

# **Iran in Transition:**

## **Uncertain Hostility, Uncertain Threat**

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Patience is not one of America's greatest virtues. We want instant solutions and we want them now! We also have limited tolerance for complexity and uncertainty. We want instant judgments, and clear divisions between black and white. We also like morality plays, and clear simplistic differences between good and evil and friend and foe—and few Americans can forget events in Lebanon or that militant students held 52 Americans hostage for 444 days after the Islamic revolution in 1979 with the blessing of Iranian officials.

Our cultural bias has its advantages. We are a nation that acts, and often with great success and decisiveness. At the same time, when we deal with very complex problems in foreign relations we tend to either sanctify a given regime or demonize it. We also can rush to judgment and oversimplify, and end up seeking the kind of answers that have become a joke within the U.S. national security community: "We have the same solution to every problem, simple, quick, and wrong."

Any such rush to judgment is particularly dangerous in the case of Iran. Neither nation will quickly forget the past, or the present level of tensions. It is far too soon to make judgments about how moderate Iran will become and remain, about changes in its national security policy, its attitude towards proliferation, and its support of revolutionary warfare and terrorism.

Many internal political developments are quite positive, as are many of Iran's diplomatic actions. At the same time, there is an obvious power struggle between conservative and moderate. There have been few visible changes in Iran's national security policy and force posture, and it may be several years before we can firmly understand what Iran's new government can make by way of changes in Iran's conventional forces and programs to acquire weapons of mass destruction.

### **Iran's Strategic Interests**

We will need tolerance as well as patience. At best, moderation is not going to mean Iranian agreement with the United States. Iran has different strategic interests, and its present fears and hostility cannot be attributed simply to revolutionary rhetoric, internal

politics, hostility, or paranoia. Iran is a nation with good historical reason to fear its neighbors and outside intervention.

Many of Iran's present attitudes were shaped by an eight year long war with Iraq. Iran's aggressive efforts to export its revolution, extremism, and the U.S. Embassy hostage crisis created many of its problems. Nevertheless, the Iran-Iraq War was a conflict where Iran was first invaded and was then the victim of massive chemical and missile attacks. Outside powers armed Iraq against Iran, while they denied Iran resupply and new arms, and Iran fought a "tanker war" against the U.S. and Britain in 1987-1988. Iran ended the Iran-Iraq War in near isolation, having lost a series of massive battles that cost it some 40-60% of its major land force weapons.

Iraq has since been greatly weakened by the Gulf War, but it remains a stronger military power than Iran. Iran has roughly 380,000-400,000 men under arms versus 345,000 men in both Iran's regular forces and the Revolutionary Guards. Iraq has 2,700 main battle tanks compared to less than 1,400 for Iran. Iraq has about 3,800 other armored vehicles compared to around 1,100. The only category of major land weapons where Iran is superior is artillery, and this superiority exists largely in obsolete towed artillery weapons that have defensive value, but which are extremely difficult to use effectively in maneuver warfare. Regardless of the recent improvement in their relations, both Iran and Iraq still harbor armed opposition movements which are targeted against the other state. Neither nation can ignore the risk of another Iran-Iraq War, nor both Iran and Iraq deploy the majority of their armored forces along their mutual border.

Iraq is also a reason that is unlikely that Iran's efforts to acquire long-range missiles and weapons of mass destruction are regime-dependent, or will vanish if Iran's moderates come to full power, although the rate and intensity of Iran's efforts to acquire weapons of mass destruction may vary sharply according to the regime and the political climate in the Gulf. The Gulf War has exposed the truly massive character of Iraq's efforts to proliferate, and the risk that Iran might eventually have been the target of massive attacks with biological and chemical weapons. Iran is keenly aware of Israel's long-range strike capabilities, and that India and Pakistan are major proliferators.

Iran will take time to forget that the U.S. has sought to isolate Iran both militarily and economically. It is unlikely to forget that American military power now dominates the Gulf. Iran is aware that it has little hope of eroding U.S. conventional superiority except by proliferating and the use of asymmetric warfare, and that the U.S. is the world's leading nuclear power. It is also keenly conscious of the fact that Southern Gulf nations like Saudi Arabia are importing something on the order of fifteen times more arms than Iran.

This is not a peaceful or friendly region. Every nation plays other regional nations off against each other. Even in the Southern Gulf, virtually every regime is in some ways the rival of its neighbors, and no Southern Gulf nation has a firm identity of strategic interests with the United States.

Regardless of Iran's regime, it can be expected to compete in the complex game of power in the region. Iran may never seek hegemony in the literal sense of the word, but it will always seek regional power and influence. In the Gulf, that means trying to advance Iranian interests against those of Iraq, Saudi Arabia, and the United States. It means seeking influence over the smaller Gulf states, and trying to assert Iran's role as a Gulf and Indian Ocean power. Virtually any Iranian regime is likely to see the kind of naval power that Iran has built up along its Gulf coast as both a way of ensure that its own oil shipments are not threatened and as a way of intimidating its neighbors

Iran will seek to assert its interests in the Caspian, Afghanistan, and Central Asia, and complex and sometimes troubled relations with Turkey and Pakistan. Iran can never ignore Russia, anymore than it can ignore the US. At present, it is likely to try to use Russia as a counterbalance to the U.S. and seek to limit Russian ties to Iraq, just as it will seek to use all other interested outside powers to advance its interests in the region.

Iran can be expected to support Shi'ite causes in nations like Afghanistan, Bahrain, Lebanon, and Saudi Arabia, although the way in which it does so may vary sharply with a given Iranian regime and leader. It will also continue to have some problems with its Azeris and Kurds, although they are unlikely to lead to the kind of tensions that exists in Iraq and Turkey.

Any Iran that cannot match U.S. and Iraqi conventional strength is unlikely to abandon unconventional or asymmetric warfare, and this will sometimes include the use of what we call "terrorism." Iran is also unlikely to ever openly acknowledge that the U.S. has a legitimate role to play in the Gulf, and contributes to regional stability. Iran has scarcely ignored the fact that it benefited from the US-led attacks on Iraq during the Gulf War, and the eight years in which Iraq has been denied arms imports and the ability to proliferate. At the same time, Iran sees the U.S. as an oppressor under the Shah, a key cause of its defeat in the Iran-Iraq War, and as an ally of Saudi Arabia and Israel. Future Iranian regimes are likely to entirely forget the past, and most are far more likely to want to lead a Gulf security structure than accept a U.S. presence.

Iran has nothing to gain from violent attacks on its legitimate opposition, and some aspects of its terrorist activities already seem to be sharply reduced in scope. While Iran does continue to support the Hezbollah and some extremist movements like the Palestinian Islamic Jihad, it seems to have less interest in operations in the Southern Gulf and the rest of the Arab world. At the same time, no Iranian regime is likely to remain passive when it is under violent attack by its extreme opposition.

This is particularly true in the case of the People's Mujahideen, which is itself a terrorist group. Before we call any member of the People's Mujahideen a victim of terrorism, we should remember that it lost a bloody civil war in Iran in the early 1980s, in which it made widespread use of bombings and assassination. It killed Americans long before the fall of the Shah, and supported the student seizure of the U.S. embassy and hostages. The People's Mujahideen has since maintained an Iraqi-supported military force near Iran's border, and gone on with its terrorist attacks inside Iran. Similarly, Iran is unlikely to

tolerate the Kurdish groups that supported a Kurdish uprising in Iran in 1980-1983, and which also has elements that threaten to attack Iran. Violence in Iranian politics is almost certain to be met with violence, and "terrorism with terrorism."

Israel is a long way away from Iran, and there is little prospect of real conflict between the two countries. At present, however, Israel makes a convenient political whipping boy for Iran and one where the whip is sometimes wielded out of real conviction. Until the peace process is revived, and receives broad Arab and Islamic support, Iran will probably continue to attack Israel's legitimacy and support Arab hard-liners. This may not involve the support of terrorist and extremist groups, or cooperation with Syria, but ideological differences are likely to combine with strategic interest, and the most the U.S. may be able to hope for is an Iran that softens its rhetoric and which does not actively support violence.

In short, even if the "moderates" in Iran do come fully to power, and gain full control over the national security apparatus and security structure, we should not expect Iran to agree with the US, to cease all of its rivalries with its neighbors, and to abandon all of the military efforts we do not like. We should not expect Iran to halt proliferation, give up its efforts to strengthen its naval power in the Gulf, and abandon the use of violence against the violent elements of its opposition.

## **Iran in Transition**

Iran is not; however, a nation where the "moderates" are firmly in power, or where we yet know what Iran's more moderate leaders feel about national security policy or how they would behave if they did not face serious internal opposition. We are dealing with a complex regime that is in the midst of an uncertain transition and Iran's internal political divisions make it extremely difficult to determine whether a given speech attacking the U.S. or the West is really directed at its target, or Iran's internal politics.

Virtually every day, we see new signs that the Iranian government is divided between "hard-liners" and "moderates," and this struggle makes it very difficult to know how moderate Iran's moderates really are. Since 1980, Iran's revolutionary ideology and political rhetoric have been intensely anti-American. No one in Iranian politics can now ignore this fact.

It is scarcely surprising, therefore, that Iran's present rhetoric is divided between initiatives that promise better relations and dialogue and repetitions of past hostility. Moderates must talk like hard-liners to survive, and this helps explain why one day's new moderate initiative may be followed by the next day's hard-line speech.

## **The Impact of President Khatami**

No one in the US, however, can afford to ignore President Khatami's election, and the words of moderation that have followed. Some 91% of Iranians voted on May 23, 1997, a total of 29.7 million votes out of some 32 million eligible voters. This vote contrasts with

only 55% in 1993, when Rafsanjani was the only real candidate. These voters included all citizens of age 15 and over. Nearly half were women, and more than half of population was under 18.

President Khatami received 69% of votes (20.7 million). He won in spite of the fact his main conservative opponent, Nateq Nouri had massive funding, a near monopoly of the media until shortly before election, the tacit support of Khamenei, and the support of the Basi'ij and the force for the Elimination of Vice and Propagation of Virtue. Some 200 members of Majlis had endorsed Nateq Nouri before the election while only 70 had endorsed Khatami. Nevertheless, Nateq Nouri got only 7.2 million (25%) votes, and a hard-line ex-intelligence chief got less than 1 million.

It is true that the Council of Guardians only allowed four out of 238 prospective candidates to run. No foreign policy issues were debated, and all the candidates had to pay at least lip service to "hard-line" and anti-U.S. positions. Yet, it seems clear that Iranian voters did vote against the more extreme conservatives, Islamic extremism, corruption, mismanagement of economy, and interference in their day-to-day lives. They were voting for privacy, and some unquestionably voted for an end to revolutionary adventures and confrontation with Iran's neighbors and the West.

It has become clear in the year that has followed the election that President Khatami does want to make fundamental changes in Iran's foreign relations as well as liberalize its revolution. Khatami has spoken repeatedly about his belief that there should be no clash of cultures and that Islam and other cultures had much to teach each other. Iran has made efforts to improve its relations with the Arab Gulf states and the Arab world, it has begun a dialog with Iraq at the Ministerial level, improved its relations with Turkey, and has taken new steps to improve its relations with the European Union.

Khatami's interview on CNN has already received widespread attention, but his speeches to his neighbors are of equal importance. Perhaps the most important such speech is the one he gave on December 9, 1998, at the meeting of the Organization of Islamic Countries in Tehran. President Mohammad Khatami gave a speech that stated that Islamic civil society and its Western counterpart were "not necessarily in conflict and contradiction in all their manifestations and consequences...This is why we should never be oblivious to judicious acquisition of the positive accomplishments of the Western civil society."

