraq was able to import some \$3.7 billion worth of arms in 1981 and \$4.3 billion worth of arms in 1982. Iran only imported \$1.0 billion worth of arms in 1981 and \$1.5 billion worth of arms in 1982.

This meant Iraq was getting more than three times as many arms as Iran, and Iraq was able to get far more in terms of supply and technology per dollar. Khomeini's crackdown on the Tudeh also ended the Soviet flirtation with Iran at an ideal time for Iraq. From September onwards, the USSR began to provide Iraq with all its back orders and with virtually all the new arms Iraq could pay for. This gave Iraq access to Soviet T-72 tanks, replacement fighters, new surface-to-air missiles, and more artillery.

Equally importantly, France provided nearly 40% of its arms exports in 1982 to Iraq. Iraq's Mirage F-1 forces became operational and Iraq soon used these fighters, and French Magic 1 air-to-air missiles. This allowed Iraq to take advantage of the steady decline in Iran's operational air strength, because of Iran's lack of spare parts and technical support. This gave Iraq increasing success in air-to-air combat. At the same time, the Mirage F-1 provided far better avionics for air-to-ground missions than any of Iraq's export versions of Soviet fighters. Iraq also acquired a new capability to attack Iranian shipping when France provided it with the ability to fire AM-39 Exocet missiles from its Super Frelon helicopters. These helicopters had relatively short range, and could not reach most of Iran's oil traffic, but they set an important precedent in providing an air launched weapons system that Iraq could use to attack without warning and with relatively little risk of intercept.

Iraq resumed its strategic bombing attacks on Iran in response to Iran's summer offensives. It claimed that it began these new air and missile strikes as a response to Iranian air strikes on Baghdad on July 21, but their goal was obviously broader. Iraq had begun to try to use its growing advantage in air power to push Iran towards a ceasefire or peace settlement -- an effort which was to become steadily more important with time.

FIGURE 6.1 (Old Figure 4.6)

IRAN-IRAQ: IRAN'S OFFENSIVES OF 1982

Iraq began this new strategic bombing campaign by launching a series of fighter, bomber and FROG 7 strikes against Iranian cities. It declared the northern Gulf to be a military exclusion zone on August 12. It then launched air strikes at Kharg Island on August 18, August 25, and September 17. Iraq increasingly used its Exocet missiles against shipping in Iranian waters in the northern Gulf. This mix of air attacks was relative large in scale by Iraq's standards, but they were poorly planned and targeted. Iraq still flew far too few sorties to be effective, and still failed to follow up. As a result, Iraq's air effort did not achieve any strategic effect.

Iraq also launched its first Scud Bs against Iran during 1982. It began to launch these missiles against Dezful on October 27, and fired both Scuds and FROG-7s against Dezful on December 18. These missiles did little more than kill and wound the civilians that happened to be in the area where the missiles hit, but they added a new "terror" weapon to Iraq's inventory.

Iraq continued its air offensive against civilian and economic targets in Iran during December and January. On January 18, it launched what seems to have been intended as a major attack. Iraq claimed to have flown 66 bombing sorties. The real number was substantially larger, and Iraq sent in attack aircraft without adequate fighter escort and training in evading ground based air defenses, and in some cases Iraq seems to have sent aircraft out with insufficient maintenance and on missions at ranges where they ran out of fuel.

The Iranian Air Force replied to the Iraqi attacks during January 25 to 30, and showed it could still successfully penetrate Iraqi air space at low altitudes and hit many targets. The Iranian aircraft, however, rarely attacked with more than two or four aircraft per target, and Iraq's low altitude air defenses and fighters also inflicted significant losses. The end result was something of a stalemate in the strategic bombing effort. While Iraq's air performance was improving as the result of Indian, Jordanian, and Egyptian advice, and Iraq now had considerable Soviet and French technical support, it still attacked as a scattered group of units rather than as a cohesive air force. Iran, in contrast, was still strong enough to deter Iraq by flying its own bombing missions, but was too weak to achieve any real results. Further, every new loss of aircraft cut further into Iran's operational strength. Accordingly to some estimates, Iraq lost as many as 80 combat aircraft during January and Iran lost 55.

At this point in the war, Iraq had roughly 330 operational combat aircraft and large numbers of armed helicopters. These included 7-9 Tu-22 bombers, and 5-8 IL-28 bombers. Iraq's air attack forces include four squadrons with 70 MiG-23Bs, six squadrons with 70 Su-7s and Su-17(20)s, and one squadron with 12 obsolete Hunter attack aircraft. Iraq's air defense forces included five squadrons with 14 MiG-25s, 40 MiG-19/F-6s, 70 MiG-21/F-7s, and over 30 new French Mirage F-1EQ and F-1BQs. Iraq had eight MiG-25 high altitude reconnaissance aircraft.

These air strength levels varied sharply according to the status of losses and resupply at any given time, but Iraq could normally fly 150-200 combat sorties per day. Iraq's armed helicopter strength is difficult to estimate because many armed helicopters

were modification, rather than designed as attack helicopters. Iraq did, however, have 13-41 operational Mi-24 attack helicopters, 6 to 47 Alouette IIIs armed with guns and AS-12 ASMs, and 15-50 Gazelles armed with HOT anti-tank guided missiles. Iraq obtained delivery of 11 Super Frelons equipped to fire AM-39 air-to-ship missiles.

Iran's air strength is much harder to estimate. Its operational strength at the beginning of 1983 may have been anywhere from 70 to 120 operational aircraft, although it now seems likely that it began the year with over 100 operational aircraft and reached a low of 70-80 by mid-1983. Anywhere from 12 to 35 of its F-4D/Es may have been serviceable, 40-65 of its F-5E/Fs, 5 to 15 of its F-14As, and 3 to 5 of its 14 RF-4Es. Its operational combat helicopter holdings were well below 100 AH-1Js, 150 Bell 214As, 30 AB-205As and 206As, and 70 CH-47s.

Iran's operational strength also had a very different meaning from that of Iraq. Iran could peak its strength to levels close to 100 aircraft for one day and 30-50 aircraft for a week, but this meant rapidly losing operational capability for a month or more. Iran's need to vulturize its aircraft often presented serious problems. While Iran lied throughout the war about its progress in obtaining spares and manufacturing them in country, it never solved its spare parts and supply problems. Many of its aircraft had to be stripped to supply a critical part and if the aircraft using the remaining part or parts were lost, Iran might have to spend days or weeks finding a replacement somewhere on the world arms market.

Throughout the war, the Iranian Air Force served as a lesson that it is not equipment inventory that counts in war, but operational strength and sustainability.

The Iranian Air Force also was never able to establish its reliability as a "revolutionary" force. Defections of both Iranian military and civil aircraft took place in late 1982, and at sporadic intervals throughout 1983. Khomeini again changed the commander of the Iranian air force in April, and a minor coup attempt in May was blamed on Air Force personnel. Unlike the regular Iranian Army, the air force could not recruit and training "revolutionary" leaders and remained under extremely tight surveillance and political suspicion. Arrests continued, as did the practice of holding the family of pilots and aircrew hostage, and restricting fuel to prevent defections. So many officers, pilots, and skilled personnel was imprisoned or lost that Iran lost far more aircraft to accidents and poor maintenance than combat.

6.5 Continuing Iranian Attempts to Invade Iraq in Early 1983

Iran began the land fighting in 1983 by launching its first Wal (Val)-Fajr offensive.

This offensive began in the Musian area, west of Dezful, on February 7 1983. See Figure 6.2 (old Figure 4.7) The attack came to the north of the Hawizeh Marshes and drove across relatively dry and flat terrain towards Amara. The Iranians had five to six formations that were called divisions, but which were the size of reinforced brigades. The bulk of the Iranian forces were Pasdaran units with limited mechanized support, but there

was one armored division or brigade. The total Iranian force was between 40,000 and 50,000 men. The Iraqi force in the area consisted of the 4th Army with the equivalent of about seven Iraqi divisions and 50,000 to 55,000 men.

