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Key Targets in Iraq

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Possible Targets: Weapons of Mass Destruction Facilities

- US background briefings have indicated that there are roughly 100 chemical-related facilities and 90 biological related facilities that Iraq might use to proliferate, including the UN-inspected targets.
- UNSCOM, however, covers a much wider range of locations. But weapons inspectors have been monitoring more than 300m locations, from breweries and pesticide plants to microbiology laboratories, that could be used to make biological weapons. A separate monitoring protocol is tailored to each site, with 130 cameras installed at about 30 locations. Other air-sampling devices record minute traces of chemicals in the air.
- In terms of missile facilities:
 - One key facility is the missile production plant at Ibn Al Haytham. This plant has ongoing activity and two buildings big enough to produce large missiles.
 - There is a major missile research facility at Al Kindi.
- In terms of chemical weapons,
 - UNSCOM had conducted some 550 inspections and had full time inspectors checking on 150 facilities by April 1997. UNSCOM has a monitoring system which includes 30 remote-controlled cameras at six Iraqi chemical sites and 19 air samplers at eight sights
 -
 - By October 1997, UNSCOM was covering some 160 facilities, had tagged 323 items, was monitoring thousands of others, and was conducting over 170 monitoring inspections in a six month period. These inspections had discovered some “200 key pieces of undeclared dual-use equipment, such as heat exchangers, glass reactor vessels and distillation columns capable of use in proscribed chemical weapons activities. About 800 pieces of related equipment have been located.
- In terms of biological weapons,
 - there were 90 sites with resident biological weapons teams in late 1997, had tagged some 893 items, and was conducting 240 inspections over a six month period
 - The UN had identified 79 key sites related to biological warfare. Of these, nine are considered Category A, requiring the most intense monitoring, while 15 are Category B, 10 are Category C and 45 are Category D. Many of the Category A sites were damaged during the Gulf War, but one facility at Al-Hakam was missed entirely by both Coalition intelligence and bombers.
 - 5 used to make weapons before war;
 - 5 vaccine or pharmaceutical sites;
 - 35 research and university sites;
 - thirteen breweries, distilleries, and dairies with dual-purpose capabilities; eight diagnostic laboratories.

Possible Targets: Major Iraqi Military Production Facilities

- Tank assembly plant operating under Polish and Czech licenses at Al-Amen.
- Major armor refitting center at Base West World (Samawa).
- Manufacture of proximity fuses for 155 mm and cluster munitions at April 7 (Narawan Fuse) Factory.
- Manufacture of 122 mm howitzers, Ababil rockets, tank optics and mortar sights at Sa'ad 5 (Sa'ad Engineering Complex).
- Manufacture of wheeled APCs under East European license, other armor, and artillery pieces at Al Taji).
- Manufacture and repair of artillery, vehicle parts, and cannon barrels at SEHEE heavy engineering complex (Al Dura).
- Aircraft assembly and manufacturing plant under construction at Sa'ad 38. (Fao)
- Manufacture of aerial bombs, artillery pieces, and tungsten-carbide machine tool bits at Badr (al Yusufiyah).
- Production of explosives, TNT, propellants, and some vehicle production capability at Al Hiteen (Al Iskandariyah).
- Production of cluster bombs and fuel-air explosives at Fao.
- Production of aerial bombs, TNT, and solid rocket propellants at Al Qaqaa.
- Manufacture of small naval boats at Sawary (Basra).
- Production and modification of defense electronics at Mansour (Baghdad).
- Production and modification of defense electronics, radars, and frequency-hopping radios at Sa'ad 13 (Salah al Din - Ad Dawr).
- Digital computer software, assembly of process line controllers for weapons plants, and plastic castings at Diglia (Zaafarniyah).
- Precision machining at Al Rabiyyah.
- Manufacture of non-ferrous ammunition cases at Sa'ad 21 (Mosul).
- Liquid nitrogen production at Al Amil.
- Production of ethylene oxide for fuel-air explosives at PCI.
- Production of HMX and RDX explosives at Fallujah chemical plant at Al Muthanna.
- Manufacture of gas masks at Sa'ad 24 (Mosul).

Possible Targets: Key Facilities of the Intelligence and Security Forces:

- *The Special Security Service (also known as Amn al-Khass, Hijaz Amn al-Khass, Presidential Affairs Department, Special Security Organization, or the SSS).* The Special Security Service is the most powerful of Iraq's security services. Some reports indicate that it controls a Joint Operations Room in the palace that is charged with coordinating the efforts of Iraq's various services to protect Saddam, and which has computer data links to each of the various paramilitary units in the other intelligence services and records section of the General Intelligence Directorate.¹

It was established in the mid-1980s, after an attempt to assassinate Saddam Hussein highlighted gaps or failures in the already extensive cloak of security around the Iraqi leader. Its top leadership is manned by men personally selected by Saddam Hussein. It was headed by Major General Fanar Zibin Hassan al-Tikriti during the Gulf War, and then by Hussein Kamel, Saddam's ex son-in-law. It is now headed by Saddam's younger son, Qusay.

Recruiting is extremely selective. Personnel are generally from Saddam's hometown of Tikrit, or from Hawiija and Samarra -- two neighboring cities loyal to Saddam. Many members are recruited from loyal tribes. These tribes included the Dulaim tribe in Western Iraq in the past, but is unclear that this tribe is still regarded as loyal. Many recruits are brought in at ages 16-18, are suitably indoctrinated, and then grow up in the service. There are unconfirmed reports of a major new recruiting drive after the coup attempts against Saddam in 1995. It is reported to have grown from around 1,000 personnel before the Gulf War to some 5,000 personnel, but any such numbers are speculative.

The main function of the Special Security Service is to protect Saddam from assassination attempts emanating from within the Army, his family, or the government at large. The tasks of the Special Security Service include

- ⇒ Guaranteeing the security of the president and providing protection for him during travel and at public meetings,
- ⇒ Ensuring the security of all presidential facilities such as palaces, guest-houses, supervision of the other security and intelligence services,
- ⇒ Surveillance of government ministries and agencies and leadership of the armed forces, and,
- ⇒ Supervision of key internal security operations against the Kurds and Shi'ites.

Some experts feel it manages Saddam Hussein's secret foreign accounts, intelligence operations involving the purchase of foreign arms and technology, and security within Iraq's most critical military industries. It evidently provides some of the liaison staff working with UNSCOM, and closely supervises programs involving missiles and weapons of mass destruction.

