



APPROVED FOR RELEASE
DATE: NOV 2005

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National Intelligence Estimate

**Iraqi Military Capabilities
Through 2003**

UPDATE

*NIE 94-19 Iraqi Military Capabilities
Through 1999 July 1994*

Produced by the National Intelligence Council

~~Secret~~

*NIE 99-04
April 1999*

0542

NIE 99-04 April 1999

Iraqi Military Capabilities Through 2003

**This Estimate was approved for publication by
the National Foreign Intelligence Board under the
authority of the Director of Central Intelligence.**



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Scope Note

Iraqi Military Capabilities Through 2003

The Intelligence Community has reviewed its judgments in the National Intelligence Estimate 94-19, *Iraqi Military Capabilities Through 1999* of July 1994 and the Update Memorandum to that NIE published in January 1995. This assessment:

- Examines the status and capabilities of Iraq's military forces to conduct combat operations.
- Describes what we believe are Saddam's attack options.
- Reassesses Saddam's probable calculus in selecting a course of action.

Volume I provides an overview of our assessment. Volume II provides a more detailed discussion of force capabilities and analyses of Iraq's attack options.

What We Said

In our July 1994 NIE and the January 1995 Update to that Estimate, which assessed Iraqi military capabilities through the year 1999, we judged that the effects of Desert Storm and UN sanctions had severely diminished Iraqi military capabilities. We concluded that:

- *The effectiveness of future military operations would be plagued by problems in morale, leadership, and maintenance as long as these restrictions remained in place.*
- *Iraq's military remained a potent force by regional standards and would continue to be resilient and resourceful in its ability to reconstitute forces and capabilities.*

No Agency was willing to rule out Saddam's attempting another high-risk military confrontation, and the Military Intelligence Community believed that Iraq had at least some chance of quickly mounting a multidivision attack that could successfully penetrate Saudi Arabia and damage oil facilities in the Al Jubayl-Dhahran area.

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Figure 1
Iraqi Military Order of Battle, April 1999



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Key Judgments

Iraqi Military Capabilities Through 2003

Iraq's military capabilities have deteriorated significantly as a result of UN sanctions and damage inflicted by Coalition and US military operations. Its military forces are even less well prepared for major combat operations than we judged in the National Intelligence Estimate 94-19, entitled *Iraqi Military Capabilities Through 1999* [redacted] of July 1994 and in an Update Memorandum published in January 1995. [redacted]

Iraqi forces, though degraded, remain capable of defeating internal opposition groups and, without significant and timely opposition from Western forces, could overrun Kuwait. [redacted] but could not gain a decisive military advantage over Iran's forces. [redacted]

We believe Saddam's attack options have narrowed since our 1994 and 1995 estimates. Iraq's forces and transportation infrastructures are weaker and at greater risk from Coalition air strikes, vulnerabilities that have been manifested in Coalition attacks such as Desert Fox. Consequently, Saddam's probable preferred attack option—a large-scale, 13 to 18 division Republican Guard Forces Command (RGFC)—led attack to seize Kuwait and preempt or prevent Coalition reinforcement by extending operations into Saudi Arabia—is no longer as feasible. [redacted]

If, however, Saddam senses that he is increasingly being "cornered," he could alter his risk calculations. Saddam might conclude that an invasion of Kuwait, however risky, was the only hope of averting disaster. By threatening or actually unleashing a major military attack against Kuwait, most likely accompanied by threats to use weapons of mass destruction (WMD), Saddam might believe he could bargain for full sanctions relief in exchange for an Iraqi pullback or an agreement to stand down his forces. [redacted]

An end to the No-Fly and No-Drive Zones would significantly reduce the Community's ability to provide warning of an attack against Kuwait. [redacted]

Iraq's Military Capabilities Today

We assess degradation has occurred at different rates to Iraq's various combat capabilities. [redacted]

Air Force: Dramatic Erosion

The ability of the Iraqi Air Force to protect national airspace and to conduct effective offensive operations has been substantially reduced since 1995.

The combat proficiency of most pilots is low and continues to decline. The impact of UN sanctions is the major cause of the Air Force's decline. []

Air Defenses: Weaknesses Evident

Air Defense Forces are significantly less capable than even a year ago because of losses inflicted in the December 1998 Operation Desert Fox and subsequent strikes. []

Naval Forces: Still Sunk

Baghdad's Navy remains incapable of defending Iraq from naval or naval-based threats posed by either Coalition or Iranian forces, but it potentially could sink or severely damage a ship with its residual Seersucker force. []

Ground Forces: Slower Erosion

In comparison to Iraq's other forces, the ground forces have suffered less degradation, in part because the regime has sought to preserve their capabilities so they can protect the regime and maintain internal security. Nonetheless, the capabilities of Iraqi ground forces have slowly but steadily eroded since the 1995 Update Memorandum. Areas of particular ground forces degradation include: flagging troop readiness and morale; strained combat materiel availability; inadequate unit logistics and support; and weakened transportation networks and sustainment infrastructure. []

Kuwait: Attack Options []

Most of the attack options available to Saddam during 1994-95 remain viable today. []

Limited Attacks

Using III Corps forces, Iraq could conduct raids to damage or destroy selected facilities west and north of Kuwait Bay. Because III Corps units are garrisoned close to the border and deploy for counterinsurgency operations, they could mount limited-sized operations in less than 24 hours with little or no warning. If a Republican Guard unit were employed in this scenario, its movement south from the Baghdad area could provide additional warning. []

Rapid Buildup, Major Offensives

To limit Western warning, Iraq could launch a major offensive employing Regular Army units already garrisoned in the south or, more likely, launch

a combined RGFC-III Corps Regular Army attack composed of four to five heavy divisions, of which two or three would be Republican Guard armored divisions. [redacted]

[redacted] In the absence of an adequate Western response, Iraq remains able to overrun Kuwait under either of these attack options. [redacted]

Attack After A Deliberate Buildup: A Disappearing Option

In our 1994 and 1995 estimates, the Intelligence Community judged that Saddam's preferred attack option would be a major operation of some 13 to 18 divisions, led by a three-division RGFC Corps. This option would aim to seize Kuwait and rapidly extend combat operations deep into Saudi Arabia to preempt or prevent Coalition ground force reinforcement. Its size would necessitate a lengthy buildup, [redacted]