The Iranian forces attacked at night, having deployed at a time when rain prevented major air and helicopter operations. The Iranian attack was divided into sequential thrusts of about two divisions each. Iran evidently sought to decoy Iraq into using all its reserves to attack the first thrust while it then launched the second to cut the Basra-Baghdad road. In practice, however, the Iraqi commander kept his forces behind the main Iraqi defensive line. This line was one of the best built up positions on the front north of Basra, and the Iraqis turned it into a killing ground for the advancing echelons of Pasdaran infantry, which did not penetrate Iraq's main defenses.

As the morning went on, Iraq was also able to make extensive use of armed helicopters and attack aircraft, including its new Mirage F-1s. The Iranian forces were often exposed enough for the Iraqi air attacks to be unusually effective. Iraq was able to use aircraft and helicopter gunships in battlefield support missions with more effectiveness against targets advancing against a static front on its own territory, and where it had time to both erect large defensive barriers and concentrate its superior armor and firepower to counterattack and push Iran back. Iraq claimed to fly well over 150 sorties per day, and these claims seem to have been justified. It also launched a limited number of attacks against Iranian cities in reprisal for the offensive and hit targets in Ahwaz, Dezful, and Khorramshahr.

In spite of heavy losses, Iran repeated its human wave attacks that afternoon, and again on February 8. The next day, Iran committed the 92nd Armored Division to an attack in an area where Iraq had only limited manpower. Although this division seems to have had less than two full brigades of tanks, it punched through the Iraqi defense positions but it then advanced into the open plain without infantry support. The end result was that the division was counterattacked by Iraq armor and the forward elements were surrounded by Iraqi infantry. Iran lost at least one brigade element, while another surrendered.

The fighting ended around February 10, and Iran gained little other than a strip of a few kilometers along the less defended part of the border area that was to the east of the main Iraqi defenses. The total casualties on both sides ranged anywhere from 10,000 to 15,000. As many as half of the casualties were killed, with Iran losing about three times as many men as Iraq.

Iraq launched a counteroffensive near Shahrani in the central sector in late March 1983, but made no gains. Iran then launched another attack in the Musian area. The attack took place on April 10 and lasted until April 17. It was intended to recapture the heights in a 30 kilometer stretch along the front north of Fakkeh. It scored some gains near the border area, and Iran took roughly 400 Iraqi prisoners of war, but the offensive also cost both sides some 4,000-7,000 casualties.

Iraq launched a number of new FROG, Scud, and air strikes on Iranian civilian targets in

May, and attempted again to call for a ceasefire on the ground that this would protect civilians. It also unsuccessfully sought a truce for the month of Ramadan. While Iran had clearly taken serious losses of personnel, including experienced officers and NCOs, and of equipment, the Iranian government was still committed to pressing ahead with its invasion of Iraq.

Each side's relative ability to import arms however, was becoming a steadily more critical issue. The dollar value of arms import trends affecting the Gulf War at this point in the conflict are shown in Figure 6.3. It is important to note that Iraq had an effective monopoly in being able to buy the most modern military technology and modern weapons systems. Although Iraq had now lost more than 100 jet fighters, and over 2,000 tanks and armored personnel carriers, its continuing arms purchases allowed it to increase its total number of major weapons and its stockpiles in spite of these losses.

FIGURE 6.2 (Old Figure 4.7)

THE FIRST IRANIAN OFFENSIVE OF 1983

FIGURE 6.3 (old Figure 4.8)

MAJOR ARMS SALES TO THE GULF STATES: 1979-1983

FIGURE 6.3 (Old Figure 4.8 continued)

THE IMPACT OF ARMS IMPORTS ON THE IRAN-IRAQ WAR

Iran managed to get some arms and military supplies through Syria, Libya and Israel, and it increasingly turned to states outside the region, such as the PRC and North Korea. Nevertheless, Iran's combat losses and its lack of spare parts had gradually reduced Iran's operational air strength from over 400 operational aircraft at the time of the Shah's fall to as low as 70 by mid-1983. Iran could not support high sortie rates for these aircraft, and was forced to limit their use to defensive purposes and to protecting key points, like airfields, refineries, important cities and economic installations. Even then, Iran could only provide limited coverage, and was unable to provide air cover for its troops or meaningful air support.

Iran did, however, retain two major advantages in other areas: Superior oil earnings and a far greater capacity to sustain casualties. Iran retained its religious and revolutionary fervor. Iran used this fervor to expand the naval and air branches of the Pasdaran it had started in 1982. More importantly, it used it to further build up its land forces along the border and then deploy its forces over a wider area.

6.5 Further Iranian Attacks on the Kurds and the Wal-Fajr 2 Offensive

Iran seems to have had the goal of overstretching Iraq's limited manpower resources and of exploiting Baghdad's political vulnerability to casualties through a war of attrition. Iran launched a new offensive on July 23, 1983, in the Piranshahr area of the northern sector of the front, and along a 30 kilometer stretch between two Kurdish towns called Sardasht and Piranshahr. This attack was called the Wal-Fajr 2 offensive, and was linked to an earlier offensive in mid-March against the pro-Iraqi and anti-Khomeini KDPI forces led by Abdul Rahman Ghassemlou. During this offensive, Iranian regular and Pasdaran forces had attacked the KDPI forces with a local superiority of over 4:1 in manpower and vastly superior firepower. They drove the remaining KDPI forces out their remain positions near Baqqez, Bukhan, and Mahabad, and consolidated many of the gains Iran had made against the KDPI the previous fall.

The Iranian forces that now attacked Iraq as part of Wal-Fajr 2 included about two divisions, plus independent Pasdaran forces and KDP forces of about a battalion in size. The Iranian forces infiltrated the Iraqi and anti-Iranian Kurdish positions in the Ruwandez Valley, and then overran them with human wave assaults. The Pasdaran attacked through rough terrain which had considerable natural cover. They also seem to have had considerable intelligence and scouting assistance from the KDP. After about five days of fighting, and at least one major Iraqi counterattack, the Iranians were able to advance about ten miles forward into Iraq. This advance also took place even though the Iraqis seem to have made use of mustard gas against some of the KDP forces. Iran captured the Iraq 1st Corps garrison of Haj Omran, the main heights and artillery positions in the area, some 43 Kurdish villages, a major headquarters of the KDPI and much of the KDPI's equipment.

The territory Iran took was not of great significance, but Wal-Fajr 2 marked the end of much of the anti-Khomeini Kurdish resistance in Iran. It gave Khomeini an excuse

to declare the existence of a government in exile on Iraqi soil. More importantly, it have Iran far better ability to use anti-Iraqi Kurds against Saddam Hussein, and to attack areas dominated by Kurdish factions hostile to Iraq.

These anti-Iraqi factions consisted primarily of the KDP factions led by the Barzanis, but the PUK forces under Talabani had largely ceased to support the KDPI. As a result, a large part of the anti-Iraqi Kurd groups were now actively engaged in campaigns against both Iraq and Turkey.

In fact, the PUK was so successful in the areas along Iraq's border with Turkey that Turkey had had to restructure much of its 2nd Army to guard the Iraqi-Turkish pipeline and the road along it. While the pipeline continued to be defended by pro-government Kurds, the Turks now had to station army forces in the area and to force the evacuation of Kurdish villages. Turkey also reached a joint security agreement with Iraq in late April.

This agreement effectively allowed Turkey to compensate for Iraq's lack of manpower in the north by pursuing PUK forces onto Iraqi territory. It also led to major Turkish raids against the PUK in May, August, and September. These raids were effective enough to eventually force Talabani to begin negotiations with Baghdad for a compromise agreement where he would give up the search for independence for increased Kurdish autonomy. Talabani signed a ceasefire with the Iraqi government in December.