Khatami condemned terrorism, and called for peaceful relations between all Islamic states, including Iran and the Southern Gulf states. He stated that, "Living in peace and security can be realized only when one fully understands not only the culture and thinking but also the concerns as well as the ways and manners of others....In our view, a new order based on pluralism is taking shape in the world that, God willing, will not be the monopoly of any single power...(Islam and the West) are not necessarily in conflict and contradiction in all their manifestations and consequences. This is exactly why we should never be oblivious to judicious acquisition of the positive accomplishments of Western civil society."

Khatami clearly emphasized his emphasis on tolerance and democracy, "In the civil society that we espouse, although centered around the axis of Islamic thinking and culture...personal or group dictatorship or even the tyranny of the majority and the elimination of the minority has no place." He urged all Islamic nations to "strengthen confidence, reduce security concerns and...render ineffective the wrong inculcation by the enemies of Islam."

Khatami has repeatedly criticized the U.S. and its role in the Gulf, but his criticism has not involved extremism or threats of violence. Khatami's words indicate that the U.S. and Iran have a long way to go before they can have friendly relations, but they also indicate that a modus vivendi based on mutual compromise may well be possible:

"Today we do not need to have the United States at our side. We can go ahead without the help of the United States...Those who put coercive pressure on others and resort to force, and world powers that try to make oppressive pressure the basis of their relations with other nations... they cannot expect anything from the Iranian nation ...We have suffered the greatest harm from the unjust policies of America... Before the revolution, as you know, after the revolution, and even today, American politicians behave like the masters of the world. They impose sanctions on any place that does not bow to their interests and want to impose their sanctions by force on the world, not just on us...(The United States feels it can talk to Iran "in whatever form it likes, and do whatever it feels like...It not only puts pressure on Iran, it puts pressure on Europe, Asia, Japan, saying, for example, 'If you want to invest in Iran more than such an amount, we will impose sanctions on you'. It tries to impose its own domestic laws on the world. That is its domineering way. The fruit of our revolution is that we have freed ourselves from the yoke of our masters, and we will never submit to any new one. Today we are building our country ourselves, if we have shortcomings, they belong to U.S. and we can remove them."

### **A Divided Regime and National Security Structure**

At the same time, it is clear that President Khatami faces constant opposition from various hard-liners, and does not yet control Iran's security apparatus. Iran's religious leader, the Ayatollah Ali Khamenei, gave an opening address to the OIC conference in which he stated that, "Western materialistic civilization is directing everyone towards materialism while money, gluttony and carnal desires are made the greatest aspirations. Sincerity, truthfulness, altruism and self-sacrifice have been replaced in many parts of the world by deception, conspiracy, avarice, jealousy and other indecent features....Most nations are deprived of scientific progress while a group have used their science and knowledge as a means to mete out oppression on others...Western liberalism, communism, socialism and all other - 'isms' have gone through their tests and proved their debility. As in the past, so today, Islam is the only remedial, curative and savior angel....The Zionists, the notorious global Zionist media and the agents of arrogance, in particular the Americans—namely those who have sustained the greatest losses due to the (Iranian) revolution—have been and are most active and vocal" in slandering the Islamic republic." <sup>1</sup>

The Ayatollah Ali Hoseini Khamenei, and not Iran's new president, is the formal commander of the armed forces and has ultimate authority over Iran's intelligence and security services. This includes the Supreme Council for National Security, whose members include the President, the speaker of the Majlis, head of the judiciary, Chief of the General Staff, Minister of Foreign Affairs, Minister of Intelligence and Security, Minister of the Interior, and the head of the Plan and Budget Organization. Khamenei and his hard-line supporters seem to dominate bodies like the Special Operations (Coordinating) Committee, which includes the President, Supreme Leader's representative, Chief of the General Staff, Minister of Foreign Affairs, Minister of Intelligence and Security, head of the IRGC, and others and which some experts feel manages Iran's overseas operations and support of extremist groups.

Khamenei has an effective veto over the actions of the other branches of Iran's government, and Iran's government other centers of power, a number of which are still under conservative control. The Majlis remains under the leadership of Khatami's rival, Ali Akbar Nateq Nouri, and about two-thirds of its members seem to be "conservative" in most of their votes. A largely religious Council of Guardians can veto the actions of the President and Majlis, and arbitrate many types of issues. Khatami's predecessor, Ali Akbar Hashemi Rafsanjani, now heads a much strengthened Expediency Council, which is generally more liberal than the Council of Guardians and serves as a rival body of review. The Iranian Revolutionary Guards Council (IRGC) represents conservative military force that is closely linked to the Leader of the Islamic Revolution, and conservative clerics still have de facto control of key popular security forces like the Basij.

Iran's military leadership has changed for the better, but it is still anything but moderate. On September 15, 1997, Khatami called for the depoliticisation of Iran's armed forces, and urged them to stay out of Iran's politics. "The armed forces have to abstain from factional politics and do their utmost to serve ...(the) pillars of the revolution."<sup>2</sup>

Some of Khatami's key national security appointments offer hope of increased moderation. Rear Admiral Ali Shamkani left the navy and became the new Minister of Defense. Shamkani had long been regarded as a close associate of the Ayatollah Ali Hoseini Khamenei, and the Ministry of Defense remained closely tied to the Leader of the Islamic Revolution. At the time, Shamkani had never been regarded as revolutionary fanatic or hard-liner and was viewed as one of the most apolitical and professional of Iran's senior officers. He had been a leader in Iran's military modernization and the development of its military industries—seeking to strengthen its forces and capabilities, rather than engage in military adventures.

Some observers felt it was significant that Khatami did not appoint a direct replacement for Shamkani, who had commanded both the regular navy and the naval branch of the Iranian Revolutionary Guards Corps (IRGC). Instead, Rear Admiral Abbas Mohtaj became commander of the regular navy, and Brigadier General Ali Akbar Ahmadian became commander of the and the naval branch of the Iranian Revolutionary Guards Corps (IRGC). This led to speculation that Khatami had divided the command to prevent

any member of the military from having too much power, although other analysts felt that Khamenei might have intervened to insure the independence of the IRGC.

Khatami fired Ali Fallahiyan from his position as the Minister of the Ministry of Intelligence (information) and Security (MOIS). Fallahiyan had strongly opposed Khatami during the election and had become something of an embarrassment to Iran after the Mykonos trial of Iranian assassins in Germany. Qorban'ail Dorri Najafabadi became the new Minister. Najafabadi is a relatively obscure figure with limited intelligence background. Although Najafabadi had backed Khatami during the election, it seems likely that Khatami would have preferred to appoint a closer associate like Mohammad Musavi Ko'einiha, and that Najafabadi's appointment was a concession to Khamenei and the hard-line clerics. Najafabadi, however, was regarded as part of the more moderate wing of the conservative faction and as less likely to engage in terrorism and aggressive efforts to export the revolution than his predecessor, Ali Fallahiyan.

Khatami may be altering the course of Iran's nuclear efforts and proliferation. He has replaced Reza Amrollahi, the head of the Atomic Energy Organization of Iran, with Gholamreza Aghazadeh, Iran's former oil minister. The reasons for this appointment are not clear. Some sources argued that it represented an effort to improve the administration of Iran's nuclear programs (Amrollahi had developed a reputation as an awful administrator and manager). Some feel it might be part of an effort to make Iran's nuclear power program more efficient, while others saw it as part of an effort to review whether such a program was cost-effective at all. A few feel it may represent a down-playing of Iran's nuclear weapons program.

There is no way to predict Iran's future intentions regarding nuclear weapons. Aghazadeh did, however, reaffirm Iran's commitment to a massive nuclear power program on October 3, 1997. At a meeting with Hans Blix, the head of the International Atomic Energy Agency (IAEA), Aghazadeh indicated that Iran planned to add a second 1,000 megawatt generating unit to its existing efforts to build a 1,000 megawatt unit in Bushehr, and eventually produce 20% of Iran's electric power needs from nuclear units. He indicated that Iran had approached Russia to buy two more 440 megawatt reactors and was seeking an eventual total of six, and that it was still seeking two 300 megawatt nuclear reactors from China. <sup>3</sup>

One change is particularly important. On September 9, 1997, Khamenei replaced Major General Mohsen Rezaei (Rezai) the head of the Iranian Revolutionary Guards (IRGC), with his former deputy, Major General Yahya Rahim Safavi. Rezaei was then the longest-serving senior military official in Iran, and had been commander for 16 years. Rezaei had previously threatened to turn the Gulf into a "slaughterhouse" if the U.S. attacked Iran in June 1997. He had supported Nateq-Nouri and had openly criticized Khatami during the election campaign. He had had called for a Syrian-Iranian alliance against Israel and the West just days before the change in command—a sharp contrast with Khatami's continuing calls for dialogue. <sup>4</sup>

This change in command was greeted in Iran as a sign of moderation, and even led to rumors that Rezaei's family had fled Iran and/or that Rezaei was being set aside for his failure to get the IRGC and Basij to support Nateq-Nouri in the election.<sup>5</sup> Rezaei, however, made a point of declaring in an interview on September 12, that while the Revolutionary Guards needed a strong ideological motivation, they "had to maintain a neutral stance in matters related to the existing factions in the country."<sup>6</sup> At the same time, Khamenei made Rezaei the deputy head of the Expediency Council, potentially one of the most powerful political bodies in Iran, Rezaei's appointment also gave Khamenei a potential hard-line balance to ex-President Rafsanjani, the more "moderate" head of the Council.<sup>7</sup>

## Recent Military Rhetoric and Exercises

Even nations with united regimes rarely make rapid massive changes in their military force posture, exercise activities, defense spending, arms imports, or military activities. Long lead-times are involved in making such changes and high costs. Furthermore, Iran has already made major cuts in its military expenditures and arms imports and it is unlikely it will make massive additional cuts in the future. It is hardly surprising, therefore, that no dramatic changes have taken place in Iran's military behavior since Khatami's election that provide a clear indication of its future intentions, or the extent to which it is and is not "moderating."

Iran's military rhetoric is often less hard-line and provocative, but it has not changed its goals and principles. Iran has not changed its attitude towards the U.S. presence in the Gulf. On September 22, 1997, the 17th anniversary of the beginning of the Iran-Iraq War, Khatami gave a speech calling for strong Iranian forces that virtually echoed the kind that Rafsanjani had given during the years he was president. He referred to foreign navies in the Gulf (U.S. and British) as a major threat, and singled out US-Israeli-Turkish joint naval exercises in the Mediterranean as a threat to Iran.<sup>8</sup>

At the conference of the Organization of Islamic Countries, President Khatami stated that there should be a pact to enable Gulf nations to defend themselves without relying on "foreign forces." "Iran...considers the conclusion of collective defense-security arrangements in the Persian Gulf an assured step towards the establishment of lasting security in the region...In the sensitive and strategic region of the Persian Gulf, the regional states themselves should undertake to preserve security and peace...The presence of foreign forces and armada...serves not only as a source of tension and insecurity but also of tragic environmental consequences."

The Ayatollah Khamenei has used harsher language, "Right now, the presence of foreign warships and more importantly the U.S. military muscle flexing in the Persian Gulf, which is an Islamic sea and an important source of energy for the entire world, is faced with insecurity. Khamenei referred to the "poisonous breath" of the US, and called on the OIC to "force the aliens to dispense with this intervention and on the other hand eliminate the pretexts for this improper presence."<sup>9</sup>

Although Secretary of Defense William Cohen made a point of stating that the sudden deployment the carrier *Nimitz* to the Gulf in late September, 1997, was a reaction to Iraqi flights in the "no fly zone," and that the "deployment order only cited Iraq and did not mention Iran," Iran reacted with a new flood of rhetoric. <sup>10</sup> Key Iranian military officers like Rear Admiral Abbas Mohtaj, the new commander of Iran's navy, issued statements like, <sup>11</sup>

"The aim of the U.S. presence in the Gulf is to create a crisis and to sell billions and billions of dollars worth of weapons to the Arab countries in the region...The presence of foreign countries, including the USA, in the Gulf is illegitimate and contrary to the security of the region."