Although Saddam probably prefers an option of this sort—hoping to preempt Coalition reinforcement and a reprise of Desert Storm—we believe that such an option is no longer as feasible because of Iraq's greater vulnerability to air strikes and because of the deterioration of Baghdad's strategic transportation capabilities. Saddam probably holds the same assessment. For this reason, we believe that an Iraqi attack into Kuwait, particularly a large-scale attack that extended into Saudi Arabia, is highly unlikely today. [redacted]

What If Saddam's Risk Calculus Changed? A High-Risk Desperation Attack

In the unlikely event that Saddam decided to attack Kuwait, he probably would choose a rapid buildup of RGFC-Regular Army units, using four to five divisions to seize Kuwait as hostage for subsequent negotiations. Threats to use weapons of mass destruction (WMD) would reinforce his negotiating stance. If Saddam believed the Coalition response threatened the destruction of his regime, he would be likely to use WMD—against Kuwait or in the region. [redacted]

[redacted]

Views of Outside Experts []

To tap into a broader range of views and perspectives, we supplemented our analysis by engaging a retired policymaker—Ambassador Joseph Wilson—and a warfighter, Gen. William Hartzog, USA (ret.). []

Ambassador Wilson served in Baghdad from 1988 to 1991 as the Deputy Chief of Mission. He was the last American official to meet with Saddam Husayn prior to the launching of Desert Storm. []

Ambassador Wilson agreed with the NIE key judgment that the impact of sanctions had degraded Iraq's military capabilities and had narrowed Saddam's attack options. He noted that this was an assessment the Embassy similarly reached prior to Desert Storm; that is, that sanctions would be effective in degrading Iraq's military capabilities (but would be insufficient to force Saddam out of Kuwait). He found the depiction of the logistic problems to be credible, especially because he had noted these types of problems in Iraq's war with Iran. He doubted that the Iraqi military could be inventive in developing new operations, because—in his view—Iraq's military institutions and leadership tend to plod along. []

In contrast to the judgment in the NIE, Ambassador Wilson gave greater emphasis to miscalculation by Saddam, rather than desperation, as the dynamic that would trigger an attack to seize Kuwait. Wilson described Saddam's character as an eclectic mix of narcissism, derangement, thuggery, and unrepentant ambition. []

Saddam would act upon any perceived indication of weakness among his enemies, and for this reason—Wilson emphasized—Saddam has to be confronted with blunt force. In his view, this was why Desert Fox had proven so successful. He felt that Saddam was reviewing the Balkan crisis for opportunities to drive wedges between UN Security Council members—particularly France, Russia, and China—and the United States. []

Wilson concluded that Saddam equates his own fate with that of the Iraqi nation. Saddam defines victory as merely his own survival. Thus, as Saddam emerges from each confrontation with the Coalition, he sees himself as "victorious" and having won a renewed opportunity to pursue his regional ambitions. []

(continued)

Looking Toward the Future

Iraq's military capabilities will continue a slow and steady decline as long as both economic sanctions and the arms embargo are maintained. Smuggling and other efforts to circumvent the embargo will be inadequate to halt this trend. []

Views of Outside Experts [] (continued)

General Hartzog served as Commanding General, Training and Doctrine Command (TRADOC), and was the J-3 for Southern Command during Operation Just Cause in Panama. []

General Hartzog regarded the judgments of Iraq's military capabilities as accurate, and he took note of the enduring institutional strengths of Iraq's ground forces as compared to other regional ground forces. He cautioned that increased corruption in the officer corps might not necessarily be an accurate indicator of declining morale and leadership. He thought that the Iraqis might simply view this as an acceptable method for officers to compensate for other hardships. []

Hartzog thought that the operating style of Saddam's regime was similar to that of strongmen he had dealt with in Latin America. Hartzog's observation was that dictators over time purge individuals of moderation and competence from their inner circle. Eventually the remaining leadership consists of a chief and a coterie of sycophants and blood relations. Hartzog doubted that the security forces of such regimes would fight to the end for the tyrant, and he felt

that these forces would "flee like rats off a sinking ship" if the regime were confronted directly by a committed enemy. []

We asked Hartzog about the judgment that Saddam would be likely to use WMD if a Coalition military response directly threatened the regime. We were particularly interested in Hartzog's thoughts as to what threshold would have to be crossed for Saddam to believe the end was imminent, thus making him more likely to embrace the risks associated with WMD use against his enemies. Hartzog felt that dictators such as Saddam would only think the end was near when tangibly and directly threatened; for example, if Coalition paratroopers were deployed on the palace grounds. In Hartzog's view, such dictators have a high threshold for desperation because of their delusions of eminence and invincibility and would retain the belief that they could outwit their enemies through evasive maneuvers within the country's borders even as the country was subjected to massive attack. []

Discussion

Iraqi Military Capabilities Through 2003

Iraq's Current Military Capabilities

Four more years of UN sanctions and embargoes, along with damage inflicted by US military operations, have significantly degraded Iraq's military capabilities. Erosion of Iraqi Air Force capabilities has been most pronounced, reflected in a continuous decline of operational aircraft, sortie generation rates, and pilot training. Air defense capabilities have suffered more recently, primarily from destruction by Coalition air forces. Since late 1998, naval forces have been more active; however, naval forces remain incapable of defending against Coalition naval or naval-based operations. Ground forces have fared comparatively better than other services, but even they are less well prepared for major combat operations than in 1994 and 1995.

Despite these difficulties, Iraq's armed forces are capable of defeating internal opposition groups

We continue to assess that, without significant and timely opposition from Western forces,² Iraq could overwhelm Kuwait, because of the small size of Kuwait's military and its long vulnerable border with Iraq. Iraq continues to fall behind Israel in both

² "Western forces" are defined as those US and Coalition units presently in theater augmented by US and Coalition forces that could rapidly deploy to the region.

the qualitative and quantitative military balances. Iraqi and Iranian conventional forces have different sets of strengths and weaknesses. We judge that neither country could gain a decisive military advantage over the other. Iran has a huge naval advantage and a limited and growing advantage in air capabilities. Iraq's Republican Guard Forces Command (RGFC) is superior to Iran's ground forces. Finally, we judge that Iraq retains residual chemical and biological weapons of mass destruction (WMD) and missile capabilities that can inflict severe damage on unprepared military forces and disrupt host-nation logistic functions and facilities that would be used to support the deployment of Coalition forces.

Enduring Vulnerabilities and Strengths

Iraq's military suffers from longstanding endemic vulnerabilities that undermine the morale of troops, impair unit cohesion, and hinder combat leadership. Materiel and technical shortfalls exacerbate these vulnerabilities.