6.6 The Wal-Fajr 3 Offensive Near Mehran

Iran launched its Wal Fajr-3 offensive on July 30 in the area near Mehran. This offensive was intended to clear the heights above Mehran. Iraq had evacuated the town in late June, but had kept the heights surrounding the roads between Dehloran and Mehran and between Ilam and Mehran. The attack began against the forces of the Iraqi 2nd Corps in the area along the Dehloran-Mehran road, and drove forward into the border area near the Badra Dam and Doraji in Iraq. This time the Iranian attack was able to take advantage of rough terrain on the edge of the Iranian plateau, which offered the Pasdaran considerably better protection and concealment than the open plains to the south.

Iraq had ample warning of the attack, and Iraqi armor and aircraft attempted to counter-attack the Iranian forces as they assembled for the offensive. Iran had some 35,000 men in the area, however, and were already in good defensive positions. The Iraqi spoiling attack failed, and left the Iraqi forces off-balance when the Iranian offensive began.

Wal Fajr-3 then became a fight for each successive defensive position, and the resulting fighting lasted until August 10. According to some reports, Iraq used helicopters fighter-bombers to deliver mustard gas against the Iranian forces. A French source indicates that the initial attacks failed because they were delivered without adequate

attention to the wind conditions and because the heavy gas tended to flow down the side of the heights and away from the Iranian positions.

Iraq also succeeded in reinforcing its forces during this period, but it could not counterattack successfully. Iraq lacked the kind of open fire zones that had allowed it to be successful in the south, and its air power and artillery fire was considerably less effective. The battle produced a total of between 10,000 and 17,000 casualties.

While Iran did not score a major victory, it pushed forward about eight to ten kilometers, and took control of more than 100 square kilometers in the eastern heights above Mehran. The battle also demonstrated that the Pasdaran could continue to make at least limited gains if they picked the right terrain, and Iraq had taken nearly as many casualties as Iran.

At the same time, however, the Wal-Fajr 3 attack showed that while Iran was steadily modifying its tactics in using human wave attacks, it could not change the fundamental problems it faced in exploiting any initial success unless Iraqi commanders made serious mistakes. Iran tried to avoid massive direct human wave assaults against well defended Iraqi positions, and shifted to smaller attacks at a number of different weak points along the border. Iran lacked the strength and command and control capability, however, to launch more than one major assault at a time. Iran's attacks also usually developed slowly. This meant they provided Iraq with considerable warning, and that they moved at a pace, and with a concentration of force, that gave Iraq ample time to react. Even when Iran scored initial offensive successes it still could not exploit them against well prepared Iraqi positions, and Iraq now had such defenses in most strategically vital areas.

Iran also had increasing problems in equipping its ground forces. While estimated differ sharply, Iran now had about 300,000 full time regulars, including reserves and conscripts. It had roughly the same number of Pasdaran and Baseej. This gave it a total force of three corps. Depending upon the source, these were organized into as many as twenty-one divisions, 12 armored and mechanized units, and a number of airborne and special forces elements of up to brigade size. The regular army had about eight divisions out of this total.

Estimates of Iran's equipment holdings are equally uncertain, but they seem to have included 700 to 1,000 operational main battle tanks: Roughly 190-340 Soviet and North Korean T-54, T-55, and T-72, 200 Chieftain, and up to 300 M-47/48/60 tanks. Iran had anywhere from 500 to 1,000 operational other armored vehicles, including a growing number of BMP armored fighting vehicles. It had about 1,000 major artillery pieces. Even by regional standards, this was only about one-third half the major equipment needed for a force of 600,000 men.

While Iran had begun to receive major arms deliveries from North Korea, and had captured considerable equipment from Iran, its equipment losses were often as high as its manpower losses. Iranian ground forces also continued to lack the logistic support, air cover, and mobile artillery to exploit their occasional penetrations of Iraq's forward

defenses.

Iraq, in contrast, had at least 475,000 to 575,000 men, or near parity with Iran in manpower. The regular army had four major corps, and about 15 division equivalents -- including six armored, four mechanized, and six regular mountain and infantry divisions. Iraq also steadily improved its Republican Guard brigades since early 1981, and corrected a number of the defenses in the Popular Army, which now contributed 15 additional brigades. Iraq had around 2,500 operational main battle tanks, 3,000 other armored fighting vehicles including large numbers of BMPs, and 1,100 - 1,500 artillery weapons.

Iraq also continued to receive a steady flow of arms and munitions. It saturated its forces with anti-aircraft guns to provide high volumes of fire against Iranian infantry, deployed large numbers of Western anti-tank guided missiles like HOT and Milan, and continued to build up both its Soviet-made land based air defenses and its strength of French Rolands. Unlike Iran, Iraq's land forces also had massive modern support and training facilities. Iraq continued to lead in improving its already sophisticated fixed defenses, and was able to set up vast supply dumps in virtually every part of the front.

It is doubtful that Khomeini or most of those around him understood these trends in the balance, or would have cared if they had. Even when Iran was defeated in achieving its major objective, it usually took some territory. Iranian forces often seemed to be on the edge of a breakthrough even during the worst tactical reversals. Even though Iraq's forces showed relatively good morale, and its Shi'ites remained loyal, it seems likely that Iran's leadership felt their ability to launch large scale Pasdaran and Baseej infantry assaults was still a way that Iran could eventually shatter Iraq's defenses by exploiting what they perceived to be Iraq's weakening economy, internal divisions, and inferior ability to take casualties.

Iran's losses during the first six months of 1983 did, however, lead Khomeini to reduce the ability of the Mullahs and religious "commissars" to interfere with operations at the front. Khomeini also made continuing efforts and public statements to reassure the regular forces that they had the same importance as the Pasdaran. Nevertheless, Khomeini had mixed success. The Mullahs and the leaders of the Revolutionary Guards in Tehran continued to exaggerate Iraq's vulnerability in much the same way that Saddam Hussein and his colleagues had exaggerated Iran's vulnerability earlier in the war.

The Mullahs and more radical leaders of the Pasdaran and Baseej had sufficient power to prevent Iran from developing both a cohesive command structure and concept of operations, and continued to try to substitute ideological fervor for strategy, tactics and training. Iraq, in contrast, continued to respond by exploiting its superior ability to import arms and military technology. It continued to obtain the external financing it needed to survive, and it built up an improved capability to reduce or cripple Iran's ability to export through the Gulf.

6.7 The War in the Gulf Resumes

The Wal-Fajr 3 attack had another major strategic effect on the war. The conditions that had led to a near ceasefire in the Gulf since late 1980 had ended. Iraq's leaders decided to expand the war, and to attack the shipping and tanker traffic moving to and from Iran. Iraq had several objectives in mind in starting what later came to be called the "War of the Tankers". Iraq's leadership realized that Iran was having problems in funding its arms imports and critical civil imports like food. Striking at tankers and offshore oil facilities seemed to be an ideal way of striking at Iran's economic lifeblood without risking the kind of reprisals that might occur from attacks on Iranian cities.

Iraq also felt that it was now far less vulnerable to Iranian attack on its oil exports. Both Iran and Iraq had sought to create export capacity through Turkey shortly after the war began, and Iraq began to actively consider plans to link its pipeline system to the Saudi lines going to the new Saudi port on the Red Sea and to expand its pipeline to a refinery near Amman in Jordan to reach the Jordanian port of Aqaba. Iran, however, could not find the money to fund a new pipeline through Turkey, and Iraq could offer Turkey substantial construction and transit fees to expand the capacity of its existing pipeline to over one million barrels a day.

Turkey and Iraq signed an agreement to carry out such an expansion in February, 1983, with a scheduled completion date in 1984. Iran also obtained Saudi agreement to provide an additional 1 MMBD link to the Saudi system, plus Saudi and Kuwaiti agreement to market up to 350,000 barrels per day of their oil for Iraq as part of a loan that was later to be repaid in oil. While the pipeline link to Aqaba fell through when the U.S. would not guarantee its security against Israeli attacks, Iraq was still able to plan on the basis it would be able to export at least as much oil as Iran at some point in the next few years.

