POLITICAL OBJECTIVES and MILITARY OPTIONS in the PERSIAN GULF

A Defense and Arms Control Studies Working Paper

By Barry R. Posen*

November 5, 1990

DEFENSE AND ARMS CONTROL STUDIES PROGRAM

Center for International Studies
Massachusetts Institute of Technology
292 Main Street, Cambridge, Massachusetts 02139

POLITICAL OBJECTIVES and MILITARY OPTIONS in the PERSIAN GULF

A Defense and Arms Control Studies Working Paper

By Barry R. Posen*

November 5, 1990

*The preparation of this paper would have been impossible without the assistance of the Conventional Forces Working Group: Nicholas Beldecos, Eric Heginbotham, Eric Labs, Jonathan Ladinsky, Daniel Lindley, Brian Nichiporuk and Kevin Oliveau.

Iraq's invasion of Kuwait has presented the United States with its first major post Cold War strategic challenge. This analysis examines the Persian Gulf crisis from a political-military perspective. I address three key questions. Why has the United States so forcefully committed itself to the Persian Gulf? What are the political objectives of the international coalition that has deployed forces in Saudi Arabia? Finally, does this coalition have the military capability to meet and fulfill those political objectives, and how would it employ this capability?

This paper does not address in detail the relative viability of the three alternative policy options available to the coalition that has formed to oppose Iraq. These options are a negotiated settlement based on major concessions to Iraq; a long siege designed to impose great economic hardship on Iraq for as long as it takes to force it to withdraw; or a war to liberate Kuwait. The pace of events imposes a choice between comprehensiveness and timeliness, and I have opted for the latter.

Why Is the US in Saudi Arabia?

Two broad sets of concerns have motivated the US to take the lead in containing Iraqi expansion--old fashioned "balance of power" considerations, and a more "idealist" interest in setting the terms of the post Cold War international political order.

The "power" stakes are clear. The Persian Gulf contains sixty to seventy percent of the world's proven oil reserves. It is not in the interest of the United States, or other developed or developing countries, most dependent to some degree on imported

oil, to have this resource controlled by one state, headed by a leader who has demonstrated great ambitions and considerable ruthlessness.

Control of these resources could convert to political power in a number of ways. Should Saddam Hussein gain full or even indirect control of nearly all Persian Gulf oil, he could manipulate oil prices and thus affect the performance of many economies. He could also offer concessionary oil prices to favored countries. Either might provide political influence over their governments. But of greater importance, Saddam Hussein could use the wealth acquired by the sale of conquered oil to buy even more sophisticated weapons and weapons technology. For example, Kuwait's 1988 oil revenues alone roughly equal the 1988 defense spending of Egypt or Israel. Thus, the conquest of Kuwait alone, if allowed to stand, will permit a huge new expansion of Iraq's already substantial military power. Fear of these military consequences would likely energize an even more intense military competition in the region. The regional arms race would intensify, including the search for chemical, nuclear, and ballistic missile technology. Incentives for preventive or preemptive war would mount. Given the importance of Persian Gulf oil to the world economy, this is not a comfortable prospect. And the possibility of a regional chemical or nuclear war is not a happy one; even if US national military capabilities seem adequate to isolate it from the violence of such a conflict, one can never be certain.

The United States and indeed, given the intense involvement of the UN, much of the international community, is also pursuing a second, more idealistic interest. The end of the Cold War has brought both fear and hope. However oppressive it was, the direct military competition of the two superpowers disciplined many potential regional competitors; the passing of the Cold War has raised the fears of new regional conflicts. But the new comity between the two rivals and the apparent progress in both nuclear and conventional arms control has raised the hopes that the great and middle powers can coexist with much lower levels of armaments. In this period of transition, statesmen in the US and elsewhere cannot want the first major lesson to be that it is easy for states to expand their wealth and power by the sword. With the momentous changes occurring in Eastern Europe, a region characterized by unsolved ethnic and national hostilities, this is the wrong time for the international community to permit aggression to go unchecked. This is the wrong time to imply that nobody cares if some states want to conquer bits and pieces of other states, much less effect the conquest of an entire country. Such an attitude can only encourage irredentist claims and make status quo states more fearful for their security and thus much more willing to arm excessively against any real or imagined threats to that security. Kuwait is the first test of the stability of post Cold War international politics.