- Politicization, nepotism, and rampant corruption detract from the professionalism of the officer corps.
- Saddam's inherent distrust of the military and his repressive policies foster fear and resentment, and they discourage initiative, risk-taking, and candor among officers and enlisted men. In particular, military commanders resent the authority of Saddam's intelligence officers over their operations.

(Page 10 - Lender)

Figure 2
Iraq's Forces and Equipment Inventories as Compared to Other Regional Powers^a

	Iraq
1994 Manpower ^b	400,000
Tanks	2,700
APC/IFV	4,300
Artillery	2,100
MRLS	220
Combat Aircraft	340
1999 Manpower ^b	350,000
Tanks	2,600
APC/IFV	3,300 ^{c, d}
Artillery	2,000
MRLS	210
Combat Aircraft ^e	310

^aThis includes only personnel on active duty and equipment assessed to be operational.

^bGround forces personnel only.

^cIncludes some command vehicles that were not included in 1994 Iraqi totals.

^dIncludes reconnaissance vehicles that were not included in 1994 Iraqi totals.

^eFighter/fighter bombers.

- Communication between units is intentionally limited to discourage coup plotting. This approach reduces effective coordination and cooperation between commanders, units, and the various military services.
- Iraq's ethnic (Arab versus Kurd), religious (Sunni versus Shia), and tribal divisions contribute to mistrust, resentment, and a lack of motivation among military personnel. Favoritism shown toward elite security and Republican Guard units has a similar impact, especially in the Regular Army.
- Family hardships resulting from regime economic policies and UN sanctions continue to distract officers and enlisted men from their

military tasks. Absences from duty to work civilian jobs is a common occurrence. Poor pay and benefits and loss of status also undermine morale and motivation. *These difficulties are probably greater today than in 1995.*

- Shortcomings in leadership, training, soldier skills, and execution of combined arms doctrine continue to limit Iraq's ability to exploit the effectiveness of the relatively few modern weapons it possesses.
- Continuing internal security operations fatigue men and equipment.

Nevertheless, in comparison to other potential regional foes, Saddam's military retains several strengths and is likely to do so in the future:

- Iraq's military remains larger than that of the combined Gulf Cooperation Council states or other Arab neighbors.
- Iraq has a well-established military-industrial base by regional standards.
- Baghdad's forces have more combat experience and logistic expertise. Iraqi officers have good staff skills. The Iraqi military has shown its ability to implement technical and tactical innovations to overcome specific obstacles.
- By regional standards, Iraq maintains a regular and comprehensive schedule of training and exercises and a significant military education infrastructure. Frequent rapid deployments and military exercises have somewhat enhanced readiness.
- Iraqi leaders know the collection capabilities of hostile intelligence services, and they generally implement excellent operational security and denial and deception plans.

The Iraqi Air Force

The Iraqi Air Force (IZAF) is substantially less capable today than in 1995. Sanctions and embargoes are the major cause of the Air Force's decline. Saddam's distrust of IZAF officers also has contributed to the degradation of the Air Force. To discourage pilot defections or attacks against the regime, fuel and armament loads are usually restricted.

- *Iraq has had difficulty keeping its best aircraft flying.* Since the 1994 NIE, Iraq has essentially grounded its fleet of 14 MiG-29s.

The number of sorties flown by Iraq's 31 Mirage F-1s declined in 1995 and 1996 from the comparatively high levels of flight activity seen in 1994, followed by a further, precipitous drop of some 65 percent in 1997. Iraq apparently has managed to obtain spare parts for its F-1s through smuggling. By mid-1998, F-1 flight activity increased, but flight activity remains far below the 1994 level.

- *The number of aircraft sorties has declined,* largely because of maintenance problems and shortages of spare parts. In 1998, the IZAF averaged some 65 sorties per day, compared to around 90 in 1995. We believe the Iraqi Air Force would be hard pressed to maintain two sorties per day/per aircraft for more than two days.
- *The combat proficiency of most Iraqi pilots is low and continues to decline.* Pilots are now conducting fewer training flights than at any time since they resumed flying in 1992. Pilots are now flying a mean level of only 20 to 30 hours annually, compared to 50 to 70 hours in 1993. Only some 20 to 25 percent of IZAF sorties have been dedicated to combat training, and much of that lacks realism. Iraqi pilots have difficulty finding and striking ground targets during training. We judge the Iraqi Air Force has little or no nighttime or adverse weather capabilities.

Mission Capabilities

The Iraqi Air Force's ability to protect national airspace and to conduct effective offensive operations is limited. Although most Iraqi pilots are incapable of successfully engaging a Western Coalition pilot, a small cadre of senior, very qualified pilots—who receive more than

Figure 3
Iraq: Military Totals

Unit	Northern Iraq			RGFC ^a		Southern Iraq		Total
	I	II	V	I	II	III	IV	
Corps								RGFC/RA ^b
Divisions								
Armored		1		1	2	1	1	3/3
Mechanized	1		1	1		1		1/3
Infantry	3	2	3	1	1	1	2	2/11
Brigades								
Armored	1	2	1	3	4	3	2	7/9
Mechanized	2	1	2	3	2	3	1	5/9
Infantry	9	6	9	3	3	3	6	6/33
Commando	1	1	1			1	1	0/5
Special Forces				1	1			2/0

Ground Forces	Total ^c
Personnel	350,000
Tanks	2,600
APC/IFV	3,300
ARTY	2,000
MRL	210

Naval Forces	Total
Personnel	2,500
Submarines	0
Frigates	1 ^d
Patrol Craft	4 ^e

Air Defense Forces	Total
Personnel	17,000
Mod SA-2 Batteries	11
SA-2 Batteries	9
SA-3 Batteries	19
SA-6 Batteries	8

Air Forces	Total
Personnel	18,000
Combat Squadrons	18
Bombers	0
Fighters/Fighter-Bombers	310
Combat-Capable Trainers	197
Attack Helicopters	85

Ballistic Missile Forces	Launchers	Missiles
Al Hussein	Several	Several dozen

^aRepublican Guard Forces Command.
^bRegular Army.
^cNational equipment inventory totals.
^dNot operational.
^ePatrol craft less than 40 meters.

the mean level of flight training hours—would be able to prosecute and execute an intercept mission. This group of pilots spearheads Iraq's

challenges to the No-Fly Zones. Iraqi pilots have a minimal capability against regional threats.