Finally, Iraq concluded that it could not mobilize world opinion in favor of peace unless it could broaden the war. Some Iraqi spokesmen were publicly accusing the superpowers of encouraging the war to weaken both Iraq and Iran at this time, but it seems likely that the leadership in both countries had more sophisticated goals in mind. Broadening the war meant bringing in both the Southern Gulf states and Western oil importing states into the periphery of the war. It was also clear that Iran might well overreact and take a relatively xenophobic stand. Iraq not only proved to be right in this calculation, it eventually found Iran's inability to deal with other states to be as great a strategic vulnerability as Iraq's dependence on oil export facilities in the Gulf had been at the start of the war.

6.7.1 Iraq's Threats to Halt Iran's Oil Traffic

Tariq Aziz warned on July 1, that Iraq would attack economic targets in Iran if Iran did not halt its attacks on Iraq. This warning came after many previous threats that Iraq would use new weapons in the oil war, but this time the threats had substance. Iraq had already received Exocet air-to-ship missiles from France, but could only launch them using short range helicopters which could not cover targets east of Bandar e-Khomeini.

It lacked a delivery system with the range to attack naval targets as far away as Iranian oil ports. In January 1983, however, France had agreed to supply Iraq with five Super Etendard jet fighters. While the Super Etendard aircraft were still limited in range to a radius of about 360-380 nautical miles, and could not reach naval targets in the lower Gulf, they had more than enough range to enable Iraq to threaten Iran's oil exports by attacking tankers in the waters near Iraq's main export facility at Kharg Island.

Iraq declared a formal Exclusion Zone on August 12, 1983. Iraq then warned foreign shipping to stay clear of all Iranian waters in the upper Gulf of August 15, including the waters around Kharg Island -- from which Iran was then exporting up to 2 MMBD. This forced Iran to respond with a declaration that it would protect foreign shipping on August 19, to institute an escort policy for foreign ships, and to deploy ships with surface-to-air missiles at Kharg.

FIGURE 4.9

IRAN'S VULNERABLE LOADING POINTS IN THE OIL WAR

Iraq did little initially to actually attack ships, but it began to make exaggerated claims of air strikes that were clearly designed to deter foreign ships from loading at Kharg. These claims and threats, however, had no immediate effect upon the Iranian leadership, or most of the world's tanker fleets, although Iran did try to persuade France not to transfer the Super Etendard aircraft.

6.7.2 The Limitations of Threats and Limited Escalation

The Super Etendards were delivered in late September 1983, in spite of Iranian protests, and Iraq allowed the fact they had arrived to become public on October 9. In practice, however, the deployment of the Super Etendards did no more to alter Iranian behavior in Iraq's favor than previous Iranian threats. Like most forms of limited escalation, the Super Etendards did as much to keep the conflict going as they did to terminate it.

The reasons for this failure provide some important insights into the problems inherent in the use of limited escalation in modern war. The first reason Iraq failed to have its desired impact on Iran was insufficiency of force. In fact, from the introduction of the Super Etendards to the point where Iraq finally made extensive use of missiles and poison gas, Iraq never used sufficient force in any of its efforts at escalation to make the transition from harassment to achieving a significant strategic effect.

Second, Saddam Hussein and his colleagues confused the use of new forms of force, and/or the new technology, with the level of force that could confront an enemy state with a situation where prolonging the conflict at similar or higher level of force was so much worse than agreeing on a peace or ceasefire that it would actually change national behavior. Mere novelty is not enough.

Third, Iraq ignored the level of commitment to the war that was already evident in Iran's words and actions. Limited escalation, and "graduated response," usually fail to achieve their objective once states have become committed to full scale conflict unless it is apparent that they can lead to the decisive use of force.

Fourth, Iraq failed to be realistic about the probable effectiveness of its own actions. Iraq exaggerated the effect of its attacks on Iran. It also assumed that Iran would view the attacks from the same perspective as Iraq, and see the process of escalation with Iraq's "logic". Like most states under similar circumstances, however, Iran saw the limited impact of such attacks as being as much as a sign of Iraqi weakness as a sign of strength. The shock effect of new forms of attack was quickly dissipated when these attacks took place in limited numbers and produced limited damage.

This kind of response to limited escalation has been typical of inter-state conflicts since the first bombings of civilian targets in World War I, and it is important to note that the U.S. made similar mistakes in its "Rolling Thunder" campaign as the USSR did in attacking the Afghan population in the latter years of its war in Afghanistan. It is a grim warning that (a) escalation must be high enough to achieve a decisive tactical or strategic effect, (b) the enemy must have no alternative that is even approximately as attractive as

continuing the war on its own terms, and (c) it is the enemy's attitudes and frame of reference that determine the success of the new form of attack and not those of the side that is escalating.

6.7.3 The Impact of Iraq's Threats in Broadening the War

Iraq did eventually prove to be correct, however, in thinking that it could use the "tanker war" to broaden the war to include the Southern Gulf states and Superpowers. Further, Iraq was correct in believing that it could step up the "tanker war" with only pro forma protests from the USSR and the West. While oil prices still remained relatively high, oil supply already significantly exceeded demand. Iran had alienated the Soviet Union, and key Western states had strong strategic and financial reasons to back Iraq. The U.S. feared the impact of an Iranian victory on the stability of northern and southern Gulf states far more than it feared the impact of Iraq's action on the flow of oil, and Iran was extraordinarily unpopular in U.S. official circles.

France had similarly favorable strategic interests in the survival of a secular regime in Iraq, and strong financial incentives as well. French military sales to Iraq had reached \$5.6 billion since September 1980, plus \$4.7 billion in civilian and commercial contracts. At least \$7 billion of this total was in the form of French loans and credits which would be at risk if the present regime were to be replaced by one strongly under Iranian influence.

This left Iran with little other response than to make its own threats to widen the war to include the southern Gulf, and to close the Straits of Hormuz. Rafsanjani even went so far as to outline alternatives like use anti-ship missiles, the 120mm guns on the Iranian islands in the Straits, and using mines and sinking blockade ships. Iran then moved some small detachments of Pasdaran to Larak, Hengin and Sirri Islands in the Straits. It also built up its artillery and anti-aircraft installations on Qeshm and Greater Tumb Islands, and established an expanded presence on Farsi Island.

The U.S. responded by strengthening its naval forces in the Gulf region, and warned that Washington would not allow Iran to close the Gulf. France agreed to speed up its arms deliveries, and the USSR continued to increase its support of Iraq.

U.S. planners concluded that they could halt any Iranian effort to close the Straits, or halt the export of oil, in a matter of days. U.S. planners based this conclusion on four main factors: First, Iran had little operational air power; second, most U.S. supplied Iranian surface-to-air and anti-ship missile now had limited effectiveness; third, any Iranian artillery positions near the Straits could be quickly suppressed; and fourth, the Straits were too wide and deep, and had currents too strong, to be easily closed. As later events showed, however, these calculations did not take account of the transfer of new missiles by other countries, the creation of a large naval guerrilla warfare capability, and the vulnerability of Gulf shipping to a much broader pattern of mine warfare and anti-shipping attacks throughout the Gulf.

6.8 The Wal-Fajr 4 Offensive Take Place Near Panjwin

Iran quickly demonstrated that it had no intention to halt its land offensives in response to the "tanker war". Iranian forces crossed into Iraq in the Marivan area in mid-September, and Iran launched its fourth major offensive of 1983 near Panjwin on October 19. This offensive occurred in the Iranian part of Kurdistan, to the east of Soleymaniyeh and along a 130 kilometer area between Marivan and Sardahst. The offensive involved two to three Iranian divisions (Some Iraqi reports refer to 21st and 24th armored divisions and elements of the Pasdaran), plus forces from the KDP and other anti-Iraqi groups.

The offensive was directed at two mountain passes which the Iraqis were using to supply Ghassemlou's Kurdish Democratic Party (KDP), the Iraqi positions in the Panjwin Valley, and the Iraqi garrison towns of Panjwin and Garmak in Iraqi Kurdistan. These positions were about 144 kilometers from the Kirkuk oil fields and 48 kilometers from Soleymaniyeh.