Defense Minister Shamkani has also picked up familiar themes. He has stated that that the U.S. is seeking to pursue a strategy of "distinctive control" in dealing with the Gulf states, and defending Iran's right to attack People's Mujahideen bases in Iraq even if this meant flying through the UN no fly zones. <sup>12</sup> Admiral Mohammed Razi Hadayeq, the commander of Iran's missile forces has stated that Iran was the region's "strongest missile power." <sup>13</sup>

Iran has not reduced its shipments to the Hezbollah. Mohammed Sadr, Iran's new Deputy Foreign Minister, visited Damascus on September 9, 1997 to discuss the security situation in Lebanon and pledge continued military aid to the Hezbollah. Iran supplied the Hezbollah with new, longer-range rockets, although these seem to have been shipped before the election. <sup>14</sup>

Iran continues to seek new technology and supplies to produce chemical and nuclear weapons, long-range missiles, and advanced conventional weapons. Iran has continued its intelligence surveillance of U.S. facilities in Saudi Arabia. <sup>15</sup> It bombed the bases of the People's Mujahideen, a violent opposition group based in Iraq, on September 29, 1997. <sup>16</sup>

Iran held massive military exercises in September 1997 to commemorate the start of the Iran-Iraq War. Khamenei attended the final week of the exercises, which Iran claimed involved 200,000 men, air units, and several heavy divisions operating in an 1,800 square kilometer area north of Qom. As usual, the exercises were rationalized as defensive, but taught just as many lessons in offensive warfare. <sup>17</sup>

Iraq held naval war games in mid-October, which it claimed involved 100 ships operating over a 15,000 square mile area. These exercises began almost at the same time the *Nimitz* entered the Gulf. Iran issued claims that it had sent a new, small "stealth" remotely piloted reconnaissance system to spy on the U.S. task force. Somewhat ironically, it then accused a U.S. destroyer and reconnaissance plane of spying on its maneuvers. The U.S. destroyer it named, the *USS Kinkaid*, was sitting in port in Bahrain at the time Iran claimed it was doing the spying. <sup>18</sup>

At the same time, President Khatami denied Iran had any expansionist ambitions during his April 18, 1998 speech on Armed Forces Day. "Our army is strong and sovereign; our

armed forces are strong and powerful, but neither our revolution nor our nation or armed forces are expansionist....We want a sovereign country and nation that seeks independence and honor and could act as a model for all the nations and countries of the region....And we are prepared to defend—with all our being—our revolution, country, homeland and nation against the malice of ill-wishers and the plots of conspirators...Today, the most spiritually powerful armed forces are the Iranian armed forces....All the martyrs and the war-disabled are signs of the invincibility of our nation and the enemy's disappointment with aggression against this country."

The main focus of the parade was to remember the casualties of Iran's war with Iraq, which Iran referred to as "the imposed war" and "the sacred defense." It was also to celebrate the recent repatriation of Iran's POWs under the supervision of the International Committee of the Red Cross. The exchange included 5,584 Iraqis and 316 Iranians, most of which had been held captive for more than 15 years. Some of the freed Iranian POWs watched the parade and were honored by Khatami who hung laurels about their necks. The equipment used in the parade included a flypast of MiG-27 and Sukhoi 24 fighters, but it also included twenty-five year old F-4 Phantom fighters. It also included British Chieftain and Scorpion tanks and U.S. Hawk surface-to-air missiles which were acquired before the 1979 Islamic revolution that toppled the pro-Western shah and. If there was any ominous element it was the march of nuclear, biological and chemical warfare decontamination units, but these were displayed to recall the deaths of many Iranians from Iraqi chemical weapons and no reference was made to any present Iranian capability.

Iran held more exercises following Armed Forces Day. They involved some 15,000 naval and air force personnel and all three of Iran's Russian-built Kilo-class diesel submarines. They produced the usual rhetoric about Iran's strength, and served as a tangible demonstration of the threat it could post to shipping through the Strait of Hormuz and the Gulf. At the same time, the rhetoric was less strident and the exercises did not involve any offensive operations. Like all previous Iranian exercises, not attempt was made to practice extensive amphibious operations involving significant movements of armor or over-the-beach operations.

If there is any irony in Iran's military rhetoric, it lies in the fact that Iran's Majlis has continued to indulge in the same kind of hostile posturing as the U.S. Congress. On January 25, 1998, it approved a fund for countering U.S. "plots" against the Islamic republic for the third consecutive year. Deputies voted to allocate half of the fund to the Intelligence (internal security) Ministry and to give President Mohammad Khatami control over the rest of the budget which is to be used to "uncover and neutralize the American government's plots and interference in Islamic Iran's internal affairs." The amount set aside for the fund was not announced, but a parliamentary debate broadcast on the radio indicated it would be about the same as the current year's 25 billion Rials (\$14.3 million).

One deputy claimed that 10 billion Rials had already been used to set up Iran's satellite television channel which was launched last month and covers Europe and parts of Asia

and the Middle East. "If today our dear president talks to the American people for one hour on CNN, with this budget we can launch a network through which we could address the Americans every day and bring them the message of the Islamic revolution and tell them about our just stands." The debate also indicated that some of the money would be used to bring suits against Washington at international bodies and to fight a "U.S. cultural invasion" and that some of the money would also go to the Islamic Propagation Organization, a state-affiliated body which sends Shi'ite Moslem clerics to other countries.

Iranian Foreign Minister Kamal Kharrazi followed up with a speech on April 22, 1998 that condemned the U.S. plan to beam radio broadcasts to Iran by stating that, "A wall of mistrust still stands between Tehran and Washington... America's policies prove that, as in the past, one cannot trust what American officials say." He stated that the U.S. plans to set up a Persian-language radio aimed to wage a "psychological war" against Iran and constituted United States interference in the internal affairs of the country. A war of words, however, is not a war of weapons. Furthermore, the Majlis only began this effort after U.S. media reports that the U.S. Congress had been set up a similar fund for covert action against Tehran.

## **Recent Increases in Military Expenditures**

Actions are generally more important than words, and money is the key to action. By this standard, there has been no sign of a major Iranian military build-up since the end of the Gulf War. U.S. government estimates indicate that Iran's military expenditures peaked in 1986, at a cost of \$14.8 billion when measured in constant 1995 dollars. They dropped from \$10.9 billion to \$8.9 billion immediately after the cease-fire in the Iran-Iraq War, and then dropped from \$8.6 billion to \$5.4 billion after the UN Coalition destroyed much of Iraq's military capability in the Gulf War. They then dropped to \$4.2 billion in 1995, the most recent year for which ACDA has released unclassified figures. <sup>19</sup>

To put such spending levels in context, ACDA estimates that Egypt's total spending during 1990-1995 averaged around \$1.7 to \$2.7 billion. Iraq's expenditures averaged around \$10 billion during 1988-1991, but no firm recent figures are available. Kuwait's spending reached peaks of \$15 billion a year during 1990-1992, but dropped to \$3.2 to 3.6 billion from 1993-1995. Turkey has recently spent between \$6 billion and \$7 billion. The UAE spends around \$1.8 to 2.2 billion annually, and Saudi Arabia spends \$17.2 to \$20 billion. <sup>20</sup>

Unfortunately, the data the Iranian government reports on military spending have little reliability, and there is no way to draw a meaningful correlation between Iranian and U.S. estimates. For example, Iran reported total military expenditures of only \$1.8 billion in 1992 and \$1.2 billion in 1993, while it estimated its GNP at \$71 billion for 1992. Such estimates are far too low to reflect the true cost of military forces as large as those of Iran, and what is known about the size of Iranian arms imports. <sup>21</sup>

Iran spending claims may, however, be valuable as an indication of the trends in spending. Rafsanjani's military spending request for the 1996-1997 budget totaled 5.9 billion Rials (roughly \$3.9 billion in January, 1996 \$US). This request seems to have been funded. To the extent it was a real increase in spending, rather than a reflection of the impact of inflation, it marked a significant increase over Iran's 1994-1995 budget (\$2.3 billion) and a 31% increase over its 1995-1996 budget request (\$2.46 billion). Further, Rafsanjani made his request in the context of a civil budget that called for new sacrifices for Iran's future, speeches which condemned American "aggressiveness" in the Gulf, and estimates of oil revenues that only totaled 51.5% of Iran's revenues—the lowest percentage in recent history.

Rafsanjani proposed another increase in military spending for 1997-1998. In a speech to the Majlis on November 24, 1996, Rafsanjani noted that Iran had received a major increase in export revenues due to high oil prices, and could afford to increase its budget and still keep it balanced. He called for a 35% increase in the total budget over the previous year's budget and for a 44% increase in the defense budget. However, it is again impossible to distinguish how much of the increase was intended to pay for inflation and how much was an increase in constant Rials, and whether the increase reflected any shift in the government's overall policy or simply the fact Iran was receiving higher oil revenues. <sup>22</sup>

The level of confusion involved is indicated by the fact President Mohammad Khatami said the total defense allocations he was seeking for 1998-1999 amounted to 10.1 trillion Rials when he presented the draft national budget in November, 1997. This would have been a 22 percent rise in Rials over the current year's total military budget, and it was not clear if additional sums were set aside for defense purposes in other parts of the budget. On January 18, 1998, however, the Majlis allocated 2.89 trillion Rials to the Ministry of Defense in the budget for the 1998-1999 budget year. These expenditures could scarcely Iran's total military budget. The dollar value of such allocation could range from \$1.65 billion, if calculated at the official exchange rate used for essential state accounts, to \$963 million at Iran's other official rate which the government has increasingly been using. <sup>23</sup>

In practice, Iran's future oil revenues and its success in economic reform may be much more important in determining the actual shape of its military capabilities than its military plans and strategy. If oil prices are high, and exports remain high, Iran may spend more. If prices and revenues drop, it may cut its spending.

## **Low Levels of Arms Imports**

Iran took two major sets of decisions that sharply limited the size of its arms imports long before Khatami came to office. The first occurred in 1989, when Iran did not react to its massive defeats and equipment losses in the Iran-Iraq War by making massive new imports of arms. The second occurred in 1991, when Iraq reacted to the UN destruction of much of Iraq's military capability by making further major cuts in its arms imports. It is impossible to tell how much of these cuts were the result of a strategic decision not to

try to build-up massive forces, how much was forced on Iran by its economic problems, and how much was the result of U.S. pressure on supplier countries not to sell.

U.S. government reporting indicates, however, that Iran took delivery on \$10.2 billion worth of arms during the four year period between 1987-1990—the time between the final years of the Iran-Iraq War and the Gulf War. These imports were generally of low quality. Iran did not receive any significant military imports from the U.S. and only received \$500 million from its major Western European suppliers. In contrast, Iran received \$1.1 billion in deliveries from Russia, \$2.5 billion from China, \$1.9 billion from other European states (mostly Eastern Europe), and \$1.8 billion from other countries (mostly North Korea). Virtually all of these deliveries were the product of agreements that had been signed during the first four years of the Iran-Iraq War.

The volume of arms deliveries to Iran dropped sharply during the four year period from 1991-1994, and Iran took delivery on only \$3.9 billion worth of arms.<sup>24</sup> Despite some reports of a massive Iranian military build-up during the 1990s, the total volume of arms deliveries during 1991-1994 was only worth one quarter of the values of the deliveries that received during the previous four years, even measured in current dollars. Iran still could not obtain any military imports from the U.S. and only received \$100 million worth from Western Europe.