What kind of threat does Saddam Hussein pose to these "realist" and "idealist" goals? Although the analogy between Hussein and Hitler can be overdrawn, there are a number of

disturbing parallels. Iraq is not Germany, and one doubts that it could become a world power. On the other hand, Hussein has used nationalist and pan-nationalist rhetoric to buttress his geopolitical goals, in much the same way Hitler advanced Germany's claim to the Rhineland, Austria, the Sudetenland, and Poland. Hussein has provided no clear stopping point in his territorial and political ambitions. Hussein is a military opportunist, unafraid to use military power both to threaten and to conquer, whenever he perceives that his targets are weak. In the war with Iran, he proved himself to have a sufficiently firm grip on the allegiance of his population to hold on to power while demanding great sacrifices. Finally, like Hitler's, his diplomacy depends on lies and deception. Prior to the August 2 invasion, Hussein informed several Arab leaders of his intention to respect Kuwait's borders and forswear an invasion as a means of resolving their differences over oil prices and disputed oil fields. In spite of concessions by Kuwait and the UAE on oil prices, Iraq launched an invasion. This record of ambitiousness, violence, opportunism, and deception makes it extremely difficult to have confidence in Saddam Hussein adhering to any political bargain unless considerable military force remains present to buttress that confidence.

In short, the stakes for the US, the Arab regional powers, and much of the rest of the world in the Persian Gulf are considerable and the threat to them is great. This accounts for the size and diversity of the coalition that the US has assembled.

Let us turn then to the objectives of the US military deployment as far as we can discern them.

Political Objectives of the Coalition

Three objectives were established as the crisis developed. The first was to prevent Iraq's further expansion into Saudi Arabia. After launching two wars of conquest and after giving the Saudis the same promises as the Kuwaitis before the invasion, the US felt that Iraq might not stop with Kuwait. News reports indicate that the Saudis may have come to this conclusion even before the US. Clearly there was no guarantee that Iraq would stop, nor did the US or the Saudis have the means at that moment to check any further moves militarily.

The second objective was to impose a severe cost on Iraq for its invasion of Kuwait. Over the sweep of history, the international political system has "socialized" states to a certain set of simple norms. The great would-be hegemons of modern history have ultimately been disciplined by coalitions of status quo powers who value their own security and sovereignty. The Soviet Union is only the last in a long line of unsuccessful expansionists. The purpose here would be to induce Iraq to see that expansionism has costs, and that the status quo ante bellum was more comfortable than they imagined. Out of this experience a more cautious Iraq should develop.

The third objective, more ambitious, emerged with full clarity in President Bush's speech on September 11, 1990. Although the objective was foreshadowed in a series of UN

resolutions that called for Iraqi withdrawal from Kuwait, it was the stark rhetoric of the President's speech that highlighted the seriousness with which the objective was likely to be pursued. "We will continue to review all options with our allies, but let it be clear: we will not let this aggression stand." US and UN prestige are clearly on the line; the US has threatened to use military power to roll back the conquest. The apparent intention that emerged in late October to dispatch additional troops to Saudi Arabia underscores the seriousness of the US intent. This is a major commitment, and of the three objectives I have outlined, it is the one that most deserves a major public debate--a debate that has not yet occurred. The President will need to clarify to the American people why this objective is so important that it merits the substantial loss of US lives that could attend any military effort to achieve it.

The Means: Political, Economic, Military

The primary means to fulfill these objectives thus far have been the economic embargo and the large-scale deployment of military forces to Saudi Arabia and the Persian Gulf. The military power in Saudi Arabia is, at the very least, intended to deter Saddam Hussein from further aggressive action and to thwart such action if it were attempted. To force Iraq to pay a high price and to encourage a retreat from Kuwait, the United States organized an international economic embargo of Iraq which precludes the sale of weapons, technology, or spare parts for Iraq's war machine. It also precludes the export and purchase of

Iraqi and (Iraqi-controlled) Kuwaiti oil. Saudi cooperation is central to this effort. First, the Saudis had to shut the major pipeline that carries Iraq's oil to the Red Sea. To embargo Iraq's oil, states even more dependent on imported oil than the US had to cooperate. Thus the Saudis had to pump more oil, employing their surplus capacity to offset the losses caused by the embargo. Saudi Arabia needed to feel militarily secure if it were to cut the outward flow of Iraqi oil and replace that oil itself. Without substantial US military forces to provide protection, Saudi cooperation would have been suicidal.

There are four additional military missions that have been discussed in Washington and the media with varying degrees of seriousness: 1. Police the embargo; 2. Take back Kuwait; 3. Destroy Iraq's chemical weapons manufacturing and nuclear research facilities; 4. Conquer Iraq and reorganize its government along peaceful and democratic lines, much in the same way the U.S. reorganized German and Japanese politics after World War II. A slightly less ambitious version of the last objective would be to do so much damage to the Iraqi military and to the Iraqi economy that Hussein's domestic prestige would collapse and his government would fall. There are also attendant missions such as preventing damage to the Saudi oil fields or pumping facilities during combat and conducting military operations without risk to the hostages held in Iraq.