Iran claimed it was trying to put its own border towns of Baneh and Marivan out of Iraqi artillery range, and that it was striking at "counter-revolutionaries" supporting Iraq, who seemed to have been Iranian Kurds. Iraq claimed that attacks were directed at its Kirkuk fields and at isolating its Kurdish areas. Iraq launched new missile attacks on Iranian cities in the south--Dezful and Masjed Suleyman--and claimed to have mined the shipping routes to Bandar Khomeini. Iraq also seems to have experimented with mustard gas attacks on October 2 and October 25, using both its Mi-8 helicopters and Soviet attack fighters to deliver bombs, although the validity of these claims is unclear.

While the full details of the fighting remain obscure, a number of trends clearly emerged that later proved to be important. Iran as usual infiltrated its forces into forward positions and attacked at night. This time, however, Iran attacked with more than a dozen primary and secondary thrusts along a broad enough front to prevent Iraq from rapidly concentrating its defenses. It took good advantage of the mountain terrain, and made use of its infantry to launch well target assaults against Iraqi positions.

Iran's initial success showed that the proper use of volunteers to charge machine guns or walk over mine fields still made sound military sense as long as it was directed at achieved well defined and practical goals, kept within careful limits, the resulting penetrations were properly exploited, and the fighting had a well chosen and meaningful objective. While Iraq counterattacked, and flew up to 122 fighter and attack helicopter sorties per day, it could not halt the Iranian advance. Iran was able to use human wave assaults to advance steadily up the Panjwin Valley for nearly 15 kilometers between October 19 and 24, and it took five more camps operated by the KDPI.

The Iranians launched a second wave of attacks on October 25, and forced the Iraqis to retreat to positions outside Panjwin. By October 31, Iran had retaken about 80-110 square kilometers of Iranian soil. Iran claimed to have destroyed the large elements of the Iraqi 49th Armored Brigade, and other elements of the Iraqi 1st Corps.

Iran claimed to have killed 2,800 Iraqis while Iraq claimed to have killed 5,000 Iranians.

On November 4, Iran launched its third wave of attacks. It infiltrated the mountains and hillsides immediately above Panjwin and attempted to take the town. Iraq, however, was already rushing reinforcements into the area and deployed elements of its elite Republican Guards to Panjwin. Iran took heavy casualties in attempting to seize the town and the fighting died down by November 9. While Iran launched a new attack to consolidate its gains in the mountains on the Iraqi side of the border on November 19, the Iraqi 1st Corps was able to create new defensive positions.

Iran still failed to properly control the exploitation of its initial successes. Rather than continue to infiltrate and advance on a broad axis, and wear the Iraqis down in a series of carefully calculated blows, Iran kept trying for dramatic and rapid breakthroughs against heavily defended areas. As a result, Iran suffered serious casualties. While the total number of killed in Wal-Fajr 4 did not reach anything like the 15,000 level claimed by Iraq, it may well have approached 7,000 to 10,000. It also seems fairly clear that Iraq did use mustard gas to help defeat at least some of the Iranian assaults, and that this time its use of gas was effective. Iran later claimed up to several thousand casualties as the result of these gas attacks.

By the end of November, the net impact of more than a month of fighting was that Iran had pushed forward 20 to 25 kilometers into Iraq's mountains, and conquered about 130-200 square kilometers of Iraqi territory. Iran had moved to within a mile of Panjwin and gained control of the Chilere salient. This put Iranian forces within 120-130 kilometers of Iraq's pipeline to Turkey, which originates near the city of Kirkuk, and Iran had captured or destroyed 400 tanks and other armored vehicles, 20 artillery weapons, 20 AA gun and SAM batteries, large amounts of ammunition, 33,000 mine detectors, and 1,800 POWs.

The attack did not, however, result in a major defeat of Iraqi forces. Iran's gains still did not give it a good territorial springboard for a future attack and breakthrough, although they had further reduced the tenuous ability of the KDPI to conduct any kind of military operations in the Kurdish parts of Iran. Iran also did little to demonstrate it could counter Iraq's advantage in armor and air power once its forces had penetrated far beyond its starting point, and cost Iran significant amounts of its own equipment.

All in all, 1983 was not a good year for Iran. In human terms, its offensives had brought the cost of the war to about 240,000 killed (65,000 Iraqis and up to 180,000 Iranians), with three to five times as many wounded, and some 50,000 Iraqis and 8,000 Iranians taken prisoner. It was also during these battles that the first major Iraqi use of chemical weapons was reported, and Iran began to launch major protests to the UN.

Iran's offensives also continued to fail in two critical areas where Iran had to be successful if it was to defeat Iraq. Iran's first failure was that it did not carry out the kind of mass national mobilization that would give it a decisive advantage in trained manpower. This failure to mobilize a decisive advantage in manpower numbers, and to keep Iran's manpower at the front long enough to turn it into a trained force, seems to have stemmed from several causes: (a) Divisions within the Iranian armed forces, particularly between the regular forces inherited from the Shah and the new revolutionary

forces, (b) the cost of such mobilization to the Iranian economy, (c) an ideological belief in the efficacy of revolutionary war and single "final offensives" on the part of the leadership elite, (d) a lack of sufficient supplies of weapons and military equipment, and (e) the fear that such mobilization would have to be forced upon the people and then would either have to be totally successful in defeating Iraq or threaten popular support for the revolution.

Iran's second failure was that it still gave Iraq far too much time and ability to concentrate its forces. Attacking at several points on a broad front increased Iraq's difficulties, but it presented far fewer difficulties than a simultaneous attack on multiple fronts. This Iranian failure to launch simultaneous major offensives on several fronts was a natural result of Iran's failure to carry out mass mobilization. It was also the result of Iran's lack of supplies and logistics organization; of its problems in organizing any activity on this scale in the midst of a divided revolution; of the problems inherent in coordinating Pasdaran and regular Army efforts, and of Iran's lack of modern equipment.

Iraq, in contrast, steadily improved its use of fortified defensive positions during 1983, and exhibited a slowly growing capability to handle limited counterattacks, trade space for time, and regroup after an attack. Iraq's forces remained overcautious, and rarely exploited Iran's mistakes with major counterattacks or pressed such attacks home. Iraq also had the benefit of an organization whose leadership and manpower was far more stable than that of Iran and which could benefit from experience, and Iraq had a steadily growing advantage of superior access to heavy weapons, and superior strength in operational aircraft and helicopters.

Iraq was not, however, able to make more effective use of its air and missile power to attack civil, economic, and naval targets. When the new wave of Iranian offensives continued through October, and Iran launched several follow-up attacks in November, Iraq retaliated by mining the port of Bandar Khomeini, and attacking Dezful, Masjid-i Suleiman and Behbahan with SCUD-B surface-to-surface missiles. Iran did not slow its attacks, however, and attempted to reply in kind. When Iraq's elite Presidential Guard was committed to the battles around Panjwin on November 5, 1983, Iranian artillery hit at civilian targets in Basra the next day. Both Iraq and Iran issued propaganda that claimed their respective attacks had a major impact on the morale of their opponent. In fact, the attacks did little more than stiffen public support for continuing the war and strengthened the opposing regime.

6.9 The Wal-Fajr 5, Wal-Fajr 6, and Operation Kheiber Offensives of 1984

Iran attempted to correct one of the major failings in its offensive tactics when it launched a new series of attacks in early 1984. It shifted from an emphasis on using favorable terrain and broad front attacks in the north to multiple attacks in the central and southern parts of the front. In February, 1984, Iran launched four thrusts against Iraq. While there was only one major line of advance, these thrusts did create a more serious problem for Iraqi in concentrating its forces than Iran's previous offensives.

The first Iranian thrust was a limited offensive by Iranian-supported PUK forces on February 12, in the area near Nowdesh. The PUK made limited gains, but the attack tied up a significant amount of Iraqi forces and allowed Iran to pin down a significant number of Iraqi troops at very little cost. It also showed that the "Kurdish balance" had shifted, and it was pro-Iranian Kurds that were to be on the offensive until the ceasefire in 1988. The Iraqi-supported KDPI movement had lost virtually all of its ability to operate in Iran, had lost some 27,000 dead, and was now little more than a support element of the Iraqi forces on the northern front.