The organization operates within the presidential palace, and is headquartered on Palestine Street in Baghdad. It also has a much larger building near the Al Rashid Hotel, and has small offices in Basra and Mosul. It has a large prison and interrogation complex at Al Ranighwania, near the Baghdad International Airport.

The Special Security Service has a Political Branch headed by Major Nawfal Mahjoom Al-Tikriti that monitors surveillance on all suspect citizens. It has links to the data bases maintained by the Ministry of Interior and elements in the Foreign Ministry. It has an operations unit under Haji Zuhair Al-Tikriti that can arrest, interrogate, and execute suspects. The Special Branch essentially acts as a watch dog that ensures the loyalty of the members of the Special Security Service and top intelligence and security officials. It also has a paramilitary security force called the Amn Al-Khass Brigade, and cooperates closely with (and monitors) the Special Republican Guards. The Special Republican Guards would evidently provide the Special Security Service with heavy units in the event of a serious military coup.

- *The General Intelligence Service (Also known as the Mukhabaret, Da'irat al Mukhabaret, Mukhabarat al-Amma, or GIS).* The General Intelligence Service is the intelligence and security service of the Ba'ath party. It grew directly out of the clandestine Ba'ath party security organization built up by Saddam Hussein in the 1960s and known as the *Jihaz Haneen* (Instrument of Yearning).

It was expended when the Ba'ath took power in July, 1968, and became the General Intelligence Service in the early 1970s. Its first head was Sadoon Shaker, and then by Saddam's half brother Barzan Al-Tikriti. One director, Fadhil al Barak, was arrested in 1989 for spying for Russia, and was executed in 1991. Its present head is Lt. General Manee Abd al Rashid, but Qusay plays a major role in its control.

Its tasks include:

- ⇒ Conducting counterespionage and monitoring subversive activities.
- ⇒ Supervising of the Ba'ath party and other political organizations.
- ⇒ Maintaining a watch over internal minorities such as the Kurds and Assyrians.
- ⇒ Suppressing opposition activities emanating from Shi'ites and other minorities.
- ⇒ Maintaining a watch over foreigners in Iraq, including those from Arab countries.
- ⇒ Conducting sabotage, subversion, and terrorist operations against neighboring countries such as Syria and Iran.
- ⇒ Providing financial and military aid, including logistical assistance, to opposition.
- ⇒ Seizure or murder of opposition elements outside Iraq.
- ⇒ Training of key personnel for other intelligence and security agencies.
- ⇒ Technical research into covert operations and procurement of equipment for such operations.
- ⇒ Providing disinformation and attempts to exploit or use Arab and other media.
- ⇒ Targeting threatening individual and groups in countries hostile to Iraq.

The GIS is divided into units or bureaus that are spread throughout the country, and are attached to Iraqi embassies and the offices of Iraqi Airways. The GIS has a massive walled headquarters in the Mansour District of Baghdad. It was this headquarters that the US attacked with cruise missiles on June 27, 1993 after the GIS had been identified as the agency that had sponsored an assassination attempt on President George Bush.

Like all Iraqi intelligence agencies, personnel are chosen carefully from the groups most loyal to Saddam. The GIS provides excellent career opportunities by Iraqi standards, and its senior personnel are well trained. It runs the National Security College located in Abughreib on the outskirts of Baghdad. This College trains high school graduates for three years, and college graduates for eighteen months. The strength of the GIS is estimated at around 4,000 personnel.

The key elements of the GIS include the Political Bureau which is organized into a Planning Office for intelligence and covert operations, a Propaganda Office for psychological warfare and disinformation, a Secret Service for the collection of foreign intelligence, a training directorate, and a Directorate of Technical Affairs.

There is also a Special Bureau (Office One) which has a number of different subordinate offices that have highly compartmented functions. Office Five ensures the loyalty of other members of the GIS. Office Seven handles special arrests, interrogations, and sometimes executions. It has a special prison and interrogation center in Baghdad, a major prison and interrogation center at Khandair, west of Baghdad, and holds some prisoners at Abugereib. Office Sixteen trains Iraqis and foreigners for covert operations, including terrorism, and may supervise the execution of some operations. Other offices provide foreign counterintelligence with a special focus on Syria, Iran, and Jordan. The GIS also has a paramilitary Mukhabarat Brigade, which is the only part of the GIS that does not normally dress in civilian clothes.

- *Military Intelligence (also known as Estikhabarat, Al-Istikhbarat al-Askariyya).* Military Intelligence traces its origins back to the time of the monarchy. It is still manned largely by army officers, although it was brought under the direct control of the Presidential Palace in the 1980s. It focuses on

foreign military threats, but also is responsible for internal security within the Iraqi military. It has ties to some foreign radical movements and has conducted intelligence operations overseas.

During the Gulf War, Military Intelligence was headed by Major General Sabir Abd al-Aziz Hussein al-Duri -- a Sunni Arab from Dur, the hometown of Izzat Ibrahim, the Deputy Chairman of the Revolutionary Command Council. Duri was a traditional, long-serving Ba'athist with ties to the army and senior party leaders. He was replaced after the Gulf War by Major General Wafiq Jassim Sammara'i. Sammara'i was later arrested and fled to Syria, and was replaced by Major General Khalid Salih al-Juburi. His deputy is Major General Saad al Ghani. Major General Abd al-Khadir Salman Khamis (a Tikriti related to Saddam) also plays a role in the organization..ⁱⁱ

Military Intelligence has the following tasks:

- ⇒ Ensuring loyalty of the armed forces to the regime.
- ⇒ Supervision of security and counterintelligence in the armed forces.
- ⇒ Collection of intelligence and tactical and strategic research on countries deemed hostile or threatening to Iraq.
- ⇒ Waging of psychological war against military enemies.
- ⇒ Implementation of deception plans during wartime.
- ⇒ Cooperation with foreign intelligence services.
- ⇒ Managing a large network of informants, including foreign personnel, and military human intelligence. This network includes operatives in Jordan, Israel, Gaza and the West Bank, the Gulf states, Egypt, Syria, the Sudan, Turkey, and Yemen.
- ⇒ Managing a large human intelligence network in Iran, with secure covert communications.
- ⇒ Conducting terrorist operations abroad against hostile countries, groups (Kurds), and opponents of Saddam Hussein. During the 1980s military intelligence operatives in the offices of military attaches in Iraqi embassies in Western Europe were involved in such activities. Reportedly agents of the Istikhbarat were responsible for the assassination of Saddam's opponents in Beirut, London, and Paris. Among the victims was Abdul Razzaq al-Nayef, a former senior Ba'athist official in the early days, who was murdered in London in 1978.
- ⇒ Conducting research and studies on technological issues.