Iraqi Air Defense

Iraq's Air Defense Forces are significantly less capable today than even a year ago, primarily because of losses inflicted by Coalition forces in Operation Desert Fox (December 1998) and subsequent strikes. Sanctions also have interfered with maintenance capabilities; direct observation of Iraqi missile handling and maintenance procedures indicates very low standards. Some surface-to-air missiles (SAMs) are likely to reach the end of their useful service life, potentially making them less reliable.

- **Combat Losses.** Twelve strategic SAM batteries and two SA-6 units—20 to 25 percent from each force—have been rendered nonoperational since late 1998. Strikes against Iraq's integrated air defense system (IADS) in the No-Fly Zones have reduced the number of radars and forced Baghdad to pull back surviving equipment.
- **Losses of Reconstitution Capabilities.** Destruction of the At Taji missile maintenance facility during Desert Fox has significantly reduced Iraq's SAM repair and refurbishment capabilities. Iraq has few fire-control radars in reserve. SAM radars struck during Coalition strikes in early 1999 were either not replaced or replaced with radars from other SAM batteries, rendering the donor batteries nonoperational.
- **Damage from Defensive Efforts.** Constant redeployment of SAM equipment not designed for mobile operations degrades readiness.

In the face of these losses and difficulties, the military has displayed considerable ingenuity and resourcefulness. Iraqi units have: modified tactics to reduce vulnerability; employed denial

and deception techniques with some success; decentralized operations to reduce time required for target identification; and modified equipment to improve electronic counter-countermeasures.

Mission Capabilities

Despite ongoing efforts to adapt operations and equipment, Iraq's Air Defense Forces remain unable to mount an effective defense against Coalition threats. They are significantly less capable today than in 1995 of protecting Saddam's forces and high-value installations from Coalition air strikes. Air Defense Forces would be more effective in defending against Gulf Cooperation Council (GCC) or Iranian air threats, although their ability to cover broad sectors and sustain operations against these threats also has been degraded by the impact of sanctions and Coalition strikes.

Iraq's Navy

Iraq's Navy was devastated during the Gulf war, and Baghdad has been able to do very little to reconstitute its capabilities since then. Between 1994 and 1998, Iraqi naval activity was limited to small craft patrols along its littoral and inland waterways. Iraq's only post-Desert Storm naval and coastal defense exercise was in late 1993. This lack of training and poor maintenance on Iraq's armed craft and coastal cruise missile equipment limit the threat from these systems.

- In response to the December 1998 Desert Fox attacks, Iraq deployed several antiship cruise missiles (ASCMs) and support equipment to the Al Faw peninsula only to lose at least one launcher to US air strikes in February 1999.

Iraq has only two to four launchers left, and the majority of the remaining missiles are judged marginally operational at best.

- Iraq lacks over-the-horizon targeting capabilities to ensure accurate, maximum-range [] attacks by its CSSC-3 system. Shorter range engagements, out to around 20 to 25 nm, can be conducted with greater effectiveness.
- With only one operational antiship cruise missile boat (the STYX-1A equipped OSA I PTG), five gunboats, and a limited coastal surveillance capability, Iraq's shipborne surface attack capabilities are practically nonexistent.
- Iraq's naval mining operations capability is limited by a lack of suitable launch platforms. Iraq could, however, employ small craft and fishing boats to lay mines or conduct harassment mining with drifting mines. We do not know the size of Iraq's mine inventory. []

Mission Capabilities

Overall, Baghdad's navy cannot defend Iraq from naval or naval-based threats posed by either Coalition or Iranian forces, but it could potentially sink or severely damage a ship with its residual Seersucker force. The Iraqi naval threat beyond its territorial waters is limited to potential harassment mining in the extreme northern Gulf. []

Iraqi Ground Forces

Iraq has four fewer divisions today than it did in 1994. Saddam's six RGFC divisions—the backbone of his military—are his most capable forces and remain the best trained, equipped, paid, and led military force in Iraq; they also are the most effective regional fighting force in

the Persian Gulf. Iraq's Regular Army has fared less well and would be likely to have low effectiveness during high-intensity combat operations. In comparison to Iraq's other forces, the ground forces have suffered less degradation, in part, because Saddam has sought to preserve their capabilities so they can protect the regime and maintain internal security.

- ***Flagging Troop Readiness and Morale.***

Unit manning levels largely have remained unchanged since the 1994 NIE, and all ground force units still suffer from manpower shortfalls. Compounding this problem is the apparent unreliability within the ranks, especially in the Regular Army. Harsh living conditions, meager pay, a corrupt officer corps, and overall dissatisfaction continue to result in routine absences without leave and desertions. The absences disrupt daily administrative, training, and security functions.

- ***Strained Combat Materiel Availability and Readiness.***

For the most part, Iraq has been able to retain or improve the levels of combat equipment holdings in its ground forces since the 1994 NIE, although most units still remain understrength. RGFC units receive priority for quantity and quality of equipment. They possess about 80 percent of authorized tanks and artillery pieces and about 90 percent or better of authorized armored infantry fighting vehicles and armored personnel carriers. The six Regular Army heavy divisions, on the other hand, continue to be less well equipped and ready. Regular Army infantry divisions are especially plagued by shortages in authorized tanks and artillery systems. Iraqi combat units would be hard pressed to maintain

strength during operations. During the initial phase, maintenance losses alone probably would reduce the number of tanks and other armored vehicles by around 10 percent for every 100 km of cross-country movement. The loss rate probably would increase by about 1 percent per day for each day of continuous operations.

- ***Inadequate Unit Logistics and Support.***

Since the 1995 Update, logistic capabilities and the inventory of support vehicles have degraded. Regular Army maneuver battalions and brigades do not have first- or second-line transport assets. Even the better equipped RGFC lacks equipment required to sustain deployment and combat operations beyond the first one to three days of operations. RGFC maneuver battalions have 85 to 100 percent of their trucks; their division-level supply units only have 33 to 50 percent of authorized assets, enough to support little more than a single brigade per division. Moreover, in early 1998, the RGFC was forced to transfer several hundred trucks to most Regular Army corps, underscoring the severity of some shortages plaguing Regular Army units. Vehicle repair capabilities are also inadequate.