The main three Iranian thrusts came in the south. Iran had built up forces variously estimated at from 250,000 to 350,000 men, with a total of 25-33 divisions and brigades. These forces were deployed along a broad front covering Dehloran, Mehran, and the Hawizeh Marshes. This gave Iran the option of striking at a wide range of points along the Baghdad-Basra road or of cutting off Basra from the north.

Iran dealt with this situation by launching two limited Wal Fajr attacks, which acted as something of a diversions, and then a major new offensive called Operation Kheiber. The first Wal Fajr attack began along a 50 kilometer front between Dehloran and Mehran and to the east of Al Kut. This attack was launched from positions near Mehran on the night of February 15-16, and was called Wal-Fajr 5

Wal-Fajr 5 was directed at the positions of the Iraqi 2nd Corp, which had something on the order of nine divisions and about 100,000 men. The attack was intended to either cut the Basra-Baghdad road or attack Baqubah on a key road from Tehran to Baghdad. Like Basra, Baqubah was a heavily fortified city defended by arcs of earthen berms and bunkers, and with extensive artillery fire points and supply depots in the rear. The Iranian forces participating Wal Fajr 5 consisted largely of Pasdaran and Baseej, and took some Iraqi villages and a number of positions in the hills above the plains along the Basra-Baghdad highway.

The second Wal Fajr attack was called Wal-Fajr 6, and began near Dehloran on February 21. Iranian forces attacked the Iraqi-held heights near above the Basra-Baghdad road near Ali al-Gharbi. Neither Wal-Fajr 5 or Wal-Fajr 6 scored more than limited gains, but their main purpose was to try to force Iraq to redeploy its forces from the south.

The fourth Iranian thrust was called Operation Kheiber. This attack had far more serious goals than either Wal Fajr 5 or Wal Fajr 6. It was intended to achieve a major strategic surprise by driving through the Hawizeh (Hur el-Howeyzeh) Marshes.

As has been touched upon earlier, the Hawizeh Marshes form a natural barrier along the Iranian-Iraqi border from Al Amarah in the north to a point just north of Basra in the south -- where there are dry sand plains on the Iranian side. The marshes are fed by the watershed of both the Tigris and Karun Rivers, and begin just east of Susangerd in Iran in the east and extend all the way to Nasiriyah in Iraq in the west. The eastern road from Basra to Baghdad runs through a built up area to the west of the Tigris, which has a maximum width of about 20 kilometers, but sometimes appears to be surrounded by water on either side of the road. The marshes have water levels of one to three meters in

February, and thick clumps of reeds which are often two meters high.

The Hawizeh Marshes did give Iraq a major barrier to Iranian movement, but they also were often impassable to Iraqi armor and artillery. At this point in the war, Iraq had also paid more attention to flooding the marshes, and creating improved water barriers, than to establishing a continuous line of fortifications to defend the rear of the marsh area, where an Iranian attack seemed unlikely. Iraq had placed its defenses just east of the Basra to Baghdad road, and Iranian infantry could move forward with only limited opposition and fear of armored and artillery counter attacks. Although the area was originally inhabited by marsh Arabs, Iraq also did relatively little to patrol it or secure it. It carried out only limited reconnaissance and had relatively poor intelligence coverage of what went on in the wetlands. Finally, the defense of the area was divided, with the Iraqi 4th Corps covering the area north of Qurna (also Qarneh or Al-Quornah) and the 3rd Corps covering the area to the south.

Iran deployed a strike force near the marshes of 50,000 to 150,000 men, with up to another 100,000 men in reserve for rapid deployment. Although the main Iranian attack did not develop until February 22, Iran began its preparations much earlier. On February 14, Iran launched a probing attack near the Arvand River. By February 16, Iran expanded its attacks into a major helicopter and water borne assault which used rubber boats and small craft (the Fatima al-Zahra attack). These attacks overran the Iraqi marsh villages of Al Baydha and Sakhra. Iran then launched its main attack in an attempt to cut the Baghdad-Basra road. It launched three major amphibious thrusts using barges and small craft: These were directed at Beida, the Majnoon Islands, and the main defense points of the Iraqi third Corps at Ghuzail.

The attack on Beida was initially successful. Beida was a marsh village which was only lightly defended by the 3rd Corps. The Pasdaran rapidly took the village and began to dig in. They took two other undefended villages called Sabkha and Ajrada. These villages were connected by tracks on earth mounds, and made the Iranian advance relatively easy. In fact, some scattered elements of Iranian troops may actually have reached the Basra-Baghdad road.

The success of the Iranian attack, however, depended on building up a major Iranian bridgehead by boat before Iraqi forces could counterattack with artillery and armor. The Pasdaran and Baseej forces in the attack also lacked artillery and modern anti-tank weapons. The Iranian attacks in Wal-Fajr 5 and 6 had did little to divert the Iraqi 3rd Corps, and the Iraqi forces counterattacked relatively quickly. The Iranian forces lacked the strength and heavy weapons to put up a real defense, and the Iranian small craft attempting to reinforce the area became ideal targets for Iraq's armed helicopters. By February 25, three successive Iraqi counterattacks had overrun the Iraqi forces. The fighting was grim. Iraqi tanks ran over some Pasdaran infantry and Iraq electrocuted others by diverting power lines into the marshes. The Iraqi Ministry of Information later shown films showing thousands of exposed Iranian dead.

The Iranian attacks on Ghuzail further to the south attempted to use amphibious forces which infiltrated by night to overwhelm the Iraqi position before its defense could

be organized. The Iranian attacks did score some initial successes, but the Ghuzail area had good barrier and firepower defenses. Iran then claimed on February 23, to have taken the city of Qurna, at the junction of the Tigris and Euphrates River. An Iraqi television broadcast from Qurna showed that Iran was lying, however, and that many of Iran's attacking troops had been killed at the edges of various water barriers or near Iraq's entrenched forward defense positions.

After Iran's initial successes on the first night of the battle, the fighting had become a battle attrition, with wave after wave of advancing Pasdaran attempting to overcome a massive Iraqi superiority in firepower and position through sheer numbers. There was little cover in front of the main Iraqi defenses, and Iraqi firepower inflicted terrible casualties on Iran, and Iraqi fighters and helicopters often found Pasdaran concentrations in open positions. Iraq also made good use of flooding to complicate the problems Iran faced in advancing through a mix of wetlands and the drier territory in the area. The Iranian forces could not advanced their forces quickly enough to prevent Iraq from being able to reinforce in the space between attacks.

As a result, the battle became a killing ground for the Iraqi troops, and began to reach a bloody climax on February 29. An Iranian force of over 20,000 men advanced over open ground in broad daylight, and into an Iraqi position that could concentrate massive firepower against Iran's flanks as well as against its center. Iraq also seems to have used artillery and helicopters to deliver mustard gas, and to have inflicted several thousand casualties with this weapon. By March 1st, Iran had exhausted its ability to keep attacking and Iraqi forces counterattacked the next day against Iranian forces that had now run out of supply and which was exposed on a dried salt flat. Iran suffered five to seven times more casualties than Iraq, and lost between 12,000 and 20,000 men.

The only success Operation Kheiber produced for Iran occurred as the result of a limited attack through the Hawizeh Marshes that began on February 22, when Iranian troops advancing by boat found that an Iraqi oil drilling complex called the Majnoon Islands was virtually undefended. These Majnoon "islands" consisted two main networks of sand mounds that enclosed areas in the marshes east of Qurna. Iraq had built up the islands to help develop a major oil field, which some sources credited as having several billion barrels of oil and up to 20% of Iraq's oil reserves. There were over 50 producing wells in the area, which Iraq had capped before the fighting began.