Military Intelligence is based in a large complex in the Aladhamia section of Baghdad. This complex has a large base with its own support structure and can operate without the support of any other branch of the military. It includes a large prison and interrogation center. There are other bases at the Al Rashid Camp in Baghdad, and a facility in Baghdad that handles military intelligence on other Arab countries, Iran, opposition movements, and Western threats.

Work by Sean Boyne indicates that it has regional offices in Kirkuk, Mosul, and Basra. The Kirkuk office deals with intelligence on Iran and the Kurds, the Mosul office handles Turkey, Syria, and Jordan, and the Basra office covers Iran, Kuwait, Saudi Arabia, and the other Gulf states. Military Intelligence is reported to have around 4,000-6,000 personnel. It has three main branches: Political, Special, and Administrative. The Political Branch concentrates on the collection of foreign military intelligence..ⁱⁱⁱ

The Special Branch includes a security unit to ensure the loyalty of other members of Military Intelligence, and a paramilitary "brigade" with a "battalion" to counter internal security threats in the Baghdad area. It has a covert collection office (possibly known as Unit 999) headquartered at Salman Pak. This organization has "battalions" with special area expertise for infiltrating foreign governments and movements and trains both Iraqi and foreign personnel for such missions. It is reported to have battalions for Iran, Saudi Arabia, Israel, Turkey, maritime operations against Iran or Kuwait, the Kurdish Security Zone, and Shi'ite dissidents.

- *Military Security Service (also known as the Amn Al-Askariya or MSS)*. The Military Security Service emerged out of Military Intelligence following the growing signs of unrest within the military forces during 1992. It now has officers in virtually every Iraqi military unit and performs both an internal security and anti-corruption function. Like many Iraqi intelligence and security services, it has its own paramilitary unit and a special internal security unit to watch over the operations of the Military Security Service.

The current head of the Military Security Service is Mu'tamad Ni'mah al-Takriti who replaced Khalid al-Juburi.^{iv} Some experts feel that Colonel Abd Hassan al-Majid, Ali Hassan al-Majid's younger brother, was the true power in military intelligence before his defection. The Military Security Service is headquartered in Aladhamia in Baghdad, and is near the headquarters of the Military Intelligence Service. It reports directly to the Presidential Palace and has grown to a strength as high as 5,000 personnel.

- *General Security Service (also known as the Secret Police, State Internal Security Service, Al-Amn al-Amm, or GSS)*. Along with Military Intelligence, this organization traces its routes back to the time Iraq was a monarchy and was part of the police forces controlled by the Ministry of the Interior.

Until the Ba'ath came to power in 1968, it was manned by professional policemen and army officers. It was subsequently purged and "Ba'athized" by Saddam's paternal cousin, `Ali Hasan al-Majid, who ran the service from 1980 to 1987. Its headquarters was moved from the Bataween district of Baghdad to the Al Baladiat district in 1990, and the new headquarters area includes yet another special prison.

The General Security Service focuses largely on internal security, but occasionally becomes involved in small foreign operations. It has elements in virtually every major police station in Iraq, and usually has its own floor or building. It deals with both economic and political crimes.

Major General Abd al-Rahman al-Duri headed the GSS before the Gulf War, but Saddam appointed his half brother, Siba'awi Ibrahim, as the head after the Gulf War. In July 1996 Siba'awi Ibrahim was replaced as director of internal security by General Taha Abbas al-Ahbabi. Al-Ahbabi had previously served in the GID and Military Security Service and comes from Tikrit.

Siba'awi Ibrahim's removal reflected a sharp deterioration in Saddam's relations with his half-brothers. The Ibrahims could no longer trust their half-brother. Uday shot Watban shot in the leg and the leg had to be removed. This incident was followed by the defection of Hussein Kamel, and then his murder following his return to Baghdad. Barzan responded by publicly attacking Uday. Watban and Sib'awi are reported to have indicated they wanted to leave Iraq and to have been placed under house arrest in July 1996.^v

The GSS seems to have lost influence in spite of the appointment of a new director. This may be the result of the fact that members were involved in the coup attempt against Saddam in 1996, and were arrested and executed. It still, however, is a powerful element of the security structure.

- *Ba'ath Party Security (Amn al Hizb)*. This security office develops intelligence on party members, and has security cells throughout the Ba'ath Party.
- *The Military Bureau of the Ba'ath Party*. The Military Bureau was also strengthened and reorganized after the Gulf War. It is headed by Saddam, and his deputy is his cousin and brother-in-law, Kamel Rashid Yassin. It acts as a commissar system to indoctrinate the armed forces, and check on their political loyalty.
- *The Tribal Chief's Bureau (Maktab al-Shuyukh)*. This is a new bureau that was created after the Gulf War. This service pays tribal leaders to control their tribes, spy on possible tribal dissidents, and provide arms to loyal tribesmen to suppress any dissidents. It was headed by Major Saddam Kamel, a cousin and son-in-law of Saddam Hussein and Hussein Kamel's younger brother. Saddam Kamel defected with his brother to Jordan.
- *Saddam's Fedayeen*. Saddam's Fedayeen are led by Saddam's eldest son, Uday. They were formed after the defection of Hussein and Saddam Kamel. They are largely composed of young Takritis and are trained by the Republican Guard. They dress in black and often keep their faces covered. They

have limited military capability, but are equipped with some heavy weapons, including PT-76 light tanks and BTR-70 armored personnel carriers. ^{vi}