Policing the embargo has thus far proven quite easy, as the coalition commands the sea. The conquest and political reorganization of Iraq, a socially mobilized nation of 18 million

people, would likely prove as difficult and as frustrating as the Soviet intervention in Afghanistan, or the US intervention in Vietnam. It is almost inconceivable that the US, much less the UN, could establish this objective and see it through to completion. Those who hope that military catastrophe will bring down the regime overlook Hussein's success in clinging to power through the darkest days of his war with Iran. The protection of most oil installations on the Gulf littoral from serious damage probably is achievable, but only with considerable offensive aerial action. The last mission, the safety of the hostages, is militarily unachievable and I suspect that the Bush Administration determined from the beginning (and to its credit) that these hostages cannot be rescued militarily and that they cannot be permitted to pose an obstacle to the political and military goals that have been established in the course of the crisis. The liberation of Kuwait probably is within the power of the forces that the coalition deployed as of roughly November 1, 1990. The US military, however, seems to believe that substantial additional reinforcements are required, perhaps another 100,000 troops, including a virtual doubling of US armor strength. The complete destruction of Iraq's chemical weapons manufacturing and nuclear research facilities is probably not possible since some of them are said to be protected by stone or concrete. Nevertheless, it should prove possible to do sufficient damage to set these programs back many years.

By November 1, the actual military forces arrayed in this confrontation were enormous. The coalition includes virtually all

of the great military and technological powers: the United States, Britain, and France--with Germany and Japan in supporting roles.[1] Accordingly, the coalition has substantial advantages not included in simple bean counts of troops and aircraft now present in the region. These include command, control, communications, and intelligence, electronic warfare, and huge stocks of high technology munitions and replacement weapons. For example, in any battle, a variety of military measures should largely render the Iraqis deaf, dumb, and blind. This is a major military advantage that has often foreshadowed the victor. Karl von Clausewitz, in On War, introduced the now familiar concept of the "fog of war." In this context, most fog will hover in front of Iraqi military commanders.

The Air Battle

First, consider the battle for air supremacy. As the following table reveals, the United States alone has deployed some 800 combat aircraft to the Persian Gulf. The full range of US Air Force and US Navy and Marine aircraft are present. These include sophisticated air defense fighters; all-weather, long-range, night-capable deep-attack aircraft; multipurpose fighter bombers; close air support fighters; jamming aircraft; and dedicated air defense suppression aircraft for attacks on surface-to-air missile (SAM) batteries. There are also perhaps two dozen B-52s deployed in the region, some stealth fighters, and some conventional cruise

---

1. The Soviet Union is playing a very small military role, which is likely to remain so.

missiles mounted on surface ships and submarines. At least 400 of these US aircraft are well suited to and well positioned for offensive bombing missions, with about half capable of night operations. There are perhaps an additional 50 special purpose "weasel" aircraft for SAM suppression. There are also some 120 Saudi aircraft, and several dozen British, Kuwaiti, French, and Canadian combat aircraft which easily bring the theater total to 1000. It should be remembered that the US owns a dozen seaworthy aircraft carriers and only three are currently on station.[2] It seems reasonable to assume that this number could be brought to six in a matter of weeks, increasing combat aircraft strength by another 250 machines.

---

2. The US Navy periodically relieves one carrier with another so this number occasionally rises briefly to four before the carrier to be relieved departs for home.

Estimated Combat Aircraft (11/1/90)*

	COALITION		IRAQ
Air Defense			
USAF	96		
USN(4 CV)	72		
Other	70		
TOTAL		238	275
All-Weather/Night-Attack			
USAF/USMC	120		
USN	45		
Other	62		
TOTAL		227	80
Multipurpose Fighter/Ground-Attack			
USAF/USMC	192		
USN	72		
Other	18		
TOTAL		282	160
Special Purpose Air Defense Suppression			
USAF	48		
TOTAL		48	0
Close Air Support			
USAF/USMC	144		
Other	50		
TOTAL		194	120
Strategic Bombers			
USAF	20-30		16
TOTAL		**1009-1019**	**651**

*Aircraft are assigned to categories on the basis of standard criteria, although there is ambiguity about the classification of some Iraqi aircraft which has inevitably led to some arbitrariness.