Both the Iraqi 3rd and 4th Corps were occupied in defending the main defenses east of the Basra-Baghdad road, and Iran was able to dig in unopposed. Iran built sheltered bunkers and by February 25, Iran reinforced its positions to about 15,000-20,000 men. Iran engineers established a pontoon bridge to the Iranian dry lands southeast of Hamid, and Iran was able to bring artillery into the area.

The Iraqis had to wait until they could consolidate their defense of the Basra-Baghdad road to counterattack, and this took until March 6. Iraq then found it had to fight its way meter by meter through wetlands where it could not deploy armor or artillery except along a single road. Even after bitter fighting, the extensive use of mustard gas, and what may have been Iraq's first experimental use of a nerve gas called Tabun, Iraq

could only fully recover the southern island.

This gave Iran a kind of victory. Iraq had to defend the southern part of the Majnoons like a fortress under siege. It had to set up continuous lighting, fire posts at every point along the perimeter and make new attempts to use the diversion of power lines into the marshes to make the waters impossible to infiltrate.

The fact that Iran still held northern complex of the Majnoon Islands also allowed the speaker of the Majlis, Ali Ahkbar Rafsanjani to claim that, "We have now more than enough in terms of proven oil reserves to take care of the cost of reparation for the enormous damages we have suffered at the hands of the enemy."

The overall impact of Operation Kheiber, however, was that Iran took losses that were so high that they forced Iran to stop launching major offensives until March, 1985.

Iraq had lost 6,000 dead, and 10,000 to 12,000 wounded. Iran's Pasdaran and Baseej had suffered a total of up to 20,000 killed, including non-combat related losses and missing in action, and 20,000-30,000 wounded. Iran's regular forces had lost 6,000 men out of a total of 40,000. Iran had also lost far more equipment than Iraq.

Even so, between 250,000 and 330,000 Iranian troops were kept at the front and in a position to attack until later that summer when part of the force was allowed to return home. Iran also replaced its pontoon bridge to Majnoon with a nine mile long earthen causeway by May 7. Iraq had no choice other than launch new efforts to correct every possible weakness in its forward defenses and to reinforce every critical defense point around a city or major objective.

6.10 Iran's Leaders and the Impact of the Fighting in Operation Kheiber

Although there are many reports and rumors, it is unclear how Iran's political leadership really judged the outcome of Operation Kheiber. Iranian broadcasts and speeches following the offensive continued to insist that the war could only end with Saddam Hussein's ouster, but they provided mixed signals as to whether Iran would launch major new offensives. It seems likely from the rumors surrounding the meetings of the Iranian Supreme Defense Council that followed Operation Kheiber that some Iranian planners questioned whether Iran could succeed using tactics that cost it so much manpower, and which had so little ability to sustain deep breakthroughs and hold on to major gains. This helps explain why the Wal-Fajr attacks halted for the rest of 1984, and why the Iranian Supreme Defense Council began to debate a new series of attack options:

- The first of these options included a major offensive against Kirkuk and Iraq's pipeline system in the north. The problem with this option was that it meant fighting through very defensible mountainous and rough terrain, trying to occupy most of the Kurdish areas in Iraq, and the risk of Turkish economic or military counteraction.

- The second option included attacking Baghdad via Qasr e-Shirin or Mandali, but Iran lacked both the armor and air capability to sustain such a thrust and would have to expose its forces to an offensive across open plains that were an almost ideal killing ground for Iraqi forces.
- The third option was to try to reinforce the "success" of Operation Kheiber and launch another attack across, or bypassing the edges of, the Hawizeh Marshes.
- The fourth option was another frontal assault on Basra. This option offered the potential ability to seize much of the Shi'ite part of Iraq and to reduce Iraq's access to the southern Gulf, but meant a direct attack on what was now a massive fortress.
- The final option was to bypass Basra to the South, attack the weakly defended Al Fao Peninsula, and try to cut Iraq off from Kuwait by driving to the Iraqi naval port at Umm Qasr. This offered the potential ability to force the southern Gulf states to halt their support of Iraq or risk an Iranian invasion of Kuwait. It also, however, was the option most likely to lead to Western intervention in the war.

The Iranian Supreme Defense Council eventually chose the option of repeating Operation Kheiber. At the same time, it seems to have begun to actively examine the option of attacking Al Fao and Umm Qasr. It also gave the planners in the Pasdaran and Iran's regular forces the time necessary to prepare their troops and obtain some hope of achieving success.

It still seems, however, that a significant number of Iran's war leaders fundamentally failed to understand the reasons for the failure and success of previous revolutionary conflicts like those in China and Vietnam. In spite of the fact that Iran now had at least some North Korean advisors, there was little overt recognition of the amount of effort that the PRC and North Vietnam had put on developing trained forces and cadres and on providing their troops with cohesive leadership and with adequate combat experience and preparation before an attack.

Iran's leaders seem to have interpreted each of Iraq's defensive successes as being so marginal that even a minor change in the size or dedication of the Iranian forces involved could have reversed the outcome. They also seem to have grossly overestimated Iraq's vulnerability to losses and attrition, particularly since Iran was suffering almost three times as many losses of men and equipment and had only parity in total deployed manpower and less than half of Iraq's equipment.

Above all, many top Iranian leaders, including Khomeini, must have continued to stress ideology over the practical details of making a revolutionary force work. There was a strong tendency in Iran to "sloganize" popular warfare and to ignore the actual experience at the front even though an increasing number of senior Iranian officials had actually served in the Pasdaran. Iran still was willing to throw thousands of Baseej into combat, almost straight from their cities and villages. It provided them with little military equipment and resupply capability, and gave its volunteers few instructions other than to

advance to their primary objective and obtain supplies from the newly "liberated" Iraqi Shi'ites.

6.11 Chemical and Economic Warfare

This phase of the war was also affected by the use of chemical weapons and changes in the economic aspects of the conflict. Iran made a steadily growing number of charges that Iraq had made use of chemical warfare. Iran later charged that Iraq had used chemical weapons to kill 1,200 Iraqis and injured 5,000 between May, 1981 and the end of March, 1984., and many of these charges were certainly valid. Iraq almost certainly used mustard gas, and possibly a nerve agent called Tabun, in the battles near Hur ul-Hoveyzeh on 25 February, in the Shatt e-ali area on 26 February, in the Talayeh area on 2 and 3 March, in the Majnoon Islands on 9 March, and in the Jofeyr-Al Ba'iza and Kawther regions on 17 March.

Iran's tactics made Iraq's use of mustard gas particularly effective, since Iranian forces moved slowly and on foot. Mustard gas achieves maximum effect as a persistent poison.

It is important to understand, however, that the reason for Iraq's defensive victories in 1983 -1984 was the combination of both Iraqi superiority in firepower, armor, and air power, and of Iran's failure to properly plan and manage its infantry attacks. Even if all Iranian claims are assumed to be valid, Iraq's use of a gas would still account for only three to five percent of Iran's casualties. Further, Iran helped defeat itself by consistently exposing its manpower in direct "human wave" assaults on heavily held Iraqi positions in broad daylight without major artillery and air support and without effective battle management.

By the spring of 1984, the balance of economic warfare had also changed significantly, and had ceased to favor Iran. Iran produced an average of about 2.43 MMBD in 1983, and exported about 1.71 MMBD, with annual earnings of about \$12.3 billion. In 1984, a combination of demand, price, and military factors cut Iran's production to an annual average of about 2.18 MMBD, and exports of about 1.36 MMBD, with annual earnings of around \$10.9 billion.

Iraq was still suffering severely from the loss of its oil export capability, and its revenues had drooped from \$21.3 billion in 1979, and \$26.1 billion in 1980, to \$10.4 billion in 1981, \$9.7 billion in 1982, and \$9.65 billion in 1983. Its revenues had climbed back to \$11.24 billion in 1984.