- *The Ministry of Information.* Most Middle Eastern governments control their media and the press, and use it as an intelligence and propaganda service. Iraq's Ministry of Information has served as both a particularly strong and ruthless instrument of control. It tolerates some kinds of criticism -- many of which seem to be manipulated to give the image that it is safe to make Saddam Hussein aware of the faults of government or give outsiders the impression of a free press. At the same time, it controls virtually every word written or spoken in the Iraqi media, uses "journalists" to propagandize internally and abroad, and has a long list of "writers," "academics", and "artists" it can use to influence both domestic and foreign opinion. The Ministry also has close links to other intelligence services so that it can control or spy on foreign visitors and journalists, and manipulate crowds and media events in Iraq. For example, it maintains a long list of seemingly private Iraqis who are fluent in foreign languages and who it ensures appear in front of cameras. Some of these Iraqis are allowed to give private interviews that support Iraqi propaganda -- even when the spokesperson appears to be somewhat critical. The Ministry of Information also attempts to manipulate foreign scholars and international bodies visiting Iraq. It also has a list of quasi-academic institutions it can use to hold and manipulate meetings and conferences and use to develop contacts between foreigners and seeming "moderates" and "opponents" of the regime.
- *The Foreign Ministry.* This ministry mixes legitimate diplomats with members of the intelligence and security services. Like the Soviet diplomatic service during the Cold War, it is so closely linked to intelligence operations that it is impossible to distinguish between diplomats and the Iraqi equivalents of the KGB.
- *The Iraqi telecommunications services and major academic and research institutions.* All of these institutions have intelligence and security cells designed to improve state control. Many have special sections for military and intelligence efforts, for purchasing equipment to be used for military purposes, and supporting governmental propaganda and outreach efforts in dealing with foreigners.
- *The Iraqi signals and electronic intelligence (SIGINT/ELINT) system.* Iraq received considerable Western and Eastern-bloc technical assistance in developing its SIGINT/ELINT capabilities during the Iran-Iraq War. One source indicates that the intelligence and internal security aspects of Iraqi SIGINT and ELINT operations are unified as part of the Al Hadi Project (Project 858). According to this source, the Iraqi SIGINT/ELINT system has about 800 personnel and is headquartered at Al Rashedia, and which has at least five ground stations in various parts of Iraq. This system collects and translates SIGINT and ELINT, and distributes it to both military and intelligence users. It monitors internal communications as well as foreign political and military communications, and seems to have a highly accurate and rapidly responding direction-finding capability. It uses Japanese and French-supplied computers and communications gear.

Possible Targets: Key Facilities of the Intelligence and Security Forces:

- “Special” or “Presidential” Republican Guards force, under a military command structure reporting directly to Saddam, that acts as a palace guard.
- This force is deployed in a number of battalions whose mission is to protect Saddam Hussein.
- It is largely infantry, but has some T-72s, BMPs, D-30s and 122 mm artillery weapons.
- Reports of its strength are uncertain, but one report claims a strength of some 13 battalions and 26,000 men.
- It is deployed in units which guard Saddam’s palaces, guard his movements, and provide emergency response forces. These emergency response forces may include a brigade-sized unit to provide Saddam with personal protection if he is threatened by some element of Iraq’s military forces.
- The "Special Republican Guard" is quite different from the regular Baghdad-based Republican Guard division. The former has three brigades which guard the southern, northern and western arteries into the city.
- Major General Namiq Mohammed is the senior military officer in charge of the Special Republican Guards, but Qusay is the effective commander of the force, just as he is of the regular Republican Guards.
- If the regular Republican Guards act as the “ring” of forces that defends Baghdad and Saddam Hussein, the Special Republican Guards act as Saddam’s last line of defense. According to one report,
- Qusay has also set up a Joint Operations Room in the Presidential Palace, under the Iraqi National Security Council, to coordinate the operations of the Special Republican Guards with the Republican Guards and the key paramilitary elements of Iraq’s security forces.
- These paramilitary units include the Amn Al-Khass Brigade in the General Security Service, a “brigade” in the General Intelligence Directorate, a paramilitary formation in the Military Security Service, and a “battalion” in military intelligence.

Possible Targets: Key Republican Guards and Regular Army Units:

- Iraq has consolidated its Republican Guards forces down from a total of 12 divisions to a current total of six divisions since the Gulf War, and has eliminated a number of smaller formations. In the process, it has given the Republican Guards units priority in terms of equipment, resupply, training, and operational funding. This has increased the gap between the Republican Guards units and regular army units in material terms, although the warfighting results are untested.
- In 1997, the Republican Guards divisions included three heavily armored divisions (the Al Nida division, the Hammurabi division, and the Al Medina al Munawwarrah division), and two lighter divisions (the Nebuchadnezzar division and the Baghdad division.) Two special forces brigades seem to have survived from the pre-war special forces division. There are a number of other independent infantry formations. ^{vii}
 - According to US and Israeli experts, the surviving Republican Guards have a total of between 60,000 and 80,000 men, and 26-30 brigade equivalents (7 armored, 4 mechanized, and the rest infantry). This total manning indicates that Republican Guards have about 65-75% of the total manning needed for their combat units, and about half the total manpower needed to deploy and sustain a force of seven full divisions.^{viii} This is an indication that Iraq continues to have some manpower problems with even its most prestigious force.
- The Iraqi Army has as total of 2,200-2,700 tanks, 3,000-3,500 APCs and AFVs, 1,900-2,100 major artillery weapons and 1,100 other armored vehicles, including recovery, NBC, command and other vehicles. The most probable figures is 2,700 tanks, 3,800 APCs and AFVs, and 2,005 major artillery weapons
- Most estimates of Iraq's tank strength credit it with around 2,700 tanks in early 1998, although it is not clear what portion of this total was fully operational. An estimate by other US experts indicates that Iraqi Army's major equipment holdings in late 1997 included about 2,200-2,700 tanks, substantially less than half of the 6,700 tanks it had before the war. About half these tanks were T-54s, T-55s, T-59s and T-69s. Iraq also had about 600-700 M-48s, M-60s, AMX-30s, Centurions, and Chieftains captured from Iran or which it obtained in small numbers from other countries.
- One thing is certain. Iraq lost much of its pre-war T-72 strength during the Gulf War. Only about 500-600 T-72s and 200-300 T-62s remained after the war, versus nearly 1,500 T-72s and T-62s before the war. According to some estimates, less than 2,200 of Iraq's tanks are fully operational. However, Iraq retained over 1,500 tank transporters and heavy vehicle trailers out of the several thousand it bought during the Iran-Iraq War, and continued to make effective use of them during exercises in late 1997.^{ix} Iraq does, however, have a poor history of field repairs for tanks, and of aggressively attempting to recover and repair tanks in battle.