Mission Capabilities

The capabilities of Iraqi ground forces have slowly but steadily eroded since the 1995 Update, making them less able to engage in high-intensity combat operations. The factors most likely to limit Iraq's offensive ground operations are poor morale and motivation, ineffectiveness of Iraqi air defenses against Coalition air strikes, and the fragility of ground force support and maintenance systems at all echelons. Iraq's ground forces could still overwhelm those of GCC states, and could effectively defend Iraqi territory from an Iranian ground invasion.

National Movement and Sustainment Infrastructure

Iraqi national transport and logistic capabilities have degraded significantly since the 1995 Update. The impact of UN sanctions and operational wear and tear have combined to reduce Iraq's ability to move men and equipment and to sustain forces in combat operations. The increasingly fragile supply and transport system remains vulnerable to interdiction from enemy attack.

- ***Heavy Equipment Transporters (HETs).***

HETs are Iraq's primary means of moving its heavy divisions. We estimate the total operational HETs in Iraq to number between 515 to 565, roughly 30 percent more than our estimates in 1994 and 1995. By employing all of these HETs, Iraq has a nominal simultaneous lift capacity of one heavy division. However, the disabling of a significant number of HETs engaged in a redeployment of RGFC brigades during the summer of 1998 suggests that these vehicles could be prone to breakdowns during high-tempo operations as a result of poor maintenance and a lack of spare parts caused by UN embargoes.

- ***Highway Infrastructure.*** Since the 1995 Update, substandard materials used for road repair and maintenance have degraded the throughput capacity of Iraq's national highways, especially during inclement weather. Some bridges destroyed during Desert Storm have yet to be completely repaired or replaced.

- ***Rail System.*** Iraq's railroads suffer from inadequate maintenance of both rolling stock and rails.

Totals for Heavy Equipment Transporters [redacted]

In 1994 and 1995, the Intelligence Community (IC) estimated that Iraq had about 400 operational Heavy Equipment Transporters (HETs). The IC now estimates that the total number of operational HETs (defined as the trailer portion of the tractor-trailer combination) in Iraq has increased to between 515 and 565. The increase in operational HETs primarily resulted from an intensive Iraqi repair campaign. We judge that an additional 550 HET trailers are inoperable.

[redacted]

US Central Command (CENTCOM), in contrast, estimates that the Iraqi military has a potential inventory of approximately 750

operational HETs. [redacted]

[redacted]

The Intelligence Community and CENTCOM agree that the 200 HETs in question would be sufficient to transport the equivalent of slightly more than a heavy brigade. This total, however, would not be sufficient to change the assessments reached in the threat scenarios. [redacted]

[redacted]

Braking systems on some of the cars are reportedly inadequate, and open-source reporting indicates Iraq's automated signaling system is degraded. These problems limit the number of cars per train and reduce the safe speeds at which trains can operate. We calculate that if Iraq's rail system were fully refurbished and operated unimpeded at optimum efficiency, for a one-time surge, it could relocate a complete RGFC heavy division in six to seven days. [redacted]

Saddam's Attack Options [redacted]

Limited Attacks

Baghdad retains forces and capabilities to launch limited division-sized or smaller attacks into Kuwait. Using III Corps and/or Republican Guard elements, Baghdad could conduct raids to damage or destroy selected facilities west and north of Kuwait Bay—to include locations used by Coalition military forces—or seize and hold selected areas or facilities adjacent to the border. [redacted]

Iraqi Weapons of Mass Destruction and Ballistic Missile Capabilities [redacted]

We judge that Saddam continues to believe that Iraq needs Weapons of Mass Destruction (WMD) and long-range missiles to: 1) counter Israeli and Iranian capabilities in these areas; 2) deter military attacks, including those by Coalition forces; and 3) achieve regional preeminence. Since the publication of the 1994 NIE, Saddam's belief is likely to have been reinforced by advances in WMD and missile capabilities by Iran, Pakistan, India, and other countries. We judge that Iraq retains the personnel, documentation, and some of the critical equipment necessary to continue and advance its WMD and delivery programs. [redacted]

Iraq's Ballistic Missile Capabilities

We assess that, in addition to the United Nations-authorized Al Samoud SRBM and Ababil-100 SRBM development programs, Iraq currently maintains a small, covert force of extended-range SCUD-type ballistic missiles, a few mobile missile launchers, and a small specialized cache of proscribed production equipment. Most of the missiles are likely to be the 600-km range Al Hussein variant, but Iraq also may have a few of the 900-km range Al Abbas missiles. [redacted]

These may be equipped with chemical or [redacted]

biological warheads and could be made ready for launch perhaps in a matter of hours to days. [redacted]

Chemical Warfare Capabilities

Baghdad has the infrastructure necessary to support limited Chemical Warfare (CW) agent production. We assess that, since the departure of UNSCOM inspectors in late 1998, Iraq could have erected and begun operating small CW facilities for production of blister or nerve agents. In addition, Iraq continues to conceal a small stockpile of CW agent munitions and production equipment. We estimate that Iraq's stockpile of chemical agent in bulk storage and filled munitions is between 10 and 100 metric tons. We believe an additional 200 tons of CW agents could be produced using unaccounted-for precursor chemicals, which Iraq cannot indigenously manufacture. The location, nature, and condition of these remaining stockpiles are unknown, but if stabilized properly, these agents could be used for weapons. [redacted]

(continued)

Depending on the duration, distance, and speed of the raids, Iraqi forces could inflict considerable damage on selected oil and water facilities in northern Kuwait. Iraq's forces, however,

would not be able to hold Kuwaiti territory in the face of a determined Western military response. [redacted]

Iraqi Weapons of Mass Destruction and Ballistic Missile Capabilities [] (continued)

Mustard agent is the most likely component of the stockpile. Iraq also produced and stockpiled tabun, sarin, GF, and VX. Iraq also retains several thousand unaccounted-for chemical-filled munitions, possibly including a few dozen Al Husayn missile warheads. []

Biological Warfare Capabilities

We judge that Iraq continues to conceal a small stockpile of Biological Warfare (BW) agents, munitions, and production equipment. Iraq admitted to producing 8,500 liters of anthrax spores and nearly 20,000 liters of botulinum toxin, and may have produced as much as three times the amounts declared. Iraq's claimed unilateral destruction of these materials has not been verified by UNSCOM. Anthrax has a long shelf life and would probably still be effective. With the discontinuation of UNSCOM inspections, we assess that Iraq will exploit opportunities to produce BW agents and further develop agent production capabilities. []

Nuclear Weapons Capability

Operation Desert Storm, IAEA/UNSCOM inspections, counterprocurement operations, and import sanctions effectively put a halt to Iraq's nuclear weapons program. All known fissile material has been either removed from the country or placed under IAEA control, and all identified nuclear facilities have been destroyed. In the absence of UN sanctions and effective monitoring, Iraq would need five to seven years and significant foreign assistance to rebuild a sufficient infrastructure to produce fissile material. Iraq could produce a nuclear weapon in five to eight years, with foreign assistance. However, if Baghdad can acquire sufficient weapons-grade highly enriched uranium from a foreign source, the time it will take Baghdad to produce a nominal nuclear device would be greatly reduced. If Iraq obtains fissile material and overcomes pre-Gulf war technical hurdles []

it could have a weapon ready for missile delivery in about one year. []



would lack key divisional and corps logistic and fire support, including engineer, maintenance, medical, and artillery assets required to support combat operations beyond three days. In contrast, including these additional assets before the attack, while increasing the invading forces' combat effectiveness, would significantly lengthen deployment timelines and result in increased warning for the West.