Iran only received \$2.3 billion worth of arms imports during 1993-1996, a period that reflects deliveries of orders placed after the Gulf War. These deliveries included \$1,100 million from Russia, \$800 million from China, \$100 million from other European states (mostly Eastern Europe), and \$200 million from other countries (mostly North Korea). Iran received no deliveries from the U.S. and \$100 million worth from Western Europe. This meant it had had no major replacements or modernization of most of its western supplied weapons for nearly two decades. Even in current dollars, Iran's deliveries were worth only about one-ninth of the value of the arms it had imported during similar period in the Iran-Iraq War. They were only worth about one-fifth of Iran's imports during the four year period before the Gulf War.<sup>25</sup>

It is new arms agreements, however, which shape future capabilities, and Iran made much sharper cuts in its new agreements than it did in deliveries:

- *Iran signed new agreements worth \$10.2 billion during the four year period between 1987-1990—the time between the final years of the Iran-Iraq War and the Gulf War. It signed \$2.5 billion worth of agreements with Russia, \$3.4 billion with China, \$200 million with Western Europe, \$2.1 billion with other European states (mostly Eastern Europe), and \$2.1 billion with other countries (mostly North Korea). Once again, it is clear that Iran began to concentrate its limited resources on higher quality arms following the end of the Iran-Iraq War, and cut back on the purchases of large amounts of towed artillery, munitions, and low quality weapons it had needed for a war of attrition with Iraq.*
- *Iran's new arms agreements again dropped sharply during the four year period following the Gulf War, and totaled only \$4.8 billion during 1991-1994. Despite*

some reports of a massive Iranian military build-ups —new agreements during 1991-1994 totaled only a quarter of the value of the agreements that Iran had signed during the previous four years. It signed \$1.2 billion in new agreements with Russia, but only \$400 million with China, \$100 million from other European states (mostly Eastern Europe), and \$900 million from other countries (mostly North Korea) It got now new orders from the U.S. and only \$100 million from Western Europe.

- *Iran signed only \$1.3 billion worth of new arms agreements during 1993-1996—a period heavily influenced by an economic crisis inside Iran, low oil revenues, and problems in repaying foreign debt.* Iran ordered \$200 million from Russia, \$300 million from China, \$100 million with other European states (mostly Eastern Europe), and \$600 million from other countries (mostly North Korea). The drop in agreements with Russia reflected both Iran's financial problems and the result of U.S. pressure that had led President Yeltsin not to make major new arms sales to Russia. Iran's new agreements with China and North Korea heavily emphasized missiles and missile production technology.

Iran's level of new orders has been low that it is virtually certain to rise in the future, probably to levels of at least \$1 billion a year. Iran has underinvested in its overall force structure for so long that it must either sharply increase its level of spending or make major cuts in the size and quality of its forces. It is also reaching the point where some of its Western-supplied equipment is so old that it much be replaced.

## **New Arms for Old: Focused Poverty**

Given these spending levels, it is not surprising that Iran has made carefully focused efforts to improve its land warfare capabilities against Iraq, develop a carefully focused capability to threaten shipping in the Gulf. This capability includes the purchase of three Russian submarines with minelaying capabilities, advanced naval mines, deployment of a wide range of anti-ship missiles on small craft and in land bases near the main shipping channels through the Gulf, and the creation of a large force of Revolutionary Guards equipped for anti-ship and amphibious warfare. Iran has also focused its resources on obtaining long-range missiles and weapons of mass destruction, and ability to fight unconventional warfare.

This kind of "focused poverty" allows Iran to get the maximum of amount of regional influence and intimidation per Rial, although it has scarcely given Iran much war fighting capability against any regional Coalition that involves the US. The key arms imports and production plans that shape this pattern of "focused poverty" include:

### **LAND**

- Russian, and Polish T-72 Exports. Reports indicate Iran has procured about 120 T-72Ss from Russia, and 100 T-72M1s from Poland since 1990. Inventory of about 220 T-72s of various types in mid-1996.
- Claims to be producing the Iranian-made Zolfaqar MBT, an M-48/M-60-like tank.

- Has upgraded to T-54/T-54 called "Safir-74. Claims to have upgraded Iraqi T-54s captured in Iran-Iraq War.
- Purchased Russian BMPs. Inventory of 300 BMP-1s and 100 BMP-2s in mid-1996.
- Claims ready to produce light tank for "unconventional warfare" called the Towan (Wild Horse or Fury) with 90 mm gun.
- Developed Iranian-made modification of the Chinese Type WZ 501/503 armored infantry fighting vehicle which Iran calls the Boragh. The WZ 501/503 is itself a Chinese copy of the Russian BMP, and is 30 year old technology.
- Displayed APC called the Cobra or BMT--2, which seems to be an indigenous design armed with a 30 mm gun or the ZU-23-2 anti-aircraft gun—a light automatic weapons system that Iran has been manufacturing for some years. Like the Zulfiqar, the Cobra has been undergoing field trials in Iranian military exercises since May, 1996.
- Iran now makes a number of anti-tank weapons. These include an improved version of the manportable RPG-7 anti-tank rocket with an 80 mm tandem HEAT warhead instead of the standard 30 mm design, the NAFEZ anti-tank rocket, and a copy of the Soviet SPG-9 73 mm recoilless anti-tank gun. Iran also makes a copy of the Russian AT-3 9M14M (Sagger or Ra'ad) anti-tank guided missile.
- Possible purchase of 100 M-46 and 300 D-30 artillery weapons from Russia.
- Claimed in May 1996, to have produced a self-propelled version of a Russian 122 mm gun that it called the Thunder-1, with a firing range of 15,200 meters and a road speed of 65 kilometers per hour. It may use the Boragh chassis for this weapon. It also claimed to have tested a "rapid fire" 155 mm self-propelled weapon in September, 1997, called the Thunder 2
- Has shown a modified heavy equipment transporter called the "Babr 400."
- Russian and Asian AT-2s, AT-3s, and AT-4s. Do not seem to include 100 Chinese Red Arrows.
- Chinese and 15+ North Korean 146 mm self-propelled weapons
- Has 60 Russian 2S1 122 mm self-propelled howitzers in inventory.
- Growing numbers of BM-24 240 mm, BM-21 122 mm and Chinese Type 63 107 mm MRLs
- Iranian Hadid 122 mm - 40 round MRL
- Manufacturing Iranian Arash and Noor rockets (variants of Chinese and Russian 122 mm rockets)
- Manufacturing Iranian Haseb rockets (variants of Chinese 107 mm rocket)
- Manufacturing Iranian Shahin 1 and 2, Oghab, Nazeat 5 and 10 (may be additional versions), and Fajr battlefield rockets.
- Can produce nearly 50 types of munitions, including tank rounds, artillery shells, and rockets. Probably meets between 50% and 75% of Iran's needs in a major regional contingency and their output is steadily building up Iran's reserves.
- Manufacturers most of Iran's assault rifles, mortars up through 120 mm in caliber, and anti-tank rocket launchers
- Makes military radios and low-technology RPVs like the 22006, Baz, and Shahin.

## **AIR/AIR DEFENSE**

- Keeping up to 115 combat aircraft that Iraq sent to Iran during Gulf War. Seem to include 24 Su-4s and four MiG-29s.
- Iran claims to have fitted F-14s with I-Hawk missiles adapted to the air-to-air role
- Iran has upgraded some of its F-4s, F-14s, and C-130s
- Has 30 MiG-29s with refueling in inventory, may be receiving 15-20 more from Russia
- Has 30 Su-24s in inventory (probably Su-24D version), may be receiving 6 to 9 more from Russia
- May be negotiating purchase of AS-10, AS-11, AS-12, AS-14/16s from Russia
- Has Su-25s (formerly Iraqi), although has not deployed.
- May be trying to purchase more Su-25s, as well as MiG-31s, Su-27s and Tu-22Ms
- Considering imports of Chinese F-8 fighter and Jian Hong bomber
- Has 25 Chinese F-7M fighters with PL-2, PL2A, and PL-7 AAMs.
- Reported the test of an Iranian-built fighter called the Azarakhsh (Lightning) similar to the F-4 in September, 1997, and the development of another indigenous fighter design called the Owj (Zenith).
- Has purchased 25 Brazilian Tucano trainers and 25 Pakistani MiG-17 trainers. Uncertain report has bought 12 MiG-29UB trainers from Russia.
- Defense Industries Organization claimed that Iran was soon going to start producing two trainers, a jet-powered Dorna (Lark) and propeller-driven Partsu (Swallow). There had been reports in 1996 that Iran had obtained Ukrainian aid in producing the Antonov An-140 at a factory in Isfahan. In September, 1997, Iran indicated that it had signed a contract to buy 10 Antonov An-74 transport jets, and reports surfaced that it might coproduce the An-T74T-200.
- Has bought 12 Italian AB-212, 20 German BK-117A-3, and 12 Russian Mi-17 support and utility helicopters.
- Claims to have built its first Iranian-designed helicopter, and to have tested a locally-built fighter plane. Brigadier General Arasteh, a deputy head of the General Staff of the Armed Forces (serving under Major General Ali Shahbazi, the joint chief of staff) stated in April, 1997 that the "production line of this aircraft will begin work in the near future."
- Claims to produce advanced electronic warfare systems.
- IRGC claims to be ready to mass produce gliders.
- Necessary technical sophistication to rebuild the jet engines for many of its American fighters and helicopters.
- Produce parts and modifications for some of its radars, missile systems, avionics, ships, and armored personnel carriers

## **LAND-BASED AIR DEFENSE**

- May be negotiating purchase of SA-10, SA-12, SA-14/16s from Russia
- Reports has acquired four HQ-23/2B (CSA-1) launchers and 45-48 missiles, plus 25 SA-6, and 10-15 SA-5 launchers.
- Has acquired Chinese FM-80 launchers and a few RBS-70s

- President Rafsanjani announced on October 11, 1997, that Iran had test-launched a major new surface-to-air missile system with a range of 250 kilometers, although he gave no further details. The description of the missile sounded vaguely like the Russian SA-5, which is deployed in Iran. Reports Iran has acquired four HQ-23/2B (CSA-1) launchers and 45-48 missiles, plus 25 SA-6, and 10-15 SA-5 launchers.
- More SA-7s and HN-5s man-portable missiles; may have acquired 100-200 Strelas.
- Reports is seeking to modernize Rapier and 10-15 Tigercat fire units
- May be modifying and/or producing ZSU-23-4 radar-guided anti-aircraft guns.
- Claims to produce advanced electronic warfare systems.
- May be modifying and/or producing ZSU-23-4 radar-guided anti-aircraft guns.

## **SEA**

- Claims will soon start producing 6 multi-purpose destroyers.
- Has taken delivery on three Russian Type 877EKM Kilo-class submarines, possibly with 1,000 modern magnetic, acoustic, and pressure sensitive mines.
- Reports has North Korean midget submarines have never been confirmed
- Has obtained 10 Hudong-class Chinese missile patrol boats.
- U.S. Mark 65 and Russian AND 500, AMAG-1, KRAB anti-ship mines
- Reports that Iran is negotiating to buy Chinese EM-52 rocket-propelled mine
- Iran claims to be developing non-magnetic, acoustic, free-floating and remote controlled mines. It may have also acquired non-magnetic mines, influence mines and mines with sophisticated timing devices.
- Wake-homing and wire-guided Russian torpedoes
- Seersucker (HY-2) sites with 50-60 missiles - Iran working to extend range to 400 km.
- Has 60-100 Chinese CS-801(Ying Jai-1 SY-2) and CS-802 (YF-6) SSMs.
- Iran is developing FL-10 anti-ship cruise missile which is copy of Chinese FL-2 or FL-7.
- Boghammer fast interceptor craft

## **MISSILES**

- Obtained up to 250-300 Scud Bs with 8-15 launchers
- Reports that China is giving Iran technology to produce long-range solid fuel missile
- Has bought North Korean Scud Cs with 5-14 launchers
- May be developing the Zelzal-3 missile with a range of 900 kilometers with Chinese and North Korean support.
- Claims that Russia is helping Iran develop four missiles. These missiles include:
- Shihab 3—a liquid fueled missile with a range of 810 miles (1,200-1,500 kilometers) and a payload of 1550 pounds. Israel claims the Shihab might be ready for deployment as early as 1999
- Shihab 4, with a range of 1,250 miles and a payload in excess of one ton.