The Iraqi Army Order of Battle

<u>Formation</u>	<u>Command Center</u>	<u>Headquarters Location</u>	<u>Component Brigades</u>
Regular Army			
<u>1st Corps</u>	Al Rashid	Kirkuk, Khaled Camp	-
2nd Infantry Division	Khalid ben Al Walid	Airabee area	-
* 5th Mechanized Division	Mohammed Alwuasem	Shuwan area	15, 20, 26
8th Infantry Division	Almuthana	Shuwan area	22, 44, 48
38th Infantry Division	Amru Ben Abd Alaziz	Quader Karam area	130, 847, 848
<u>2nd Corps</u>	Al Yarmouk	Deyala, Mansouria Alijabal Camp	
* 3rd Armored Division	Salah Aldin	Jalawla	6, 8, 12
15th Infantry Division	Al Farouq	Amerili	76, 104, 436
34th Infantry Division	Alhareth	Khanqin/Alsadia areas	90, 502, 504, 6
<u>3rd Corps</u>	-	-	-
11th Infantry Division	-	Al Naserria	23, 45, 47, 82
* 51st Mechanized Division	Sariat Al Jabal	Zubair	41, 31, 25
* 6th Armored Division	-	Al Nashwa, Shalamcha, Majnon	11, 30, 70
<u>4th Corps</u>	Almajar	Al Amara	
* 10th Armored Division	-	Al Teab, Al Amara	17, 24, 42
14th Infantry Division	-	S/SE Al Amara	420, 18, 14
18th Infantry Division	-	Al Musharah & Al Kahla	95, 422, 774
<u>5th Corps</u>	-	Alsalamia Camp, Mosul	
* 1st Mechanized Division	Abu Aubaida	Makhmur area	1, 27, 34
4th Infantry Division	Al Qaaqaa	Bashiqa Maoten	29, 5, 96
7th Infantry Division	Al Mansour	Alton Kopri Castle	38, 39, 116
16th Infantry Division	Thu Al Feqar	Saddam Dam, Mosul area	108, 505, 606
Republican Guard			
<u>Northern Corps</u>	Allah Akbar	Al Rashedia (Baghdad region) & Takrit	
* Adnan Mechanized Division	-	Mosul	11, 12, 21
Baghdad Infantry Division	-	Maqloob Maoten	4, 5, 6
* Al Madina Al Munawara Armored Division	-	Al Rasedia & Al Taji Camps	10, 2, 17, 14
Al Abed Infantry Division	-	Kirkuk, Khaleed Camp	38, 39, 40
<u>Southern Corps</u>	Al Fateh Al Mubin	Al Hafreia, Alsuwera Camp	
Nabu Khuth Nussar Infantry Division	-	Alhussainia, Al Khut Governate	19, 22, 23
* Hamurabi Mechanized Division	-	Al Wahda area, Alsuwaira	17, 8, 14
* Anedaa Armored Division	-	Baaquba, Deyala Governate	27, 28, 29

Possible Targets: Key Air Force Targets

- Despite its wartime losses, the Iraqi Air Force's total surviving inventory of combat aircraft includes 6-7 HD-6 (BD-6), 1-2 Tu-16, and 6 Tu-22 bombers. Roughly 6 of these bombers still seem to be operational. None of the bombers have ever been equipped with advanced air munitions for striking land targets, or were used effectively against Iranian forces and land targets during the Iran-Iraq War. None of these aircraft flew a single sortie during the Gulf War, and there are no reports of any bomber training or flight activity after the war. The HD-6 bombers do, however, have the technical capability to deliver the CS-601 anti-ship missile and played a limited role in attacking shipping to Iran in 1988. At this point, such aircraft are of interest only because a few might be made operational and used in "one-way" sorties in a desperate effort to deliver weapons of mass destruction.
- The Iraqi Air Force's key operational holdings seem to include a total of 255 fighters and fighter bombers, and some 80 trainers -- some of which are combat capable.^x Iraq's total holdings seem to include a total of 130 J-6, MiG-23BN, MiG-27, Mirage F-1EQ5, Su-7, Su-20, and Su-25 attack fighters; 180 J-7, MiG-21, MiG-25, Mirage F-1EQ, and MiG-29 air defense fighters; MiG-21 and MiG-25 reconnaissance fighters, 15 old Hawker Hunters, a surviving Il-76 Adnan AEW aircraft, 2 Il-76 tankers, and large numbers of transports and helicopters. Estimates of its total surviving inventory by aircraft type vary by source, but Iraq probably retained about 30 Mirage F-1s, 15 MiG-29s, 50-60 MiG-23s, 15 MiG-25s, 150 MiG-21s, 25-30 Su-25s, and 60 Su-17s, Su-20s, and Su-22s.
- Although it is unclear how many air munitions Iraq retained after the Gulf War, some estimates put this figure as low as 50% of the pre-war total. Iraq, however, retains significant numbers of modern air-to-air and air-to-ground munitions. These stocks include AA-6, AA-7, AA-8, AA-10, Matra 530, Matra 550, and Matra Super 530 air-to-air missiles, and AM-39 Exocet, HOT, AS-11, AS-12, AS-6, AS-14, AS-301, AS-37, C-601 Silkworm; air-to-surface missiles; laser-guided bombs, and Cluster bombs.
- Iraq has deployed Matra Magic 2 "dogfight" air-to-air missiles on its Mirage F-1s since the war. This is virtually its only major improvement in air force equipment since 1990. It is not clear whether these missiles were delivered before the war, were stolen from Kuwait, or have been smuggled in since. They are an advanced type similar to the more advanced export versions of the US AIM-9, with high energy of maneuver and a maximum range of three nautical miles.^{xi}
- Iraq retained large numbers of combat-capable trainers, transport aircraft and helicopters, and remotely piloted vehicles. The trainers included some Mirage F-1BQs, 25 PC-7s, 30 PC-9s, 50-60 Tucanos (EMB-312s), 40 L-29s and 40 L-39s. Transport assets included a mix of Soviet An-2, An-12, An-24, An-26, and Il-76 jets and propeller aircraft, and some Il-76s modified to act as tankers. The remotely piloted vehicles (RPVs) included some Iraqi-made designs, Italian designs, and Soviet designs. It is unclear how effective Iraq was in using any of these RPV systems, but it did make use of them during the Gulf War