Iraq has some 500-700 combat aircraft, with nearly half obsolescent even by Soviet standards. About 200-300 are reasonably well suited to attacks on allied forces or civilian installations at some range. Iraq also has about 50-60 surface-to-surface missile (SSM) launchers, about half short-range "FROG,"

and the rest various models of the longer ranged (300+ km) "SCUD" missile. Perhaps 100 SA-2, SA-3, and SA-6 surface-to-air missile batteries are available with anywhere from four to nine launchers per battery. Each battery could likely have at least one engagement radar, the destruction of which would badly degrade, if not totally eliminate, its capability.[3] Iraq also has numerous short-range SAMs, some of which could be quite effective, and a large number of short-range anti-aircraft automatic cannon. Iraq has about 150 attack helicopters of varying levels of sophistication. Most if not all Iraqi aircraft are said to be protected in concrete shelters, which are difficult to destroy. The Iraqi Air Force is given credit for as many as 20 airfields, but circumstantial evidence suggests that there are 7-10 "main operating bases," where the ammunition, fuel, and maintenance facilities exist to support the sustained operation of modern aircraft.

A notional target list for an aerial offensive aimed at the establishment of air superiority would encompass the targets listed below, not all of which would necessarily need to be attacked at once, or even at all.

---

3. There are also a small number of US Hawk batteries captured from Kuwait, which could prove dangerous if the Iraqis figure out how to use them.

Air Superiority Campaign Targets

SAM Batteries (one engagement radar each)	100
SSM Batteries	15
Airfields (runway cuts, ammo, fuel, maintenance and command and control) 9 targets/airfield x 10 bases	90
Aircraft Shelters	700
TOTAL	**905**

For both political and military reasons an air planner would want to drive the Iraqi Air Force from the skies, and strike all known SSM batteries. Western defenses are probably good enough to prevent these long-range weapons from inflicting major damage on the coalition's logistical capabilities or on Saudi civilian targets. But even the odd success could kill many soldiers or civilians, especially if the Iraqis employed chemical weapons against those without protective gear.

There are a number of plausible offensive air strategies the coalition might employ. Perhaps the most reasonable would be to attack known SSM sites, and SAM and early-warning radar sites in Iraq and Kuwait. This would reduce the initial possibility of "terror" attacks, and make it possible for Western aircraft of all kinds to operate in relative security over Kuwait and Iraq. The coalition could then operate intelligence gathering platforms very aggressively, so that Iraqi efforts to launch aircraft would be met by coalition fighters shortly after Iraqi pilots left their airfields. It is implausible that the Iraqis would fare well in

air-to-air combat with Western and Western-trained fighter pilots of the coalition.

A slightly more ambitious strategy would aim to damage all of Iraq's main operating bases. While this attack would probably not "close" the airfields, it would substantially reduce Iraq's ability to organize large-scale offensive raids, or to launch any kind of coordinated air defense. Only those SAMs protecting the airfields would need to be attacked initially. Each of these targets would seem to merit at least two aircraft, for a total of some 240 aircraft in a single attack. Given the number of night-capable aircraft present, it is plausible that this target set could be hit in the initial raid. It seems likely that these targets would be struck once in the middle of the night, and a second time in the early morning by multipurpose aircraft, of which there are a sufficient number. Planners would probably want to put several tons of bombs on each target, revisiting each one several times in the first few days of the battle. Since two to three sorties a day is reasonable for each aircraft during the initial stages of a war, in effect these airfield targets could be visited four to six times in 24 hours.

Subsequent to the initial attacks, a great many of the coalition's fighters would be diverted to support the ground battle, but some would continue to strike Iraq. The aircraft shelters may prove reasonable targets, depending on intelligence. Just as likely is a full-scale attack on Iraq's facilities for the manufacture of chemical weapons, the conduct of military research, and the manufacture of conventional weapons and ammunition.

In light of the coalition's overwhelming advantage in electronic warfare, aircraft quality, stocks of sophisticated ordnance, and pilot training and quality, Iraq's air capability--offensive and defensive--is likely to be virtually eliminated in two or three days. Some Iraqi forces would be destroyed, others simply driven from the sky. This "two to three" day estimate is consistent with optimistic appraisals offered by US and foreign military observers--sometimes in print, sometimes in the electronic media. Scattered Iraqi tip-and-run raids may occur, but the coalition's sophisticated air defense fighters, AWACS aircraft, ground-based command and control system, and Hawk and Patriot SAM batteries should take a heavy toll. The Iraqi Air Force did not perform particularly well in its recent war with Iran. And the experience derived in that war against an ill-organized, under-supplied Iranian Air Force, would prove of little relevance to the force they would now face.