- Other two missiles are longer-range systems with a maximum ranges of 4,500 and 10,000 kilometers.
- Claims will launch its first experimental satellite by 2000 with Russian aid.
- Reports of tunnels for hardened deployment of Scuds and SAMs.
- Experimenting with cruise missile development, although no links as yet to the employment of such missiles with warheads using weapons of mass destruction.
- South Korea reports Iran has bought total of 100 Scud Bs and 100 Scud Cs from North Korea.
- May be developing the Zelzal-3 missile with a range of 900 kilometers with Chinese and North Korean support.
- Iran may be planning to purchase North Korean No-Dong 1/2s
- Iran also interested in North Korea's developmental Tapeo Dong 1 or Tapeo Dong 2.
- Claims will launch its first experimental satellite by 2000 with Russian aid.
- Reports of tunnels for hardened deployment of Scuds and SAMs.
- Iranian made IRAN 130 rocket with 150+ kilometers range.
- Iranian Oghab (Eagle) rocket with 40+ kilometer range.
- New SSM with 125 mile range may be in production, but could be modified FROG.

## **CBW**

- Chemical weapons (sulfur mustard gas, hydrogen cyanide, phosgene and/or chlorine; possibly Sarin and Tabun)
- Biological weapons ( possibly Anthrax, hoof and mouth disease, and other biotoxins)
- Nuclear weapons development (Russian and Chinese technology imports)

This list of Iran's imports and production efforts, however, includes few items of modern equipment. Most of the "production" efforts listed are limited to prototypes or low rate production. Iran doesn't have anything like the naval strength necessary to close the Gulf for more than a very limited period, and its efforts to acquire weapons of mass destruction do not approach those of Iraq before the Gulf War. Iran's proliferation is "creeping" where Iraq's was galloping.

Iran's efforts also have major strategic limitations. It has enough naval capability along the Gulf coast, in the Strait of Hormuz, and deployable in the Gulf of Oman to harass shipping and require a major U.S. response if Iran should take offensive action. At the same time, Iran is steadily more dependent on oil revenues and has no way to export any significant volume of oil except through the Gulf. It cannot defend any of its oil facilities against U.S. missile and stealth attacks, and its naval and anti-ship missile forces cannot survive for more than a few days to two weeks in the face of U.S. military action. Iran's mine warfare capabilities pose more of a threat in terms of long-term harassment, but they cannot block the Gulf, and Iran lacks modern land-based air defenses, has very limited modern fighter strength, has only about 30 modern attack aircraft (the Su-24), and

has no modern airborne sensors and command and control assets. Its military forces and bases are open to U.S. retaliation.

No one can ignore the threat of unconventional warfare and terrorism, and the kind of threat posed by the attack on the Al Khobar Towers. At the same time, no other Gulf country will tolerate any Iranian support for such activity that it can detect and prevent, and Iran cannot move openly across the Gulf without having its forces destroyed by the US. Equally significant, Iran’s amphibious activities at best lend themselves to small raids. There have been no exercises involving the large scale movement of heavy equipment and weapons, and Iran has only token "over-the-beach" capability.

Iran’s land forces are a "dog’s breakfast" of difference equipment types with poor interoperability, and little sustainability except in defense maneuvers. Iran has no land bridge to attack any Gulf state other than Iraq, and its heavy armor is largely obsolete. Its strongest branch, artillery, relies largely on towed weapons and relatively crude massed-fire tactics; it has little mobility and offensive maneuver capabilities. Neither outside observers or observers inside Iran are particularly impressed with the quality of training, and there is a broad consensus that Iran lacks effective combined arms and joint warfare capabilities.

## Unplanned and Growing Obsolescence

Iran’s carefully focused arms imports and production efforts also cannot compensate for the fact that much of Iran military inventory is worn and obsolete. The bulk of Iran’s main weapons inventory either consists of low grade Asian-supplied weapons or U.S. and British weapons imported while the Shah was still in power, and which have not been properly modernized in two decades. The following list of obsolete or obsolescent Western weapons is as important in shaping Iran’s military capabilities as the previous list of imports and production efforts:

Table Two Key Aspects of Iraqi Proliferation that Still Are Unaccounted For			
Military Service	Weapon		Comments
	Type	Number	
<i>Land Forces</i>			
	Chieftain tank	240-260	Worn, under-armored, underarmed, and underpowered. Fire control and sighting system now obsolete. Cooling problems.
	M-47/M-48	150-260	Worn, under-armored, underarmed, and underpowered. Fire control and sighting system now

			obsolete.
	M-60A1	150-160	Worn, under-armored, underarmed, and underpowered. Fire control and sighting system now obsolete.
	Scorpion AFV	70-80	Worn, light armor, underarmed, and underpowered.
	M-114s	70-80	Worn, light armor, and underarmed, and underpowered
	M-109 155 mm SP	150-160	Worn, Fire control system now obsolete. Growing reliability problems due to lack of updates and parts.
	M-107 175 mm SP	20-30	Worn, Fire control system now obsolete. Growing reliability problems due to lack of parts.
	M-110 203 mm SP	25-35	Worn, Fire control system now obsolete. Growing reliability problems due to lack of parts.
	AH-1J Attack heli.	100	Worn, avionics and weapons suite now obsolete. Growing reliability problems due to lack of updates and parts.
	CH-47 Trans. heli.	35-45	Worn, avionics now obsolete. Growing reliability problems due to lack of updates and parts.
	Bell, Hughes, Boeing, Agusta, Sikorsky helicopters	350-445	Worn, Growing reliability problems due to lack of updates and parts.
<i>Air Force</i>			
	F-4D/E FGA	55-60	Worn, avionics now obsolete. Critical problems due to lack of updates and parts.
	60 F-5E/FII FGA	60	Worn, avionics now obsolete. Serious problems due to lack of updates and parts.
	F-5A/B	10	Worn, avionics now obsolete. Serious problems due to lack of updates and parts.

	RF-4E	8	Worn, avionics now obsolete. Serious problems due to lack of updates and parts.
	RF-5E	5-10	Worn, avionics now obsolete. Serious problems due to lack of updates and parts. (May be in storage)
	F-14 AXX	60	Worn, avionics now obsolete. Critical problems due to lack of updates and parts. Cannot operate some radars at long ranges. Phoenix missile capability cannot be used.
	P-3F MPA	5	Worn, avionics and sensors now obsolete. Many sensors and weapons cannot be used. Critical problems due to lack of updates and parts.
	Key PGMs	-	Remaining Mavericks, Aim-7s, Aim-9s, Aim-54s are all long past rated shelf life. Many or most are unreliable or inoperable.
<i>Navy</i>	I-Hawk SAM	150-175	Worn, electronics, software, and some aspects of sensors now obsolete. Critical problems due to lack of updates and parts.
	Rapier SAM	30	Worn, electronics, software, and some aspects of sensors now obsolete. Critical problems due to lack of updates and parts.
	Babr DE	1	Worn, weapons and electronics suite obsolete, many systems inoperable or partly dysfunctional due to Critical problems due to lack of updates and parts.
	Samavand DDG	5	Worn, weapons and electronics suite obsolete, many systems inoperable or partly dysfunctional due to Critical problems due to lack of updates and parts.
	Alvand FFG	3	Worn, weapons and electronics suite obsolete, many systems inoperable or

			partly dysfunctional due to Critical problems due to lack of updates and parts.
	Bayandor FF	2	Obsolete. Critical problems due to lack of updates and parts.
	Hengeman LST	4	Worn. needs full scale refit.

It would take years and tens of billions of dollars to fully modernize Iran's forces. It also would take relatively free access to the most modern Western-supplied or Russian weapons, and Iran would have to rebuild its stockpiles of munitions, modernize its sensors and command and control systems, and provide suitable training, infrastructure, sustainability and maintenance.

## **Terrorism and Unconventional Warfare**

The latest U.S. government report on Global Terrorism does not really cover the period since President Khatami has taken office, and Iran has repeatedly denied that it is involved in terrorism. Both President Khatami and Foreign Minister Kamal Kharrazi have made numerous statements to this effect, and Iranian Foreign Ministry spokesman Mahmoud Mohammadi repeated the theme on April 20, 1998: "Despite the developments in the international community, the U.S. looks at Iran with a mentality belonging to the Cold War era...Iran is against extortion, violence and terrorism in international relations." Mohammadi then went on to accuse the United States of adopting double standards in the Middle East and said Washington should react instead to "Israeli-sponsored state terrorism."

Iran claims it only gives humanitarian aid to Hizbollah, which it sees as defending legitimate Lebanese rights against Israeli occupation of a strip in south Lebanon. While it condemns the Palestinian-Israeli peace accords as a sell-out, it denies aiding Moslem fundamentalist groups opposed to it.

It seems fairly clear that some of these statements are ingenuous. Iran does continue to arm the Hezbollah and has ties to the Palestinian Islamic Jihad and lesser ties to Hamas. Elements of the Islamic Revolutionary Guards Corps continue to train extremists in Lebanon, Iran, and possibly other countries. It is possible that Iran sees its actions in Lebanon as supporting fellow Shi'ites in a defensive operation against an Israeli occupation, and that much of the support for terrorist movements comes from Iranian hard-liners without the support of "moderates." It is possible, but there is still no evidence to prove it. Iran is also clearly allied with Syria in many of these activities. This is an Iranian activity that comes into a clear conflict with vital U.S. strategic interests.

The U.S. needs to be far more careful, however, in some of its other criticisms of Iranian "terrorism." It is far from clear that Iran has ever played a significant role in the Islamic

extremism in Algeria and Egypt or has recently played a high profile role in the Sudan. Iran certainly has threatened Gulf states like Bahrain and Saudi Arabia in the past, and its role in the Al Khobar bombing remains unresolved. There is comparatively little recent evidence of Iranian support for violence, however, and Iran has at least moderated its efforts to use the Haj to attack the US. There is still good reason to be concerned, but there are at least indications of moderation.

The U.S. also needs to be extremely careful about confusing terrorist attacks on Iran's peaceful opposition and figures like Rushdie with the low level war Iran is fighting with violent opposition groups like the People's Mujahideen and various extremist Kurdish groups. The latest State Department report on terrorism, for example, refers to Iran as the "most active state sponsor of terrorism in 1997." Its main reason for doing so is that Iran sponsored some 13 assassinations in 1997, "the majority of which were carried out in Northern Iraq." It is important to point out that most of those killed were members of the Kurdish Democratic Party of Iran and the Mujahedin-e Khalq (MEK), which have been at war with the Iranian regime since 1980-1982. We are in an awkward position to condemn such actions when we grant Israel the right to conduct covert counter-terrorism operations against its violent terrorists, and Turkey the right to kill over 500 members of the PKK on Iraqi soil.

It is particularly unfortunate that many members of Congress become the unwitting supporters of terrorism by supporting the various front groups of the MEK. Here, for once, the U.S. State Department report on terrorism seems to be totally correct:

"Mujahedin-e Khalq Organization (MEK or MKO)\* a.k.a. The National Liberation Army of Iran (NLA, the militant wing of the MEK), the People's Mujahedin of Iran (PMOI), Muslim Iranian Student's Society (front organization used to garner financial support)

"Formed in the 1960s by the college-educated children of Iranian merchants, the MEK sought to counter what is perceived as excessive Western influence in the Shah's regime. In the 1970s, the MEK concluded that violence was the only way to bring about change in Iran. Since then, the MEK—following a philosophy that mixes Marxism and Islam—has developed into the largest and most active armed Iranian dissident group. Its history is studded with anti-Western activity and, most recently, attacks on the interests of the clerical regime in Iran and abroad.