Possible Targets: Key Land-Based Air Defense Capabilities

- Iraq retains 130-180 SA-2 launchers, 100-125 SA-3 launchers, 100-125 SA-6s, 20-35 SA-8s, 30-45 SA-9s, some SA-13s, and around 30 Roland VI and 5 Crotale surface-to-air missile fire units. Some of these systems were operated by the army. In addition, Iraq has some 2,000 man-portable SA-7s and SA-14s, and some SA-16s.
- Most of these surface-to-air missile units are operational, and there was evidence that Iraq had improved their readiness and training in 1996 and 1997. Iraq's ground-based defenses remain concentrated around Baghdad, Basra, and Kirkuk, as they were during the pre-war period. Iraqi territory is too large to attempt territorial defense, and Iraq has always concentrated on defending strategic targets, and deploying air defense zones to cover critical land force deployments.
- Iraq redeployed some missiles during 1992 and 1993 to create surface-to-air missile "traps" near the "no-fly zones" that the Coalition established after the war. These traps were designed to attack aircraft with overlapping missile coverage when they attacked launchers deployed near the no-fly zones. While the Iraqi efforts failed -- and led to the destruction of a number of the missile launchers involved -- it is not clear what portion survived or what other detailed redeployments Iraq has made in recent years.
- A network of radars, surface-to-air missiles, and anti-aircraft guns surrounds strategic and industrial areas, particularly in the Baghdad area. A French-supplied C⁴/BM system called the KARI (Iraq spelled backwards in French) became operational on a country-wide level in 1986-1987.
- The National Air Defense Operations Center (ADOC) in Baghdad controls Iraq's air defenses. The ADOC maintains the overall air picture and provided Baghdad with information on the course of the air battle. There are five Sector Operations Centers (SOCs) covering the north, west, center-east, southeast and far south which established priorities for air defense engagements. Each is subordinate to the ADOC, and controls air defense operations in a specific geographic area. The SOC controls large numbers of ground-based weapons systems and extensive BM/C⁴/SR assets.
- There are also a large number of Intercept Operations Centers (IOCs); to provide local air defense control. These had headquarters at Ar-Rutbah, H-1, and H-3 in the West; Mosul and Qayyarah in the north, Al-Taqaddum, Salman Pak, Al-Jarrah, An-Najf, and An-Nukhayb in the center-east; and Al-Amrah, As-Salman and Az-Zubayr in the southeast; and Al-Jahrah in the far south. These systems are linked through an extensive optical fiber communications net, and used a TFH 647 radio relay system, a TFH tropospheric communications system, and a large mix of radars supplied by the Soviet Union.
- The KARI system, however, was a mix of technologies from different nations with uncertain integration. Although part of Iraq's air defense system was French-supplied, Iraq patterned its overall air defense network and operations on Soviet models. It also concentrated its coverage around Baghdad, Basra, and key military and strategic targets. This left many areas uncovered, particularly in southern Iraq, and along air corridors striking north across the Saudi and Kuwait borders.
- Iraq's air defenses are fundamentally flawed because the SOC cannot communicate effectively once the ADOC was destroyed or deactivated. This means the US could attack and/or overwhelm each sector in isolation from the others. Moreover, the destruction of a given SOC effectively opened up a corridor that could be used to attack the entire country.

Possible Targets: Major Presidential Palaces:

- On grounds of sovereignty, Iraq has barred U.N. inspectors from searching the eight sites for weapons of mass destruction, leading the United States to threaten military strikes. Seven of eight presidential sites that Iraq has closed to U.N. weapons inspectors contain palaces, villas, offices and warehouses spread over 12 square miles (31.5 square kilometres) that house palaces, guest houses, warehouses, office buildings and garages, the head of a U.N. map team said on Wednesday.
- Staffan de Mistura, the coordinator for the UN team that was sent to Baghdad has reported that the area contained 1,058 structures, less than the 1,500 the U.N. Special Commission (UNSCOM) once reported. He said the five-person team, which included two Austrian cartographers, had the opportunity to visit them all and thereby narrow down the area that would receive special treatment during U.N. inspections in search of banned weapons.
- UNSCOM, which had taken aerial photos but could not conduct thorough ground inspections, thought the areas stretched over 27 square miles (70 square kms). He said all eight sites appeared to be well defined by high walls or fences, including guest houses and villas for visiting dignitaries, as was customary in the region.
- Last week, in an effort to resolve the dispute, U.N. Secretary-General Kofi Annan dispatched a team of experts to Baghdad to map the eight compounds. They finished on Wednesday.
- U.N. officials hope to use the maps to determine which areas of the sprawling compounds are legitimate targets for inspections.
- The documents, compiled by UNSCOM for Annan and the Security Council before the mapping began, list the size and structures of seven of the eight sites. There was no immediate explanation as to why the remaining site, in Basra in southern Iraq, was not included.
- Three of the sites are in the capital, Baghdad, and there is one site each in Mosul in northern Iraq, Tikrit, Tharthar, and Auja in central Iraq, and Basra, in the south.
 - The Jabal Makhul Presidential Palace area, contains 90 structures, including one presidential residence, 75 villas or offices, and five warehouses.
 - The Radwaniyah Presidential area in Baghdad is the largest site with 360 structures, including 225 villas or offices, and 35 warehouses. Some Iraqis compare its size to Buckingham Palace. It was built by Iraq's former royal family decades before Saddam came to power. The palace - with its ornate ceilings - was shown in television reports filled with Iraqis acting as human shields to protect it from possible U.S. air attacks.
 - Sijood Presidential Site (Baghdad)
- The other listed sites and their dimensions are:
 - The Tikrit Presidential Palace area, 2 square miles, with 100 structures (Tikrit, north of Baghdad, President Saddam Hussein's hometown). The complex at al-Oja, Saddam's hometown in Tikrit province, 120 miles north of Baghdad includes president built residences for his family here after he came to power in 1979. The entire village is sealed off.
 - The Republican Palace area in Baghdad, 2 square miles, with 140 structures.
 - The Tharthar Presidential Palace area, 1 square mile, with 45 structures (northeast of Baghdad at Lake Thartha).
 - The Auja Presidential Palace area, less than 1 square mile, with 15 structures.
 - The Mosul Presidential Palace area, less than 1 square mile, with 50 structures (at Mosul in the far north).
 - Basra Presidential Site (at Basra in the southeast)
 - Jabal Makhul Presidential Site (Bayj, north of Tikrit)
- This list does not include sites like The Qadissiya Hawk Palace: Built by Saddam near Baghdad airport during Iraq's 1980-88 war with Iran, it contains a large farm with barns and warehouses. Saddam called the Iran-Iraq war "Qadissiya," after the 6th-century Battle of Qadissiya in which the Arabs defeated Persia, today's Iran.
- President Clinton's claim that a single palace compound is "about the size of Washington D.C.," or about 60 square miles seems false. The largest site may be about 12 square miles.