In short, the objective of the initial attacks would be to achieve command of the air. But this operation is no surgical strike. There may be three or four thousand tons of bombs and air-launched missiles employed against hundreds of targets in the air superiority phase of the campaign. More would be required to eliminate Iraq's military industry. Although many Iraqi military installations appear to be situated away from population centers, there is always the possibility of civilian casualties. This possibility may make radio and television stations important targets in order to prevent the early and widespread dissemination of Iraqi propaganda footage that could undermine political support

for the coalition in the Arab world and elsewhere. Even if transmitters are destroyed, the coalition must prepare for the appearance of politically damaging film throughout the Arab world at a later date.

The Ground Battle

Unlike in the air orders of battle, Iraq is not quantitatively inferior on the ground, and in terms of quality is more competitive. Indeed, Iraq has a large overall numerical advantage in troops and tanks that places an even higher premium on quickly winning control of the air to free aircraft for close air support and interdiction missions. Iraq is reported to have 400,000 troops deployed in the general area of southern Iraq and Kuwait.[4] On the basis of admittedly skimpy information, it is reasonable to assume that the force is divided into two main groups. The first and largest group is probably stationed along the northwest Iraqi-Kuwaiti border. This force comprises perhaps 30 infantry and 9 armor brigades. The second group, in Kuwait, comprises perhaps 28 infantry brigades with 6 armor brigades in support.[5] Again, on the basis of limited information, it is reasonable to infer that most are deployed in southern Kuwait from

4. One should be cautious about these troop numbers, since it is obviously rather difficult to get an accurate count. Western intelligence analysts are probably using satellite imagery to count vehicles of different types, monitoring radio communications, and interrogating defectors to develop their order of battle estimates. These means are not foolproof, and they may produce underestimates or overestimates. From these counts analysts infer the personnel strength of the forces present.

5. Generally, a brigade is about a third the combat strength of a division. Some brigades are independent formations, but most are subordinated to divisional headquarters.

the Bay of Kuwait to the Saudi border. Many are likely near or in Kuwait City. Some forces are deployed cordon-like along the entire Kuwait-Saudi Arabia border. The force in Kuwait could have as many as 1000 artillery pieces, as well as multiple rocket launchers and mortars. These would be its best means to deliver chemical agents.

The coalition probably had about 200-250,000 ground troops--about 30 brigades (16 US)--as of November 1. This force presents a potent defensive shield against any Iraqi offensive that might be directed against Saudi Arabia.

Estimated Ground Forces Committed (Brigades)

	COALITION	**IRAQ** LOCATED IN		
		KUWAIT	**S.E. IRAQ***	**S.W. IRAQ+**
ARMOR		5-6	9	1
US	7			
Other	10			
INFANTRY		25	30	6
US	9			
Other	5			
Total	**31**	**30**	**39**	**7#**

*From Basra to the area of the Kuwait border
+In the area of the Neutral Zone
#Iraq has a total of 76 brigades committed to the theater

Major Ground Weapons in Units

	COALITION	**IRAQ** LOCATED IN	
		KUWAIT	**S.E. IRAQ**
Tanks	1600	1300	1900
Artillery	1000	900	1200
Attack Helicopters	300	(140-160 total locations unknown)	

There is considerable debate as to whether this is yet a capable offensive force. If the Iraqi force is distributed as suggested above, the coalition is quantitatively at rough parity with the Iraqi force in Kuwait. In terms of weaponry, it is qualitatively superior. In terms of training, it is likely that US, British, and French forces are a good deal better. Not much is known about the training standard of the Arab members of the coalition. The coalition would experience command and control difficulties as a consequence of its multinational composition. But it seems likely that Iraqi forces would lose most of their command and control early in the fighting as a consequence of deliberate action by the coalition, so the coalition would still enjoy an advantage. The Iraqi forces have considerable combat experience, largely of static warfare where they have enjoyed air superiority and a vast firepower advantage. These latter two conditions would not hold in this war. But this combat experience, combined with elaborate field fortifications that the Iraqi forces are said to have already prepared in Kuwait, means that the coalition ought not to count on Iraqi collapse. In the NATO-Warsaw Pact context that has informed much recent military analysis, a one-to-one force ratio across the front would not have been considered to offer a high confidence offensive option. Historically, however, it has permitted successful offensives in the Middle East and elsewhere where the attackers had certain qualitative advantages. Since I believe that the <u>overall</u> quality of the forces in the coalition is substantially higher--and that it should enjoy nearly undisputed air superiority--I think that it

did have an offensive option as of November 1, 1990. If Iraq's forces in Kuwait were to be heavily reinforced, this assessment would need to be reconsidered.[6] Reinforcement after the battle begins would be very difficult for Iraq, since the movement of forces across a desert without an effective air defense against the air power that the coalition commands would prove very costly if not impossible. This is true in local fighting--the tactical level--as well as in the overall campaign.