Rapid Buildup, Major Offensives

Regular Army-Only Attacks

To limit Western warning, Iraq could launch a major offensive employing Regular Army units already garrisoned in the south. Iraq could organize an offensive using only III and IV Corps units in about two to three days. We judge this option to be very unlikely because of the weakened readiness, morale, and reliability of Regular Army units. Saddam and his military leaders undoubtedly share this assessment.



Assessment of Rapid Buildup Attacks

With little unambiguous warning and the absence of a significant and timely Western military response, Iraq remains able to overrun Kuwait with the combinations of forces we described for the rapid buildup attack scenario.



RGFC-Led Attack

Iraq could launch a combined RGFC-III Corps Regular Army attack composed of four to five heavy divisions, of which at least two would be Republican Guard armored divisions. Using HETs and rail, Iraq, in the four division attack, could position the attack force of 12 brigade groups in assembly areas opposite Kuwait in some four to five days if the flow of forces were unimpeded. In expediting the operation to reduce Western warning, the invading force

However, the warning times presented in this scenario are worst case from the US standpoint. Our calculations assumed that Iraq's deployment timelines were unimpeded by pre-invasion Coalition strikes or delays in the flow of Iraqi forces south. Maintenance difficulties, transportation bottlenecks, weather, other intangibles, as well as insurgent and possible Coalition strikes probably would disrupt Iraq's plans and slow movement and attack times.

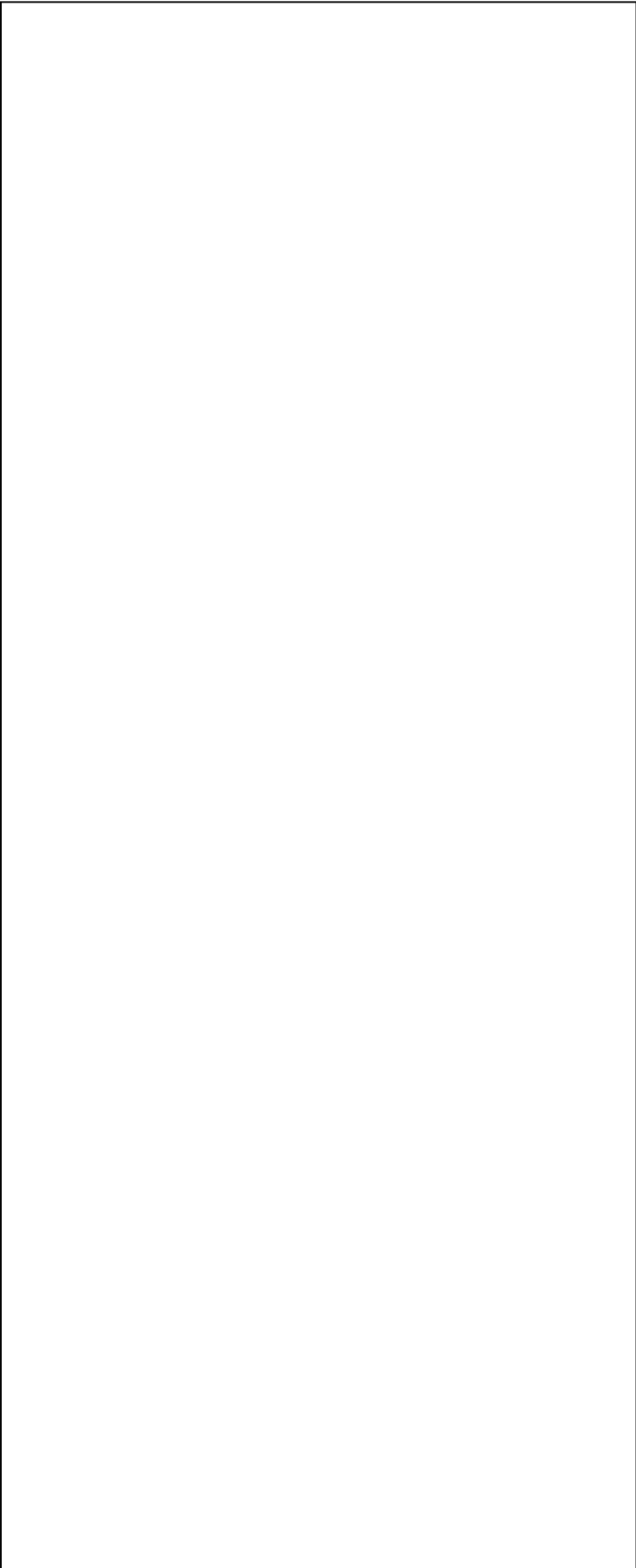
- Iraqi capabilities demonstrated during the 1994 move toward Kuwait, the limited-objective attack in 1996 on Irbil, and the 1998 RGFC rotation suggest that Iraq would have difficulty achieving the unimpeded timelines calculated in this scenario.