Possible Targets: Oil Targets

- Prior to its invasion of Kuwait in 1990, Iraqi oil output topped 3.5 million bpd but after the Gulf War, the country's output fell to 300,000 bpd. Iraq's crude production last year averaged 1.2 million bpd, according to U.S. estimates. ^
- There are major difficulties in hitting such targets, particularly given the humanitarian complications:
 - Iraq faces major export problems. It has told the United Nations it can export only \$4 billion worth of oil over a six-month period, not the \$5.256 billion proposed in an expanded "oil-for-food" plan being considered by the Security Council.
 - The current oil for food program, which took effect in December 1996 with a six-month quota of \$2 billion worth of oil, is to enable Iraq to sell limited quantities of oil to buy food, medicine and other humanitarian necessities to offset the effects of stringent economic sanctions in force since Baghdad's August 1990 invasion of Kuwait. Iraq was allowed to sell almost 152 million barrels of crude under the oil-for-food program, raising \$2 billion. Iraq's exports averaged about 844,000 barrels per day (bpd).
 - U.S. estimates put the country's export capacity at 1.4 million to 2.4 million bpd. Prior to its invasion of Kuwait in 1990, Iraqi oil output topped 3.5 million bpd but after the Gulf War, the country's output fell to 300,000 bpd. Iraq's crude production last year averaged 1.2 million bpd, according to U.S. estimates
 - The United States might, however, hit an oil refinery or related facility if it believed it to be a potential part of Iraq's chemical or biological weapons program.
- Iraq currently uses two major routes for moving its oil exports which the US might target -- a pipeline in the northern part of the country at Kirkuk that stretches through Turkey to the city of Ceyhan on the Mediterranean Sea, and the large Mina al-Bakr loading terminal off Iraq's small Gulf shoreline.
 - "Mina al-Bakr could potentially be a target," said a U.S. government energy analyst, referring to Iraq's offshore terminal.
- During the January to June 1997 period, Iraq sold an average of 665,000 barrels per day (b/d) of crude oil. An estimated 57 percent of this oil flowed through the Iraq-Turkey pipeline, conforming to the U.N. Resolution 986 mandate that at least half of the "oil-for-food" exports must transit through Turkey.
- Iraq's proven oil reserves are located in 73 structures, including at least 6 super-giant, 17 giant, and 20 large fields.
 - Iraq's largest producing oil field is Rumaila, whose North and South zones have a production capability of 700,000 b/d. The Gulf War resulted in the destruction of the production infrastructure at North and South Rumaila (gathering centers, compression/degassing stations), the PS1, Tuba, Zb1, and Zb2 storage facilities, the 1.6-million b/d Mina al-Bakr export terminal, and pumping stations along the 1.4-million b/d Iraqi Strategic Pipeline. By early 1993, however, infrastructure repairs to Southern Oil Company's (SOC) facilities in southern Iraq had been completed. Prior to the start of U.N. Resolution 986, SOC's gross crude oil output (prior to re-injection efforts) was around 520,000 b/d. Most of this was produced from North and South Rumaila.
 - In addition, SOC has seven other sizable fields which previously were online, but which now remain damaged or partially-mothballed until U.N. sanctions are lifted. These fields include Zubair, Luhais, Suba, Buzurgan, Abu Ghirab, Fauqi.
 - The Kirkuk field was brought online by IPC in 1934 and still forms the basis for northern Iraqi oil production today. Kirkuk has over 10 billion barrels of remaining proven oil reserves. The Jambur, Bai Hassan, and Khabbaz fields are the only other currently producing oil fields in northern Iraq. While Iraq's

northern oil industry remained relatively unscathed during the Iran-Iraq War, an estimated 60 percent of Northern Oil Company's (NOC) facilities in northern and central Iraq were damaged in the Gulf War. Also, post-1991 fighting between Kurdish and Iraqi forces in northern Iraq resulted in temporary sabotages of the Kirkuk field's facilities. In 1996, production capacity in northern and central Iraq was estimated at between 700,000-1 million b/d, down from around 1.2 million b/d before the Gulf War. Most war-related damage was repaired by 1993. Since that time, NOC has used field rotations to keep production facilities in working order until the lifting of U.N. sanctions.

- According to a variety of estimates, Iraq's current crude export capacity is somewhere between 2.0-3.5 million b/d. Within five years after the lifting of sanctions, Iraqi officials have stated their intention of raising the country's export capacity to 6.4 million b/d. Under U.N. Resolution 986, an estimated 385,000 b/d flowed through the Kirkuk-Ceyhan pipeline. Another 290,000 b/d was exported from Mina al-Bakr. In 1996, Iraqi officials hoped that U.N. Resolution 986 eventually would be expanded to include refined product exports. If this ever occurred, product exports likely would be loaded at Mina al-Bakr or at another Gulf terminal.

Pipelines

- The Kirkuk-Ceyhan pipeline is Iraq's largest operable crude export pipeline. This Iraq-Turkey link consists of two parallel lines built in 1977 and 1987. A 40-inch line has a capacity of 1.1 million b/d. A second, parallel 46-inch line has a capacity of 500,000 b/d and was designed to carry Basrah Regular exports. The 40-inch line has additional pumping stations and fewer bottlenecks, which allow for greater throughput than that of the larger line. In the Gulf War, both pipelines were disabled when the crucial IT-2 pumping station was destroyed. The IT-1 pumping station near Kirkuk received lighter damage and is presently functional. The subsequent imposition of U.N. sanctions on Iraqi crude exports resulted in a complete closure of the Kirkuk-Ceyhan pipeline between 1991 and 1997.
- Prior to flushing operations in mid-1996, there were 2.9 million barrels of 36o API crude trapped in the 40-inch line and 3.8 million barrels of 34o API crude inside the 46-inch line. While this stagnant crude turned to sludge in some sections of the pipelines, Turkey was able to flush the smaller 40-inch line. It has been used for Iraqi crude exports under U.N. Resolution 986. As of late 1996, certain sections of the larger pipeline were still in need of repair. Also, repairs to the IT-2 pumping station do not allow for previous throughput levels, especially on the 46-inch line. Therefore, total current capacity on the 600-mile Kirkuk-Ceyhan pipeline is in the range of 700,000 b/d - 1 million b/d.
- Iraq's two other overland export pipeline options are closed for political reasons. In April 1982, Syria closed the 500-mile, 800,000 b/d Baniyas pipeline in order to show its support for Iran during the Iran-Iraq War. This action cut an important export route for Kirkuk crude, which had been carried by the pipeline to Mediterranean terminals at Baniyas in Syria and Tripoli in Lebanon. When operational, between 450,000-600,000 b/d of Iraqi crude was exported to European markets through the line, with the rest feeding Syria's Baniyas and Homs refineries and Lebanon's smaller Tripoli refinery. Since the closure, Syria has used the line to transport 360,000-b/d of its own crude output. In addition, a 60-mile stretch of the line has been converted by Syria to carry natural gas.
 - In June 1997, a thawing of relations between Iraq and Syria led to the reopening of three border crossings. This ended a 17-year chill. The border re-openings have fueled speculation as to whether improved political relations would lead to a re-opening of the Baniyas line for Iraqi crude exports. A re-opening of the line would provide Syria with transit revenues, but it also would displace Syrian crude and require reconversion of the pipeline section that now carries natural gas.
 - Following the 1982 closure of the Baniyas pipeline, Saudi Arabia agreed to allow Iraq to export 500,000 b/d of crude through the Petroline to the Red Sea. Following Iraq's invasion of Kuwait in August 1990, Saudi Arabia closed the IPSA link permanently.