What might a military operation to retake Kuwait look like? In my judgment, the strategic bombing campaign proposed by recently dismissed Air Force Chief of Staff General Dugan is unlikely to succeed. Historically, strategic bombing does not win wars or force the enemy to surrender; and it often has the effect of stiffening enemy morale and resistance, not weakening it. A lucky strike might kill Saddam Hussein, but the military option cannot and should not revolve around such a stroke of luck. Strategic bombing is thus unlikely to win back Kuwait; it will have to be retaken by ground forces.

---

6. There are a number of possible explanations for the expressed US intention to add as many as 100,000 personnel to its forces in the Persian Gulf starting in early November. The data suggesting that the coalition has an offensive option may be wrong. My interpretation of it may be wrong. The US military may not have achieved the level of combined arms thinking that they have claimed in recent years, and thus the Army is unconvinced that command of the air provides much of an advantage in the ground campaign. An offensive option may exist now, but the President may not yet be ready to move. Since the Iraqis have apparently been reinforcing their troops and digging new fortifications, military planners believe that more forces will be needed to have an offensive capability at a later date. A more ambitious offensive than the one I have outlined may be under consideration. Finally, additional troops may be needed simply to support the current force, which is, on the basis of crude calculations, a bit undermanned.

Because information on the precise disposition of Iraqi forces is vague, as is information about the topography of much of Kuwait, the discussion that follows should be viewed as illustrative.

If the distribution of Iraqi forces conforms to that outlined above, then a reasonable campaign might take the form of a two-pronged attack with Al-Jahra, at the innermost tip of the Bay of Kuwait, as the "objective." One attack would move up the coast road to put pressure on Iraq's forces while a second attack, the main effort, would originate either at the northeast corner of the Saudi-Kuwaiti border near the Al-Manageesh oilfield (see map), or farther to the west near the Saudi-Iraqi neutral zone. An offensive from either origin would aim to cut off Iraq's forces in southern Kuwait. By threatening them with encirclement, they might be induced to withdraw. If large numbers of Iraqi reinforcements are entrenched in northern Kuwait, then a second operation may be necessary. If Iraq tries to mount a counterattack from the north, its ground forces will be highly vulnerable to attacks from tactical aircraft.

There is a Marine Expeditionary Force (MEF) deployed along the Saudi coast, composed of three Marine brigades--two ashore and one afloat totaling perhaps 45,000 people. This unit has been joined by the powerful British Seventh Armored Brigade. This force would be one element of a drive into Kuwait along the coast. It could be supported by a series of short amphibious flanking attacks--conducted largely with heliborne forces--that would permit it to unhinge Iraqi defensive positions by regularly

threatening attack from the rear. An Inchon-style landing well behind Iraqi defensive positions, north of Kuwait City seems impractical and dangerous inasmuch as the brigade or two that the USMC has afloat is probably insufficient to defend itself in the event of a collision with Iraqi tanks. Moreover, it is unclear that a truly suitable beach exists for large-scale amphibious assault. An alternative that offers some advantages would be an amphibious assault on Failaka Island at the mouth of the Bay of Kuwait (see map). This would provide a valuable forward operating base for helicopters and tactical fighters.

It seems likely that the second and more powerful attack would come in one of two places. This attack would employ all the US Army's armor (as of November 1, about seven brigades with 700 M1 tanks) plus some helicopter infantry assault units and perhaps as many as 150 attack helicopters. A force of this size ought to be able to muster favorable local force ratios--3:1 or better on breakthrough sectors. Command of the air would make it very difficult for the Iraqi Army to move reinforcements to any threatened sector. And the absence of their own air power would make it very difficult for Iraq to interfere with dense concentrations of US forces. Moreover, it may prove possible to supplement US counter-battery artillery fire with air attacks that could dramatically reduce the effectiveness of Iraq's artillery. The main obstacles to US success would then prove to be Iraq's earthworks and minefields defended by infantry, tanks, and anti-tank weapons dug in to sand and rock. These are not trivial, and they may explain the US decision to dispatch extra M1 tanks to

Iraq. These tanks apparently have somewhat better armor protection, better chemical protection, and a more powerful gun than those currently in units in Saudi Arabia. They may be better at slugging it out with prepared positions, but they also permit the US Army to "spend" tanks (and to a lesser extent tank crews) in lieu of infantrymen.[7]

One axis of advance would cross the Kuwaiti-Saudi border on the western edge of Kuwait. King Khalid Military City near Hafr al-Batin in Saudi Arabia would be the logistics base that would support this operation. With a huge army base and airfield, this installation was designed and built by the Saudis to house nearly a full division. Newspaper bylines suggest that this was initially a major staging area for US troops. A major road from Hafr al-Batin runs up to the Kuwaiti-Iraqi border and then cuts eastward to Al-Jahra, just northwest of Kuwait City. The road is no doubt defended, but it would seem to offer a good possibility to cut across the avenue of retreat of most of Iraq's forces in Kuwait. It appears that off-road mobility is good in most places, so the road should be considered an axis of advance rather than its precise path.