Although its economic situation was anything but easy, Iraq was on the way to solving many of the economic problems that had resulted from the near cutoff in its oil exports, and from rapidly drawing down its foreign reserves to try to simultaneously fund "guns", "butter", and development during the first two years of the war. By March 1984, Iraq was able to use the expansion of its pipeline through Turkey to increase its exports from a monthly average of 800,000 BPD (barrels per day) to an average of 1.2 million. Iraq was also completing contracts to establish a new pipeline link through Saudi Arabia. While Iraq could not make use of this pipeline link until late 1985, the fact it was now under

construction was a powerful factor in influencing Iraq's foreign creditors to refinance Iraq's debt and to make new loans. Iran never again was able to threaten Iraq's export capability or ability to finance the war.

Footnotes

The analysis of Phase Three is based heavily on the author's trips to the region and interviews of Iraqi and Iranian officers and officials, plus his prior writing for the Armed Forces Journal International (Especially "The Lessons of the Iran-Iraq War", Parts I and II, April and June, 1982) and in the Gulf and the Search for Strategic Stability, Boulder, Westview, 1984. It also draws heavily upon the work of Colonel W.O. Staudenmaier, U.S. Army Strategic Studies Institute; Edgar O'Ballance, The Gulf War, London, Brassey's, 1988; Nikola B. Schahgaldian, The Iranian Military Under The Islamic Republic, Santa Monica, Rand R-3473-USDP, 1987; Sepher Zabih, The Iranian Military in Revolution and War, London, Routledge, 1988; Keith McLauchlan and George Joffe, The Gulf War, Special Report 176, London, Economist Press, 1984, Keith McLauchlan and George Joffe, Iran and Iraq: The Next Five Years, Special Report 1083, London, Economist Press, 1987 and various working papers for the International Institute of Strategic Studies, Royal United Services Institute.

Virtually every Iranian leader has at some point been called a hawk or moderate. It is almost certainly true that the Iranian military commanders generally counselled far more caution and restraint than the Mullahs, and that the regular officers put far more emphasis on military professionalism. It is also probably true that the major civil leaders and ministers -- such as President Khameni, Prime Minister Mousavi, Majlis Speaker Rafsanjani, and Foreign Minister Velayati -- were far less willing to risk the stability of Iran, and future of the revolution within Iran, than Khomeini and the more radical Mullahs. Nevertheless, these debates were probably debates over tactics and timing, rather than the ultimate objective, until at least 1987.

By this time, the Baseej were drawn from ages from 12 to 72, although the majority tended to be relatively young. They were usually recruited by young mullahs who stressed the fact martyrdom against heresy (Kfor) would grant them both glory and entrance to paradise. The Pasdaran or Sepah gave them brief training for between 10 and 28 days. In theory, the Foundation of Martyrs (Bonyde Shaheed) looked after the families of those killed, and they had special treatment in terms of food rationing, the allocation of housing and property taken away from those loyal to the Shah or other opposition movement, and being sent on pilgrimage.

Iran treated the battle publicly as a victory. It claimed to have captured 101 tanks including 12 Soviet T-72s, and 1,110 prisoners of war. See Zabih, p. 181.

Zabih, The Iranian Military in Revolution and War, p. 181.

The author visited several Iraqi positions on a number of occasions during the war. The comments on Iran are based upon discussions with Iranian soldiers in the West and visits to capture Iranian positions in 1988.

ACDA, World Military Expenditures and Arms Transfers, 1985, pp. 108-109.

According to Edgar O'Ballance, the USSR agreed to begin reshipment of arms in return for the release of 180 Iraqi Communists in May. (The Gulf War, p. 103)

O'Ballance, The Gulf War, pp. 123-124.

Estimates are based upon the IISS, Military Balance, 1983-1984, pp. 55-56. The lower number in the range of strengths for each helicopter type is the minimum believed to be armed and operational at the beginning of 1983.

Estimates are based upon the IISS, Military Balance, 1983-1984, pp. 54-55.

Wal-Fajr means "behold the dawn" and is a reference to the Koran. Some sources feel the first Wal-Fajr offensive began on April 16, 1983.

Some sources feel this was the first Wal-Fajr offensive. See Zabih, The Iranian Military in Revolution and War, p. 184.

This declaration, and various Al Daawa bombings, led to ruthless Iraqi efforts to hunt down and eliminate any remaining opposition. Chubin and Trip, Iran and Iraq at War, pp. 101-103.

Iran had now gather the various Shi'ite, Kurdish movements, and other anti-Saddam Hussein groups in Iraq that it supported under an umbrella organization called the Supreme Council of the Islamic Revolution in Iraq (SCIRI).

Iran claimed to have taken some 600 POWs, 41 tanks, nearly 300 artillery weapons, and 13,000 light arms. Experts sharply disagree over the number of casualties, killed and wounded on each side in all of the Wal-Fajr battles, as well as on the number of POWs and equipment losses.

Estimates are based upon the IISS, Military Balance, 1983-1984, pp. 54-55.

Estimates are based upon the IISS, Military Balance, 1983-1984, pp. 55-56.

These comments are based on conversations during this period with senior Iraqi officials.

O'Ballance, The Gulf War, p. 149

As usual, claims are impossible to verify and the data are uncertain. See Zabih, p. 186.

Iran claimed Iraq used chemical weapons in the Panjwin area on November 7, 9, and 19, 1983. A number of earlier claims have already been mentioned. Iran claimed Iraq was using gas during an attack near Shalamchah as early as late 1980. It reported its first gas casualty during fighting near Hoveyzeh in early 1981, and its first killed (4 dead) after fighting near Musian on 27 October 1982. Iran began to claim it suffered large casualties (318) from mustard gas and arsenic agents during the fighting mid-August. It was only during the "Wal-Fajr 4" offensive, however, that gas warfare became a major issue and received widespread world attention. It also was the battle that first seems to have led

Iran to buy chemical defense equipment, and Britain announced it had sold Iran 10,000 protective kits on December 22, 1983.

Some sources refer to this attack as Wal-Fajr 6, and call both diversionary attacks Wal (Val) Fjar 5. This identification of the battle is based on O'Ballance, *The Gulf War*, p. 143, which seems to be the best available description of the land fighting through 1986.

Guardian and Times (March 2 and 3, 1984). Observer and Sunday Times (March 4, 1984).

Times (February 25, 1984); Times and Guardian (March 7, 1984); Telegraph (March 12 and 26, 1986); Zabih, pp. 186-188.

Jamhuriye Islam (Tehran), May 8, 1984, and Le Monde, February 18 and March 30, 1984.

Iran had acquired a total of about 350 square kilometers of Iraqi territory, but most had only limited strategic value.

See Le Monde, February 18 and March 30, 1984, and Zabih, pp. 189-190. Chubin and Tripp credit the regular forces for winning the leadership's agreement to this pause in a debate with the supporters of the Pasdaran. Chubin and Tripp, *Iran and Iraq at War*, p. 84.

The U.S. charged in December, 1983 that West German firms had given Iraq the ability to manufacture Tabun, and that the rapidly expanding Iraqi chemical corps had used it in 1983. The U.S. had stated that Iraq now had major chemical warfare plants at Samara, south of Baghdad, at Akachat, and at a number of other locations. The U.S. suspend the ship of possible chemical feedstock to Iraq in March, 1984 and the West German government tightened its controls of the export of chemical weapons equipment and technology in August.

For an excellent and objective technical discussion, see J. P. Perry Robinson, "Chemical and Biological Warfare: Developments in 1984," *World Armaments and Disarmaments*, Sipri Yearbook, 1985 (Solna, Sweden: 1985), pp. 178-188 and 206-217. Also, see Pearce Wright, "Why Troops Still Have to Fear Mustard Gas," *Science Report*, Times (March 6, 1984). Part of the confusion may have stemmed from the effects of mustard gas. Mustard gas, or Lewisite, often initially appears to be little more than a mild irritant because it acts as a vesicant or skin blistering agent. It sometimes takes hours before the lungs begin to blister and the skin deforms. Limited exposure produces very uncertain symptoms.

Such estimates are controversial. These are taken from the Wharton Econometrics, the Petroleum Finance Company, and work by John M. Roberts, a senior advisor to the Middle East Institute.

Ibid.

The Iran-Iraq War - Chapter VI

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