- In order to optimize export capabilities, Iraq constructed a reversible, 1.4-million b/d "Strategic Pipeline" in 1975. This pipeline consists of two parallel 700,000 b/d lines running in opposite directions. It allows for the export of Kirkuk crude from the Persian Gulf and for Rumaila crudes to be shipped through Turkey. During the Gulf War, the Strategic Pipeline was disabled after the K-3 pumping station at Haditha as well as four additional southern pumping stations were destroyed. Repairs were finished in 1992.

Terminals

- Iraq has three tanker terminals at Mina al-Bakr, Khor al-Amaya, and Khor al-Zubair. Iraq also has additional dry goods ports at Basrah and Umm Qasr, which is being outfitted to accommodate crude tankers.
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- Mina al-Bakr is Iraq's largest oil terminal, with four 400,000-b/d capacity berths capable of handling very large crude carriers (VLCCs). Iraq claims that Gulf War damage to Mina al-Bakr has been repaired in large part and that the terminal now has a capacity of 1.2 million b/d. In mid-1996, however, there were conflicting reports that export capacity at Mina al-Bakr is limited to 500,000 b/d, due partly because of a lack of crude stream separation facilities and unrepaired storage tanks. Between 1994 and late 1996, Mina al-Bakr serviced smaller 30,000-Dwt tankers, including a well-publicized trial loading by the 36,900-Dwt Kirkuk tanker in August 1996. While three channels allowing for unrestricted passage and safe navigation reportedly have been cleared, however, it is unknown whether Mina al-Bakr's underwater protection system can safely accommodate large volumes of VLCC traffic.
- Iraq's Khor al-Amaya terminal was virtually destroyed in the Iran-Iraq War. Repairs were begun in 1993, and Iraq stated in 1995 that the terminal could load 600,000 b/d. Upon full completion of repairs, Iraq projects Khor al-Amaya's capacity will rise to 1.2 million b/d. Iraq's third terminal, Khor al-Zubair, is linked to the Umm Qasr port by a 30-mile long canal. While Khor al-Zubair generally handles dry goods, it has the capability to service small quantities of liquefied petroleum gas (LPG) and refined products. Like Umm Qasr, Khor al-Zubair is being outfitted with crude loading capabilities.

Refining

- Iraq's current refining capacity is around 600,000 b/d, down from its pre-Gulf War, nameplate capacity of 700,000 b/d. Iraq has 10 refineries and topping units. The largest are the 150,000-b/d Baiji North, 140,000-b/d Baiji Salaheddin, 126,000-b/d Basrah, and 100,000-b/d Daura plants.
- During the Gulf War, both of the Baiji plants in northern Iraq as well as the refineries at Basrah, Daura, and Nasiriyah were severely damaged. This cut Iraq's refining capacity to around 60,000 b/d in March 1991. While the bulk of Iraq's refinery capacity appears to have been restored by 1993, several of the smaller refineries, namely the 27,000-b/d Kirkuk and the 27,000-b/d Nasiriyah plants, were cannibalized for parts to repair damage at Baiji, Basrah, and Daura, which was expanded in 1994.
- In addition, even though total capacity now approaches pre-1991 levels, refining depth has been severely reduced, and due to rising demand, Iraq has been forced to utilize some of its stocks. A lack of light-end products, low quality gasoline, and rising pollution levels because of a lack of water treatment facilities are some problems now faced by Iraq's downstream sector.

ⁱ Sean Boyne in “Inside Iraq’s Security Network,” Jane’s Intelligence Review, July, 1997, pp. 312-316 and August, 1997, pp. 365-367.

ⁱⁱ Source: Al-Sharq al-Awsat, July 4, 1996, p. 4.

ⁱⁱⁱ Sean Boyne, “Inside Iraq’s Security Network,” Jane’s Intelligence Review, July, 1997, pp. 312-316 and August, 1997, pp. 365-367.

^{iv} Source: Al-Sharq al-Awsat, July 4, 1996, p. 4.

^v The Times, July 4, 1996, p. 15.

^{vi} Jane’s Defense Weekly, October 7, 1995.

^{vii} See the detailed history of the attack on Republican Guards units and the resulting losses by name in Department of Defense, The Conduct of the Persian Gulf War: Final Report, Washington, Department of Defense, April, 1992, pp. 93-95, 104-113, 355, 401. Also references in the April 15, 1993 draft of the US Air Force Gulf War Air Power Survey, pp. 9-10.

^{viii} The author has drawn on interviews with various US and foreign experts; USCENCOM briefing by “senior military official,” Pentagon, January 28, 1997, pp. 2, 5-8 10; Washington Times, February 1, 1997, p. A-13; Reuters, September 4, 1996, 0911; Jane’s Pointer, November 1994, p. 2; AP September 9, 1996, 0129; Washington Times, January 30, 1997, p. A-3; February 1, 1997, p. A-13.

^{ix} These estimates are based primarily on interviews with various experts, and USCENCOM briefing by “senior military official,” Pentagon, January 28, 1997, pp. 2, 5-8 10; Washington Times, February 1, 1997, p. A-13; Reuters, September 4, 1996, 0911; Jane’s Pointer, November 1994, p. 2; AP September 9, 1996, 0129; Washington Times, January 30, 1997, p. A-3; February 1, 1997, p. A-13. The 1996/1997 IISS data show 2,700 tanks.

^x US Central Command, Atlas, 1996, MacDill Air Force Base, USCENCOM, 1997, pp. 16-18.

^{xi} Washington Times, September 5, 1996, p. A-1.