A more ambitious offensive would leave the road, head north along the Wadi al-Batin, a seasonal watercourse, deeply cut in parts, which could serve as a useful defensive anchor for the left flank of the advance, and then strike eastward along the Kuwaiti-Iraqi border. Alternatively it could cross into southern Iraq,

7. Historically, two of the four crewmen of a tank damaged by enemy action are casualties, but it seems likely that this number would be even smaller for the new M1s.

aiming to flank the entire Iraqi reserve force stationed there. The US force as of November 1 seems too small for such an ambitious operation. Moreover, northwest Kuwait has poor roads and no settlements, suggesting that the terrain is somewhat inhospitable. Thus I doubt that this operation is especially attractive. The arrival of the two additional US armored divisions whose dispatch was under consideration in late October might render these options more plausible.

Because scattered press reports suggest that western Saudi Arabia is now defended by a mixture of Saudi, other Arab, and French forces I doubt that the main effort would in fact be mounted in the west. Instead, I suspect that a "multinational" corps will move north from Hafr al-Batin and then towards Al-Jahra. But, its progress would likely depend on that of the US armor concentration which I now suspect will move up the center, roughly along the "north-south" segment of the Kuwaiti-Saudi border. Depending on where it jumped off, it would have to travel 60-75 km to Al-Jahra, at the innermost shore of the Bay of Kuwait. Press reports of late have become a little more specific about the location of US Army troops, and they suggest that US mechanized forces are in northeastern Saudi Arabia. Moreover, a major concentration in this area would permit mutual support between this offensive and the coastal offensive. Finally, again on the basis of scattered press coverage, as well as an examination of various maps, it seems that there is more air power located here than farther to the west. By cutting the Iraqi line in the middle, Iraq's forces in western Kuwait would find their rear

threatened and would likely begin to fear for their survival. Withdrawal would become tempting, rendering the forward advance of the multinational corps out of Hafr al-Batin much less problematical.

All of this sounds easier on paper than it could prove in practice. There has been much speculation on the extent of casualties that US and allied forces might suffer. Unnamed Pentagon sources and unnamed independent analysts have offered US casualty estimates of 10,000 to 20,000.[8] Given command of the air by the coalition, and some combination of surprise, skill, and luck, the campaign could conceivably go as well as the Israeli campaign in 1967--which would suggest "low" US casualties--with less than 1,000 dead, and 3-4,000 wounded.[9] But even the Israelis have run into trouble from Arab armies. Israel was surprised in 1973, and by virtue of the competence, novelty, and density of the Egyptian and Syrian ground-based air defense systems was unable to establish command of the air. Israel suffered nearly 11,000 casualties, perhaps one-quarter dead, in a war that lasted about

---

8. "Air Strike On Iraq, the Favored Strategy, Means Big Risks for Both Sides." New York Times 10-23-90. p. A 10.

9. In the 1967 "Six Day War" Israel suffered 700 dead and 2,600 wounded out of a total ground force of 275,000-300,000 troops. Although outnumbered overall by the combined forces of Egypt, Syria, Iraq, and Jordan, the main campaigns appear to have been fought at local parity on the three fronts, since the Arab coalition failed to concert its military actions. Israel may have suffered a slight numerical inferiority in weaponry on the Sinai front. Israel quickly established air dominance which contributed mightily to the speed and decisiveness of the victory. The initial ground battles in the Sinai were won by the Israeli Army, however, with little help from the Israeli Air Force. Edward Luttwak and Dan Horowitz, The Israeli Army, (New York: Harper and Row, 1975), p. 282.

20 days.[10] In my judgement this is not an unreasonable worst case for US casualties for a campaign that aims strictly for the liberation of Kuwait, under the conditions that I have described above.[11] Even the low end of these estimates would attract considerable domestic political attention in the US. President Bush has yet to mount the campaign of public persuasion necessary to prepare American citizens for such casualties.