Attack After a Deliberate Buildup: A Disappearing Option

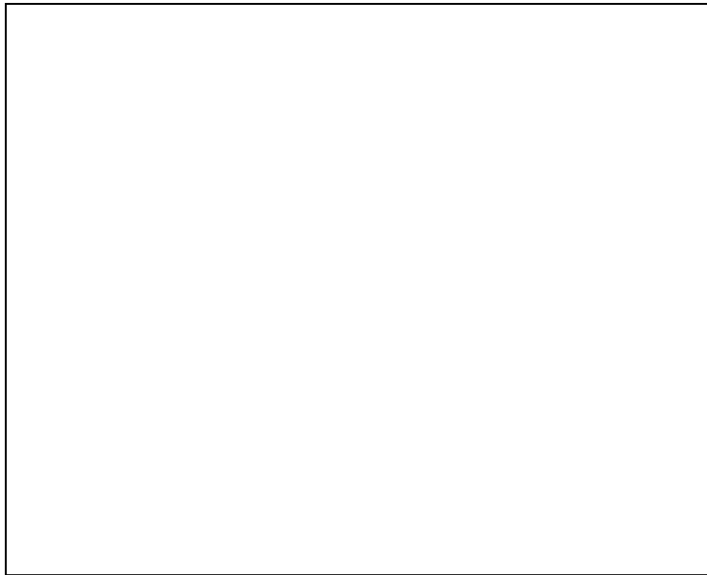
In the 1994 and 1995 estimates, the Intelligence Community judged that Saddam's preferred attack option would be a major operation using some 13 to 18 divisions, led by a three division RGFC Corps. This option would aim to seize Kuwait and rapidly extend combat operations deep into Saudi Arabia. Its size would necessitate a lengthy buildup.

We now judge that such an option is no longer as feasible under prevailing circumstances.

- ***Vulnerability to Western air strikes.***
The combination of movement restrictions imposed by the Coalition, the greater time required to assemble the assault echelons for this option, and the presence of substantial Coalition air capabilities in the region make it difficult for the Iraqis to execute this option.
- ***Limitations in Iraqi military capabilities.***
Iraq's military forces are weaker than at the time of the 1995 Update, and Iraq has not developed an operational or technological counter to defeat the capabilities of Coalition forces.
- ***Iraq's deteriorating transportation capabilities.*** The military supply and transport system is increasingly unable to handle large-scale, sustained operations. Although Iraq can surge its supply and transport system for initial operations, its roads, rails, and transport equipment would begin to degrade almost



immediately. The cumulative effect of deficiencies and shortages would become more pronounced the longer an operation continued.



Saddam's Calculus in Choosing an Attack Option

We judge that Saddam's fundamental goals remain unchanged since our last Estimate. He seeks—above all—preservation of his regime, and the restoration of Iraq's territorial integrity. In the longer term, Saddam still wants to dominate the region including retaking Kuwait. To achieve these goals, Saddam's most important near-term objective continues to be the ending of UN sanctions, the arms embargo, and other international restrictions.

Reading Saddam's intentions is difficult. He can be impulsive and deceptive; critical factors important in shaping his behavior are largely hidden from us. But there are two fundamental guideposts that drive our calculus of his actions. First, we judge that Saddam would be

careful not to place his personal survival at risk. Second, he probably believes that a reinvasion of Kuwait would provoke a Coalition response that could destroy his regime.

Deliberate Behavior

Using this line of analysis, we assessed in 1995 that if Saddam were to attempt to seize Kuwait, he would choose an option most likely to deter or preempt a Coalition ground force buildup in the region. Only in that way could he avert a more lethal reprise of Desert Storm. This option would require a large-scale attack, of about 13 to 18 divisions, to seize Kuwait and rapidly extend operations deep into Saudi Arabia, aiming to seize reception ports and to hold Saudi oil fields hostage.

As discussed in the previous section of this Estimate, we believe an attack of that magnitude is no longer as feasible under prevailing conditions; Saddam probably believes this too.

Desperate Behavior

If, however, Saddam senses that he is increasingly being "cornered," he could alter his risk calculations. Saddam might conclude that an invasion of Kuwait, however risky, was the only hope of averting disaster. His intent would be to refocus world attention on Iraq. By threatening or actually unleashing a major military operation in the region, most likely accompanied by threats to use WMD, he could bargain for full sanctions relief in exchange for a pullback of mobilized forces or, in the event of an invasion of Kuwait, an Iraqi withdrawal.

- Saddam might gamble that US political and popular will would break if he threatened to inflict substantial casualties on US forces. He might further conclude that Kuwait's GCC neighbors would be reluctant to allow US forces to operate from their territories under such conditions.

Conclusion

A deliberate, major Iraqi attack into Kuwait is unlikely. Under prevailing circumstances, we judge an Iraqi attack into Kuwait is less likely today than in 1995.

If Saddam decided to invade Kuwait under prevailing conditions, he would take this decision because he saw externally supported regime destruction as an impending likelihood; thus, he would be willing to accept significant risks to prevent the collapse of his regime. His most likely attack option would be a rapid buildup RGFC-Regular Army attack using four to five divisions to seize Kuwait as hostage for subsequent negotiations. WMD threats would reinforce his negotiating stance. If Saddam believed the Coalition response directly threatened to destroy his regime, he would be likely to use WMD.

Looking Toward the Future

Iraq's military capabilities will continue a slow and steady decline as long as both economic sanctions and the arms embargo are maintained. Smuggling and other efforts to skirt the embargo will be inadequate to stem this trend.