"The MEK directs a worldwide campaign against the Iranian Government that stresses propaganda and occasionally uses terrorist violence. During the 1970s, the MEK staged terrorist attacks inside Iran to destabilize and embarrass the Shah's regime; the group killed several U.S. military personnel and civilians working on defense projects in Tehran. The group also supported the takeover in 1979 of the U.S. Embassy in Tehran. In April 1992 the MEK carried out attacks on Iranian embassies in 13 different countries, demonstrating the group's ability to mount large-scale operations overseas.

"Several thousand fighters based in Iraq with an extensive overseas support structure. Most of the fighters are organized in the MEK's National Liberation Army (NLA).

In the 1980s the MEK's leaders were forced by Iranian security forces to flee to France. Most resettled in Iraq by 1987. Since the mid-1980s, the MEK has not mounted terrorist operations in Iran at a level similar to its activities in the 1970s. Aside from the National Liberation Army's attacks into Iran toward the end of the Iran-Iraq war, and occasional NLA cross-border incursions since, the MEK's attacks on Iran have amounted to little more than harassment. The MEK has had more success in confronting Iranian representatives overseas through propaganda and street demonstrations.

"Beyond support from Iraq, the MEK uses front organizations to solicit contributions from expatriate Iranian communities."

## **Weapons of Mass Destruction**

The most serious threat Iran may eventually pose is the development of a long range missile force, and an extensive inventory of weapons of mass destruction. Once again, the exact nature of Iran's programs is highly uncertain, Iran has denied any such activity, and a great many more charges have been made than can be validated. In summary, however, Iran seems to have the following programs and activities:

### **Delivery Systems**

- The Soviet-designed Scud B (17E) guided missile currently forms the core of Iran's ballistic missile forces—largely as a result of the Iran-Iraq War.
  - Most estimates indicate that Iran now has 6-12 Scud launchers and up to 200 Scud B (R-17E) missiles with 230-310 KM range.
  - Some estimates give higher figures. They estimate Iran bought 200-300 Scud Bs from North Korea between 1987 and 1992, and may have continued to buy such missiles after that time. Israeli experts estimate that Iran had at least 250-300 Scud B missiles, and at least 8-15 launchers on hand in 1997.
  - U.S. experts also believe that Iran can now manufacture virtually all of the Scud B, with the possible exception of the most sophisticated components of its guidance system and rocket motors. This makes it difficult to estimate how many missiles Iran has in inventory and can acquire over time, as well as to estimate the precise performance characteristics of Iran's missiles, since it can alter the weight of the warhead and adjust the burn time and improve the efficiency of the rocket motors
- Iran has new long range North Korean Scuds - with ranges near 500 kilometers.
  - Iran probably had more than 60 of the longer range North Korean missiles by 1998, although other sources report 100, and one source reports 170.
  - Iran may have 5-10 Scud C launchers, each with several missiles. This total seems likely to include four new North Korean TELs received in 1995.
  - Iran seems to want enough missiles and launchers to make its missile force highly dispersible.
  - Iran may have begun to test its new North Korean missiles. There are reports it has fired them from mobile launchers at a test site near Qom about 310 miles (500 kilometers) to a target area south of Shahroud. There are also reports that units equipped with such missiles have been deployed as part of Iranian exercises like the Saeqer-3 (Thunderbolt 3) exercise in late October, 1993.
  - Experts estimate that the North Korean missiles have a range of around 310 miles (500 kilometers), a warhead with a high explosive payload of 700 kilograms, and relatively good accuracy and reliability.

- Accuracy and reliability remain major uncertainties, as does operational CEP. Much would also depend on the precise level of technology Iran deployed in the warhead.
- Iran has created shelters and tunnels in its coastal areas which it could use to store Scud and other missiles in hardened sites and reduce their vulnerability to air attack.
- Iran is developing an indigenous missile production capability with both solid and liquid fueled missiles. Seems to be seeking capability to produce MRBMs.
  - The present scale of Iran's production and assembly efforts is unclear. Iran seems to have a design center, at least two rocket and missile assembly plants, a missile test range and monitoring complex, and a wide range of smaller design and refit facilities.
  - The design center is said to be located at the Defense Technology and Science Research Center, which is a branch of Iran's Defense Industry Organization, and located outside Karaj—near Tehran. This center directs a number of other research efforts. Some experts believe it has support from Russian and Chinese scientists.
  - Iran's largest missile assembly and production plant is said to be a North Korean-built facility near Isfahan, although this plant may use Chinese equipment and technology. There are no confirmations of these reports, but this region is the center of much of Iran's advanced defense industry, including plants for munitions, tank overhaul, and helicopter and fixed wing aircraft maintenance. Some reports say the local industrial complex can produce liquid fuels and missile parts from a local steel mill.
  - A second missile plant is said to be located 175 kilometers east of Tehran, near Semnan. Some sources indicate this plant is Chinese-built and began rocket production as early as 1987. It is supposed to be able to build 600-1,000 Oghab rockets per year, if Iran can import key ingredients for solid fuel motors like ammonium perchlorate. The plant is also supposed to produce the Iran-130.
  - Another facility may exist near Bandar Abbas for the assembly of the Seersucker. China is said to have built this facility in 1987, and is believed to be helping the naval branch of the Guards to modify the Seersucker to extend its range to 400 kilometers. It is possible that China is also helping Iran develop solid fuel rocket motors and produce or assemble missiles like the CS-801 and CS-802. There have, however, been reports that Iran is developing extended range Scuds with the support of Russian experts, and of a missile called the Tondar 68, with a range of 700 kilometers.
  - Still other reports claim that Iran has split its manufacturing facilities into plants near Pairzan, Seman, Shiraz, Maghdad, and Islaker. These reports indicate that the companies involved in building the Scuds are also involved in Iran's production of poison gas and include Defense Industries, Shahid, Bagheri Industrial Group, and Shahid Hemat Industrial Group.
  - Iran's main missile test range is said to be further east, near Shahroud, along the Tehran-Mashhad railway. A telemetry station is supposed to be 350 kilometers to the south at Taba, along the Mashhad-Isfahan road. All of these facilities are reportedly under the control of the Islamic Revolutionary Guards Corps.
  - There have been reports that Iran ordered the North Korean No Dong missile, which may be able to carry nuclear and biological missile ranges of up to 900 kilometers. This missile could reach virtually any target in Gulf, Turkey, and Israel. The status of the No Dong program is increasingly uncertain, although North Korea had some developmental types at test facilities in 1997.
  - Other reports indicate that Iran is developing two variants of the No Dong for indigenous production:
    - One version is reported to have a range of 800-930 miles and a 1,650 pound warhead. Reports differ sharply on its size. Jane's estimates a launch weight up to 16,000 kilograms, provided the system is derived from the No Dong. It could have a launch weight of 15,000 kilograms, a payload of 600 kilograms, and a range of 1,700-1,800 kilometers if it is based on a system similar to the Chinese CSS-5 (DF-21) and CSS-N3 (JL-1). These systems entered service in 1983 and 1987.

- Iran seems to have been interested in two developmental North Korean IRBMs called the Tapeo Dong 1 and Tapeo Dong 2. It is not clear how these missiles are linked to the earlier reports.
  - The Tapeo Dong 1 missile has an estimated maximum range of 2,000 kilometers, and the Tapeo Dong 2 may have a range up to 3,500 kilometers.
  - Both Tapeo Dongs are liquid fueled missiles which seem to have two stages.
  - Unlike the No-Dong, the Tapeo Dongs must be carried to a site in stages and then assembled at a fixed site. The No-Dong transporter may be able to carry both stages of the Tapeo Dong 1, but some experts believe that a special transporter is needed for the first stage of the Tapeo Dong 1, and for both stages of the Tapeo Dong 2.
- The CIA reported in June 1997 that Iran had obtained new missile technology from Russia and China during 1996. Since that time, there have been many additional reports of technology transfer from Russia.
  - These missiles included the Shihab missiles, with performance similar to those previously identified with Iranian missiles adapted from North Korean designs.
  - The Israeli reports indicated that the Shihab 3 was liquid fueled missile with a range of 810 miles (1,200-1,500 kilometers) and a payload of 1,550 pounds (700 kilograms).
  - Israel claimed the Shihab might be ready for deployment as early as 1999—and the Shihab 4, with a range of 1,250 miles (some reports say up to 4,000 kilometers) and a payload in excess of one ton.
  - The other two missiles were longer-range systems with a maximum ranges of up to 4,500-55,000 and 10,000 kilometers.
  - U.S. intelligence reports indicate that China has also been helping Iran with some aspects of these missile efforts.
- There have been other reports that Iran might be using Russian technology to develop a very long-range missiles with range of 3,500 to 6,250 kilometers.
- Russia has been a key supplier of missile technology.
- A U.S. examination of Iran's dispersal, sheltering, and hardening programs for its anti-ship missiles and other missile systems indicate that Iran has developed effective programs to ensure that they would survive a limited number of air strikes and that Iran had reason to believe that the limited number of preemptive strikes Israel could conduct against targets in the lower Gulf could not be effective in denying Iran the capability to deploy its missiles.
- Su-24 long-range strike fighters with range-payloads roughly equivalent to U.S. F-111 and superior to older Soviet medium bombers.
- F-4D/E fighter bombers with capability to carry extensive payloads to ranges of 450 miles.
- Can modify HY-2 Silkworm missiles and SA-2 surface-to-air missiles to deliver weapons of mass destruction.
- Iran has made several indigenous-long range rockets.
  - The Iran-130, or Nazeat, since the end of the Iran-Iraq War. The full details of this system remain unclear, but it seems to use commercially available components, a solid fuel rocket, and a simple inertial guidance system to reach ranges of about 90-120 kilometers. It is 355 mm in diameter, 5.9 meters long, weighs 950 kilograms, and has a 150 kilogram warhead. It seems to have poor reliability and accuracy, and its payload only seems to be several hundred kilograms.
  - The Shahin 2. It too has a 355 mm diameter, but is only 3.87 meters long, and weighs only 580 kilograms. It evidently can be equipped with three types of warheads: A 180 kilogram high explosive warhead, another warhead using high explosive submunitions, and a warhead that uses chemical weapons.
  - Iranian Oghab (Eagle) rocket with 40+ kilometers range.

- New SSM with 125 mile range may be in production, but could be modified FROG.
- Large numbers of multiple rocket launchers and tube artillery for short range delivery of chemical weapons.