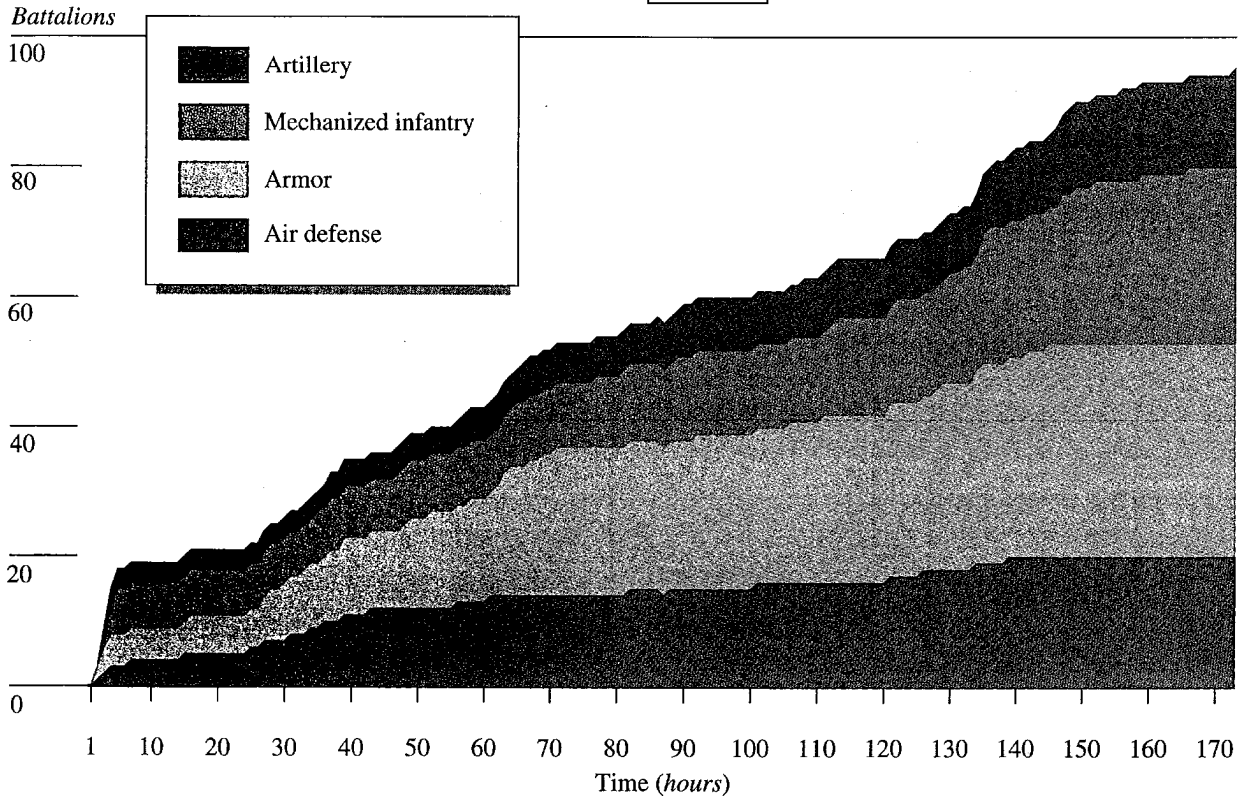
In 1994, we judged that Iraq would not be able to improve its military capabilities unless the ban on Iraqi imports and exports was modified or lifted, particularly the ban on oil exports. We also judged that there would be no significant modernization or force expansion as long as the arms embargo held. Our view remains unchanged. Although Iraq since 1997 has been able to sell limited amounts of oil under UN

supervision, the regime has not been able to divert these revenues because they remain under UN control.

In response to continuing economic and trade restrictions, Saddam, in parceling out limited resources, will continue to give priority to his ground forces—because of their role in protecting the regime and maintaining internal order. We believe that demands on ground forces to conduct these missions are likely to increase with the continuation of sanctions and embargoes against Iraq.

As in the 1994 NIE, we judge that once the conventional arms embargo is lifted or rendered ineffective, Iraq—under Saddam or a Saddam-like figure—will begin a full-scale rearmament effort that emphasizes fielding the most modern, capable systems obtainable while retaining a mix of older and upgraded equipment. Ground forces and air defense forces will receive the highest priority; acquisitions are likely to include upgraded T-72s and BMPs, some T-90s, and the SA-10 system. Moreover, the modernization of Iranian capabilities will provide the impetus for redoubled Iraqi force modernization efforts in a post-sanctions environment.

Figure 5
Rapid Buildup Invasion: Iraqi Republican Guard and Regular Army Combat Battalions in Assembly Area



Note: Timeline shows unimpeded movement capability. Follow-on supply and support units (Corps and Division GS Artillery, Division Maintenance Battalion, Division Chemical Defense Company, etc.) will require an additional 4 to 5 days to close at the assembly areas. This timeline does not include Army III Corps AAA and RGFC SA-6/SA-8 units presumed to be predeployed in southern Iraq before the invasion buildup begins.

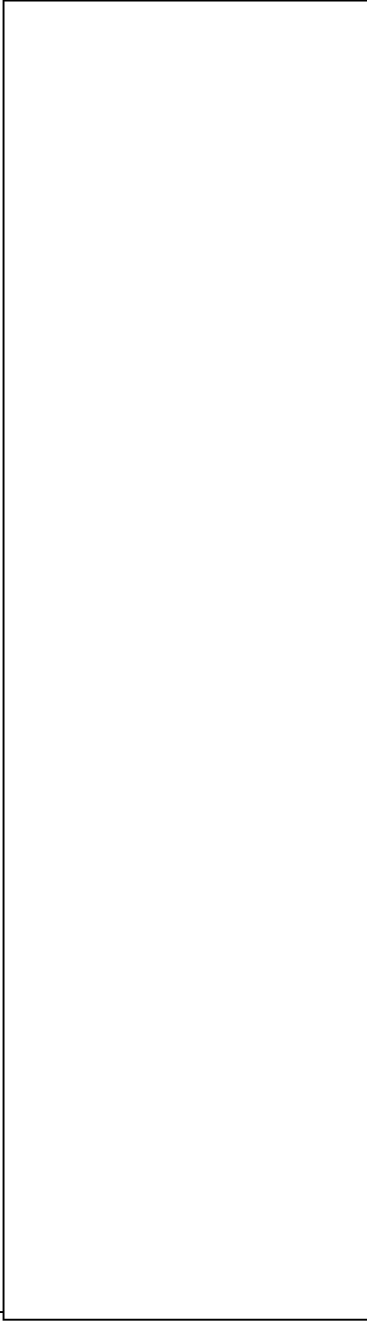
An end to the No-Fly and No-Drive Zones would significantly reduce the Community's ability to provide warning and would significantly enhance the ability of Saddam or a like-minded successor to threaten his neighbors. Future improvements to Iraq's military

capabilities need not be extensive to increase the threat to Kuwait. Iraq's forces will continue to outnumber those of Kuwait, particularly because Iraq will maintain a large military force structure to defend its borders from potential Iranian threats.

The National Intelligence Council

The National Intelligence Council (NIC) manages the Intelligence Community's estimative process, incorporating the best available expertise inside and outside the government. It reports to the Director of Central Intelligence in his capacity as head of the US Intelligence Community and speaks authoritatively on substantive issues for the Community as a whole.

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**Information available as of 16 April 1999 was used in
the preparation of this National Intelligence Estimate.**

**The following intelligence organizations participated
in the preparation of this Estimate:**

The Central Intelligence Agency
The Defense Intelligence Agency
The National Security Agency
The Bureau of Intelligence and Research,
Department of State
The Office of Intelligence Support,
Department of the Treasury
The Director of Intelligence,
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also participating:

The Deputy Chief of Staff for Intelligence,
Department of the Army
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**This Estimate was approved for publication by the
National Foreign Intelligence Board under the authority
of the Director of Central Intelligence.**