## Chemical Weapons

- Post Iran-Iraq War estimates of Iran chemical weapons production are extremely uncertain:
  - U.S. experts believe Iran was beginning to produce significant mustard gas and nerve gas by the time of the August, 1988 cease-fire in the Iran-Iraq War, although its use of chemical weapons remained limited and had little impact on the fighting
  - Iran's efforts to equip plants to produce V-agent nerve gases seem to have been delayed by US, British, and German efforts to limit technology transfers to Iran, but Iran may have acquired the capability to produce persistent nerve gas during the mid 1990s.
  - Production of nerve gas weapons started no later than 1994.
  - Began to stockpile of cyanide (cyanogen chloride), phosgene, and mustard gas weapons after 1985. Recent CIA testimony indicates that production capacity may approach 1,000 tons annually.
- Weapons include bombs and artillery. Shells include 155 mm artillery and mortar rounds. Iran also has chemical bombs and mines. It may have developmental chemical warheads for its Scuds, and may have a chemical package for its 22006 RPV (doubtful).
- There are reports that Iran has deployed chemical weapons on some of its ships.
- Iran has increased chemical defensive and offensive warfare training since 1993.
- Iran is seeking to buy more advanced chemical defense equipment, and has sought to buy specialized equipment on world market to develop indigenous capability to produce advanced feedstocks for nerve weapons.
  - CIA sources indicated in late 1996, that China might have supplied Iran with up to 400 tons of chemicals for the production of nerve gas.
  - One report indicated in 1996, that Iran obtained 400 metric tons of chemical for use in nerve gas weapons from China—including carbon sulfide.
  - Another report indicated that China supplied Iran with roughly two tons of calcium-hypochlorate in 1996, and loaded another 40,000 barrels in January or February of 1997. Calcium-hypochlorate is used for decontamination in chemical warfare.
  - Iran placed several significant orders from China that were not delivered. Razak Industries in Tehran, and Chemical and Pharmaceutical Industries in Tabriz ordered 49 metric tons of alkyl dimethylamine, a chemical used in making detergents, and 17 tons of sodium sulfide, a chemical used in making mustard gas. The orders were never delivered, but they were brokered by Iran's International Movalled Industries Corporation (Imaco) and China's North Chemical Industries Co. (Nocinco). Both brokers have been linked to other transactions affecting Iran's chemical weapons program since early 1995, and Nocinco has supplied Iran with several hundred tons of carbon disulfide, a chemical uses in nerve gas.
  - Another Chinese firm, only publicly identified as Q. Chen, seems to have supplied glass vessels for chemical weapons.
  - The U.S. imposed sanctions on seven Chinese firms in May, 1997, for selling precursors for nerve gas and equipment for making nerve gas—although the U.S. made it clear that it had, "no evidence that the Chinese government was involved." The Chinese firms were the Nanjing Chemical Industries Group and Jiangsu Yongli Chemical Engineering and Import/Export Corporation. Cheong Yee Ltd., a Hong Kong firm, was also involved. The precursors included thionyl chloride, dimethylamine, and ethylene chlorohydril. The equipment included special glass lined vessels, and Nanjing Chemical and Industrial

- Group completed construction of a production plant to manufacture such vessels in Iran in June, 1997.
- Iran sought to obtain impregnated Alumina, which is used to make phosphorous-oxychloride—a major component of VX and GB—from the US.
  - It has obtained some equipment from Israelis. Nahum Manbar, an Israeli national living in France, was convicted in an Israeli court in May 1997 for providing Iran with \$16 million worth of production equipment for mustard and nerve gas during the period from 1990 to 1995.
  - CIA reported in June 1997 that Iran had obtained new chemical weapons equipment technology from China and India in 1996.
  - India is assisting in the construction of a major new plant at Qazvim, near Tehran, to manufacture phosphorous pentasulfide, a major precursor for nerve gas. The plant is fronted by Meli Agrochemicals, and the program was negotiated by Dr. Mejid Tehrani Abbaspour, a chief security advisor to Rafsanjani.
  - A recent report by German intelligence indicates that Iran has made major efforts to acquire the equipment necessary to produce Sarin and Tabun, using the same cover of purchasing equipment for pesticide plants that Iraq used for its Sa'ad 16 plant in the 1980s. German sources note that three Indian companies—Tata Consulting Engineering, Transpek, and Rallis India—have approached German pharmaceutical and engineering concerns for such equipment and technology under conditions where German intelligence was able to trace the end user to Iran
- Iran ratified the Chemical Weapons Convention in June, 1997.
    - It submitted a statement in Farsi to the CWC secretariat in 1998, but this consisted only of questions in Farsi as to the nature of the required compliance.
    - It has not provided the CWC with any data on its chemical weapons program.

## **Biological Weapons**

- Extensive laboratory and research capability.
- Weapons effort documented as early as 1982. Reports surfaced that Iran had imported suitable type cultures from Europe and was working on the production of Mycotoxins—a relatively simple family of biological agents that require only limited laboratory facilities for small scale production.
- U.S. intelligence sources reported in August, 1989, that Iran was trying to buy two new strains of fungus from Canada and the Netherlands that can be used to produce Mycotoxins. German sources indicated that Iran had successfully purchased such cultures several years earlier.
- The Imam Reza Medical Center at Mashhad Medical Sciences University and the Iranian Research Organization for Science and Technology were identified as the end users for this purchasing effort, but it is likely that the true end user was an Iranian government agency specializing in biological warfare.
- Many experts believe that the Iranian biological weapons effort was placed under the control of the Islamic Revolutionary Guards Corps, which is known to have tried to purchase suitable production equipment for such weapons.
- Since the Iran-Iraq War, Iran has conducted research on more lethal active agents like Anthrax, hoof and mouth disease, and biotoxins. In addition, Iranian groups have repeatedly approached various European firms for the equipment and technology necessary to work with these diseases and toxins.
  - Unclassified sources of uncertain reliability have identified a facility at Damghan as working on both biological and chemical weapons research and production, and believe that Iran may be producing biological weapons at a pesticide facility near Tehran.

- Some universities and research centers may be linked to biological weapons program.
- Reports surfaced in the spring of 1993 that Iran had succeeded in obtaining advanced biological weapons technology in Switzerland and containment equipment and technology from Germany. According to these reports, this led to serious damage to computer facilities in a Swiss biological research facility by unidentified agents. Similar reports indicated that agents had destroyed German bio-containment equipment destined for Iran.
- More credible reports by U.S. experts indicate that Iran has begun to stockpile anthrax and botulinum in a facility near Tabriz, can now mass manufacture such agents, and has them in an aerosol form. None of these reports, however, can be verified.
- The CIA has reported that Iran has, "sought dual-use biotech equipment from Europe and Asia, ostensibly for civilian use." It also reported in 1996 that Iran might be ready to deploy biological weapons. Beyond this point, little unclassified information exists regarding the details of Iran's effort to "weaponize" and produce biological weapons.
- Iran may have the production technology to make dry storable and aerosol weapons. This would allow it to develop suitable missile warheads and bombs and covert devices.
- Iran may have begun active weapons production in 1996, but probably only at limited scale suitable for advanced testing and development.
- CIA testimony indicates that Iran is believed to have weaponized both live agents and toxins for artillery and bombs and may be pursuing biological warheads for its missiles. The CIA reported in 1996 that, "We believe that Iran holds some stocks of biological agents and weapons. Tehran probably has investigated both toxins and live organisms as biological warfare agents. Iran has the technical infrastructure to support a significant biological weapons program with little foreign assistance.
- CIA reported in June 1997 that Iran had obtained new dual use technology from China and India during 1996.
- Iran announced in June 1997 that it would not produce or employ chemical weapons including toxins.

## **Nuclear Weapons**

- The Shah established the Atomic Energy Organization of Iran in 1974, and rapidly began to negotiate for nuclear power plants.
- The Shah also started a nuclear weapons program in the early to mid-1970s, building upon his major reactor projects, investment in URENCO, and smuggling of nuclear enrichment and weapons related technology from U.S. and Europe.
- In 1984, Khomeini revived nuclear weapons program begun under Shah.
- The status of Iran's nuclear program since the Iran-Iraq War is highly controversial, and Iran has denied the existence of such a program.
  - On February 7, 1990, the speaker of the Majlis publicly toured the Atomic Energy Organization of Iran and opened the new Jabir Ibn al Hayyan laboratory to train Iranian nuclear technicians. Reports then surfaced that Iran had at least 200 scientists and a work force of about 2,000 devoted to nuclear research
  - Iran's Deputy President Ayatollah Mohajerani stated in October, 1991, that Iran should work with other Islamic states to create an "Islamic bomb."
  - The Iranian government has repeatedly made proposals to create a nuclear-free zone in the Middle East. For example, President Rafsanjani was asked if Iran had a nuclear

weapons program in an interview in the CBS program *60 Minutes* in February 1997. He replied, "Definitely not. I hate this weapon."

- Other senior Iranian leaders, including President Khatami have made similar categorical denials. Iran's new Foreign Minister, Kamal Kharrazi, stated on October 5, 1997, that, "We are certainly not developing an atomic bomb, because we do not believe in nuclear weapons... We believe in and promote the idea of the Middle East as a region free of nuclear weapons and other weapons of mass destruction. But why are we interested to develop nuclear technology? We need to diversify our energy sources. In a matter of a few decades, our oil and gas reserves would be finished and therefore, we need access to other sources of energy...Furthermore, nuclear technology has many other utilities in medicine and agriculture. The case of the United States in terms of oil reserve is not different from Iran's The United States also has large oil resources, but at the same time they have nuclear power plants. So there is nothing wrong with having access to nuclear technology if it is for peaceful purposes..."
- The IAEA reports that Iran has fully complied with its present requirements, and that it has found no indications of nuclear weapons effort, but IAEA only inspects Iran's small research reactors.
- These are reasons to assume that Iran still has a nuclear program:
  - Iran attempted to buy highly enriched fissile material from Kazakhstan. The U.S. paid between \$20 million and \$30 million to buy 1,300 pounds of highly enriched uranium from the Ust-Kamenogorsk facility in Kazakhstan that Iran may have sought to acquire in 1992. A total of 120 pounds of the material—enough for two bombs—cannot be fully accounted for.
  - Iran has imported maraging steel, sometimes used for centrifuges, by smuggling it in through dummy fronts. Britain intercepted 110 pound (50 kilo) shipment in August, 1996. Seems to have centrifuge research program at Sharif University of Technology in Tehran. IAEA "visit" did not confirm.
  - Those aspects of Iran's program that are visible indicate that Iran has had only uncertain success. Argentina agreed to train Iranian technicians at its Jose Balaseiro Nuclear Institute, and sold Iran \$5.5 million worth of uranium for its small Amirabad Nuclear Research Center reactor in May 1987. A CENA team visited Iran in late 1987 and early 1988, and seems to have discussed selling Iran the technology necessary to operate its reactor with 20% enriched uranium as a substitute for the highly enriched core provided by the US, and possibly uranium enrichment and plutonium reprocessing technology as well. Changes in Argentina's government, however, made it much less willing to support proliferation. The Argentine government announced in February, 1992, that it was canceling an \$18 million nuclear technology sale to Iran because it had not signed a nuclear safeguards arrangement. Argentine press sources suggested, however, that Argentina was reacting to U.S. pressure.
  - In February, 1990 a Spanish paper reported that Associated Enterprises of Spain was negotiating the completion of the two nuclear power plants at Bushehr. Another Spanish firm called ENUSA (National Uranium Enterprises) was to provide the fuel, and Kraftwerke Union (KWU) would be involved. Later reports indicated that a 10 man delegation from Iran's Ministry of Industry was in Madrid negotiating with the Director of Associated Enterprises, Adolfo Garcia Rodriguez.
  - Iran negotiated with Kraftwerke Union and CENA of Germany in the late 1980s and early 1990s. Iran attempted to import reactor parts from Siemens in Germany and Skoda in Czechoslovakia. None of these efforts solved Iran's problems in rebuilding its reactor program, but all demonstrate the depth of its interest.
  - Iran took other measures to strengthen its nuclear program during the early 1990s. It installed a cyclotron from Ion Beam Applications in Belgium at a facility in Karzaj in 1991.
  - Iran conducted experiments in uranium enrichment and centrifuge technology at its Sharif University of Technology in Tehran. Sharif University was also linked to efforts to import cylinders of fluorine suitable for processing enriched material, and attempts to

import specialized magnets that can be used for centrifuges, from Thyssen in Germany in 1991.

- It is clear from Iran's imports that it has sought centrifuge technology ever since. Although many of Iran's efforts have never been made public, British customs officials seized 110 pounds of maraging steel being shipped to Iran in July 1996.
- Iran seems to have conducted research into plutonium separation and Iranians published research on uses of tritium that had applications to nuclear weapons boosting. Iran also obtained a wide range of U.S. and other nuclear literature with applications for weapons designs. Italian inspectors seized eight steam condensers bound for Iran that could be used in a covert reactor program in 1993, and high technology ultrasound equipment suitable for reactor testing at the port of Bari in January, 1994.
- Other aspects of Iran's nuclear research effort had potential weapons applications. Iran continued to operate an Argentine-fueled five megawatt light water highly enriched uranium reactor at the University of Tehran. It is operated by a Chinese-supplied neutron source research reactor, and subcritical assemblies with 900 grams of highly enriched uranium, at its Isfahan Nuclear Research Center. This Center has experimented with a heavy water zero-power reactor, a light water sub-critical reactor, and a graphite sub-critical reactor. In addition, it may have experimented with some aspects of nuclear weapons design.
- Iran claims it eventually needs to build enough nuclear reactors to provide 20% of its electric power. This Iranian nuclear power program presents serious problems in terms of proliferation. Although the reactors are scarcely ideal for irradiating material to produce Plutonium or cannibalizing the core, they do provide Iran with the technology base to make its own reactors, have involved other technology transfer helpful to Iran in proliferating and can be used to produce weapons if Iran rejects IAEA safeguards.
- Russian has agreed to build up to four reactors, beginning with a complex at Bushehr—with two 1,000-1,200 megawatt reactors and two 465 megawatt reactors, and provide significant nuclear technology.
  - Russia has consistently claimed the light water reactor designs for Bushehr cannot be used to produce weapons grade Plutonium and are similar to the reactors the U.S. is providing to North Korea.
  - The U.S. has claimed, however, that Victor Mikhaliiov, the head of Russia's Atomic Energy Ministry, proposed the sale of a centrifuge plant in April, 1995. The U.S. also indicated that it had persuaded Russia not to sell Iran centrifuge technology as part of the reactor deal during the summit meeting
  - The first 1,000 megawatt reactor at Bushehr has experienced serious construction delays. In March, 1998, Russia and Iran agreed to turn the construction project into a turn key plant because the Iranian firms working on infrastructure had fallen well behind schedule. In February, Iran had agreed to fund improved safety systems. The reactor is reported to be on a 30 month completion cycle.
  - The U.S. persuaded the Ukraine not to sell Iran \$45 million worth of turbines for its nuclear plant in early March, 1998, and to strengthen its controls on Ukrainian missile technology under the MTCR.
- China is reported to have agreed to provide significant nuclear technology transfer and possible sale of two 300 megawatt pressurized water reactors in the early 1990s, but then to have agreed to halt nuclear assistance to Iran after pressure from the US.
- U.S. estimates of Iran's progress in acquiring nuclear weapons have become more conservative with time.
  - In 1992, the CIA estimated that Iran would have the bomb by the year 2000. In 1995, John Holum testified that Iran could have the bomb by 2003.

- In 1997, after two years in which Iran might have made progress, he testified that Iran could have the bomb by 2005-2007.
- U.S. experts increasingly refer to Iran's efforts as "creeping proliferation" and there is no way to tell when or if Iranian current efforts will produce a weapon, and unclassified lists of potential facilities have little credibility..
- Timing of weapons acquisition depends heavily on whether Iran can buy fissile material—if so it has the design capability and can produce weapons in 1-2 years—or must develop the capability to process Plutonium or enrich Uranium—in which case, it is likely to be 5-10 years.
- The control of fissile material in the FSU remains a major problem:
  - US estimates indicate the FSU left a legacy of some 1,485 tons of nuclear material. This include 770 tons in some 27,000 weapons, including 816 strategic bombs, 5,434 missile warheads, and about 20,000 theater and tactical weapons. In addition, there were 715 tons of fissile or near-fissile material in eight countries of the FSU in over 50 sites: enough to make 35,000-40,000 bombs.
  - There are large numbers of experienced FSU technicians, including those at the Russian weapons design center at Arzamas, and at nuclear production complexes at Chelyabinsk, Krasnoyarsk, and Tomsk.
  - These factors led the U.S. to conduct Operation Sapphire in 1994, where the U.S. removed 600 kilograms of highly enriched uranium from the Ulba Metallurgy Plant in Kazakhstan at a time Iran was negotiating for the material.
  - They also led to Britain and the U.S. cooperating in Auburn Endeavor, and airlifting fissile material out of a nuclear research facility in Tbilisi, Georgia. There were 10 pounds of material at the institute, and 8.8 pounds were HEU. (It takes about 35 pounds to make a bomb.) This operation was reported in the New York Times on April 21, 1998. The British government confirmed it took place, but would not give the date.

There are some experts who feel that Iran is only seeking a contingency capability and will not deploy large numbers of missiles or advanced weapons of mass destruction. There are also experts who question Iran's ability to develop an effective nuclear weapon which is sufficiently small for missile, and some who believe that Iran is in the process of canceling its reactor programs and nuclear weapons effort. These are possibilities, but it is far too soon to call them probabilities.

The U.S. also needs to recognize that Iran is unlikely to abandon its programs as long as it fears Iraq, seeks to compete for regional prestige and influence, and sees the U.S. and Israel as competitors and potential threats. The good news is that Iran is not likely to pursue Iraq's grandiose efforts, or exhibit Saddam Hussein's megalomania. The bad news is that Iran is keenly conscious of its conventional weakness, the fact Iraq is virtually certain to resume proliferation the moment sanctions are lifted, and U.S. military superiority. Barring major new successes in regional arms control, the U.S. may have to learn to live with Iran's proliferation, hoping that time and moderation will eventually limit its scope and the willingness of any Iranian regime to try to exploit Iran's capabilities in ways which threaten the region or explode into the actual use of such weapons.

### **"Demonization" versus "Sanctification"**

There is no way to predict the ultimate balance of power between Iran's moderates and conservatives. It is equally impossible to predict whether Iran will make major reductions

in its efforts to proliferate, build-up its forces for unconventional warfare, its support of terrorism, or its efforts to develop naval-air-missile capabilities to threaten shipping activity in the Gulf.

It is certainly too soon to predict whether the U.S. and Iran can develop a modus vivendi where Iran can come to accept the U.S. presence in the Gulf, improve its relations with the Southern Gulf states, change its behavior in dealing with the Hezbollah and Israel, and halt "terrorist" attacks on its opposition.

At this moment in the Iranian revolution, Iran does seem likely to become more "moderate" and "pragmatic." However, a "moderate" and "pragmatic" Iranian regime is unlikely mean an Iran that feels its strategic interests coincide with those of the US, its Southern Gulf neighbors, or any other state in the region. Actions that a "moderate" and "pragmatic" Iran regards as defensive and as serving its vital national interests may sometimes be seen as threatening by some of its neighbors, Israel, and the West.

As a result, it is equally dangerous for the U.S. to either "demonize" or "sanctify" Iran. Instead, we need patience. It may be half a decade before we really know how Iran's military capabilities are evolving, what will happen to its support of extremist movements, and how it will deal with proliferation. What we can do in the interim is seek the kind of military containment that will limit potential threats without blocking Iran's development or affecting its security. If we cannot halt proliferation, we can delay it and sharply limit it in scope. The same is true of large, destabilizing deliveries of advanced conventional weapons.

At the same time, the U.S. and Iran do need to enter into the kind of a dialogue where both sides can explore the extent they can resolve their differences. In the process, the U.S. will almost certainly have to compromise as well as Iran, and there may be areas where both sides will have to agree to disagree. This seems far more positive, however, than open hostility, Iranian treatment of the U.S. as the "great Satan," and failed U.S. efforts to sanction Iran's economy and energy exports.

<sup>1</sup> Associated Press, December 9, 1998, 0614.

<sup>2</sup> Iran Focus, October, 1997, p. 7; Middle East Economic Digest, October 3, 1997, p. 10.

<sup>3</sup> Middle East Economic Digest, October 17, 1997, p. 10.

<sup>4</sup> The Estimate, September 12, 1997, p. 4; Policywatch, October 1, 1997, Number 269; Jane's Defense Weekly, November 12, 1998, p. 30.

<sup>5</sup> Iran Focus, October, 1997, p. 7, 9.

<sup>6</sup> Iran Focus, October, 1997, p. 7, 9.

<sup>7</sup> Reuters, September 10, 1997, 1250; Washington Times, September 10, 1997, p. A-13.

- <sup>8</sup> Middle East Economic Digest, October 3, 1997, p. 10.
- <sup>9</sup> Associated Press, December 9, 1997, O741.
- <sup>10</sup> Reuters, October 7, 1997, 0639.
- <sup>11</sup> USA Today, October 6, 1997, p. 10A; The Estimate, October 10, 1997, p. 1.
- <sup>12</sup> Reuters, October 7, 1997, 0639.
- <sup>13</sup> Associated Press, NY, October 18, 1997, 1731 EDT.
- <sup>14</sup> Reuters, September 9, 1997, Damascus; Washington Times, August 22, 1997.
- <sup>15</sup> Los Angeles Times, October 15, 1997, p. A-1.
- <sup>16</sup> Jane's Defense Weekly, October 8, 1997, p. 4; Philadelphia Inquirer, September 20, 1997, p. A-17.
- <sup>17</sup> Reuters, September 28, 1997, 0417; Washington Post, October 13, 1997, p. A-24.
- <sup>18</sup> Washington Post, October 13, 1997, p. A-24; Washington Times, October 11, 1997, p. A-6, October 16, 1997, p. A-11; Associated Press, October 14, 1997, 1113, October 16, 1997, 0624; Jane's Defense Weekly, October 22, 1997, p. 3.
- <sup>19</sup> Table One, Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1996, Washington, GPO, 1997.
- <sup>20</sup> Table One, ACDA, World Military Expenditures and Arms Transfers, 1993-1994, Washington, GPO, 1995; Table One, ACDA, World Military Expenditures and Arms Transfers, 1995, Washington, GPO, 1996; and Table One, Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1996, Washington, GPO, 1997.
- <sup>21</sup> Author's guesstimate. Iran claimed on February 1992 that it was spending only 1.3% of its GNP on defense. Washington Times, February 20, 1992, p. A-9.
- <sup>22</sup> Middle East Economic Digest, December 6, 1996, p. 17.
- <sup>23</sup> Reuters, January 19, 1998, 1923. (\$1- 1,750 Rials was then the official rate used for essential state budget accounts such as oil and major national projects. 1 - 3,000 Rials was the official rate used in other cases)
- <sup>24</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1987-1995, Washington, Congressional Research Service, CRS-95-862F, August 4, 1995, pp. 57-58, 67-69.
- <sup>25</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1986-1993, Washington, Congressional Research Service, CRS-94-612F, July 29, 1994, p. 57, and Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1988-1995, Washington, Congressional Research Service, CRS-96-667F, August 15, 1996. 0 = data less than \$50 million or nil. All data are rounded to the nearest \$100 million. Major West European includes Britain, France, Germany, and Italy.
- <sup>26</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1986-1993, Washington, Congressional Research Service, CRS-94-612F, July 29, 1994, p. 57, and Richard F. Grimmett,

Conventional Arms Transfers to the Third World, 1987-1995, Washington, Congressional Research Service, CRS-95-862F, August 4, 1995, pp. 57-58, 67-69.

<sup>27</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1987-1995, Washington, Congressional Research Service, CRS-95-862F, August 4, 1995, pp. 57-58, 67-69.

<sup>28</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1986-1993, Washington, Congressional Research Service, CRS-94-612F, July 29, 1994, p. 57, and Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1987-1995, Washington, Congressional Research Service, CRS-95-862F, August 4, 1995, pp. 57-58, 67-69.

<sup>29</sup> Richard F. Grimmett, Conventional Arms Transfers to the Third World, 1983-1990, Washington, Congressional Research Service, CRS-91-578F, August 2, 1991, Conventional Arms Transfers to the Third World, 1984-1991, Washington, Congressional Research Service, CRS-92-577F, July 20, 1991, Conventional Arms Transfers to the Third World, 1987-1994, Washington, Congressional Research Service, CRS-95-862F, August 4, 1995; Conventional Arms Transfers to the Third World, 1988-1996, Washington, Congressional Research Service, CRS-96-667F, August 15, 1996; and , Conventional Arms Transfers to the Third World, 1989-1996, Washington, Congressional Research Service, CRS-97-778F, August 13, 1997. 0 = data less than \$50 million or nil. All data are rounded to the nearest \$100 million. Major West European includes Britain, France, Germany, and Italy.

<sup>30</sup> Jane's Defense Weekly, June 5, 1996, p. 15.