In estimating the possible course of a war for the independence of Kuwait, particularly the US casualties that could arise from such a war, I have not made any special allowance for Iraqi employment of chemical weapons. But the analysis above assumes that rather extraordinary offensive efforts will be taken

10. Thomas E. Griess, ed., The Arab-Israeli War, The Chinese Civil War and the Korean War, West Point NY, Department of History, United States Military Academy, (New Jersey: Avery, 1987), p. 22. This was out of a fielded force of about 310,000. The Arab coalition put a half million men in the field and suffered 36,000 casualties, according to this source.

11. The estimation of casualties is not a science. Some might quarrel with comparisons to the Israeli-Arab military relationship. As a check, I developed some crude estimates of British and US casualties in the brutal infantry fighting of the Normandy hedgerows, fighting that at least one German senior commander called the worst he had ever seen. From June 6 to September 11 the Allies suffered 224,000 dead, wounded, and missing. By September 11 the total force strength was about 2.1 million. Let us assume 1 million as the average strength. This yields a daily loss rate of about a quarter per cent of the total force per day. Transposed to a US force in the Persian Gulf of roughly 200,000 ground troops, this yields 500 casualties per day. If Al-Jahra is the objective, and we take 75 km as the distance that the force must travel, a 20-day war would demand only a 4 km per day rate of advance. Given command of the air, technological superiority, and approximate manpower parity in the actual combat area, this seems conservative. Five hundred casualties per day for 20 days would yield about 10,000 casualties. See Martin Blumenson, Breakout and Pursuit, The US Army in WWII, The European Theater of Operations, (Washington DC: US Army Center of Military History, 1961, reprinted 1984), p. 700. One could perform many such plausibility checks.

to destroy Iraq's aircraft, artillery, and missiles most suitable for chemical weapons delivery. Many of the coalition's troops are well outfitted with chemical protective gear. Between these offensive and defensive measures, it seems unlikely that chemical weapons will provide Iraq with a margin of victory against coalition forces. Indeed, given the coalition's tremendous offensive air striking power, Iraqi military leaders would be well advised to consider the scope of the retaliatory damage their country would suffer if they chose to employ chemical weapons.

Political Considerations for War

There are a number of important non-military considerations which must be weighed carefully in any decision to go to war. First, a campaign to retake Kuwait cannot be an American campaign. Other troops in the coalition--both Arab and Non-Arab must also be engaged in fighting to make this war palatable to the American public, the international community, and the Arab world (the latter being extremely difficult in any event).

Second, before combat is initiated, it is critically important to persuade the US's Arab and non-Arab allies that war is the only option. An invasion of Iraq and the imposition of democracy would likely prove politically unacceptable domestically and internationally. Consequently, even after a successful campaign to retake Kuwait, the international coalition opposed to Iraq must be kept together to ensure that Hussein's military power does not rise again. Without the political coalition and an accompanying weapons and technology embargo, Iraq would soon have

the money and resources to rebuild its war machine if it found willing sellers in the international arms market. Therefore, any strategy to retake Kuwait requires the approval and support of the coalition. This support is unlikely to be forthcoming without a serious attempt to make the economic embargo against Iraq work. And once the US determines that the embargo is not working and cannot be made to work, it will still need to persuade other members of the coalition that this is so, and thus that war is the only option. In short, even if they begin in early November, it will likely take the Bush Administration several additional months to lay the political groundwork for war.

Earlier in the crisis, conventional wisdom held that US domestic politics would somehow demand military action before the end of 1990. But public opinion polls already show considerable uncertainty about the wisdom of war, so if there was a public opinion window of opportunity, it is probably shut. More public persuasion will be necessary to take the country into war, and this will also take time.

I expect that once the US determines that the embargo is clearly not doing the job, the US will launch a political campaign to develop a consensus for war. My guess is that the full range of political and military preparations for this war cannot be complete before January 1, 1991. It is hard to wage war in Saudi Arabia in the summer, so if no campaign is launched in the spring of 1991, then the next window will not open until the autumn. Fearful of a loss of patience by other members of the coalition as well as the American public, US leaders may not wish to leave

200,000 Americans (perhaps as many as 300,000) in Saudi Arabia until then. In any event, it will be hard to argue that war is necessary after living with the occupation of Kuwait for a full year.[12] Thus one suspects that the US leadership will see the spring of 1991 as the last window for a war of choice. If no war is launched before the summer of 1991, then a "long siege" strategy will in effect have been selected and a whole series of new political and military arrangements will need to be made.

The third consideration is, of course, the cost in lives. As noted above, my worst-case scenario of a three-week war in which the Iraqis fight with some vigor could result in 10,000 American casualties, of which perhaps 3,000 would be dead. But depending on how the battle goes, and how ruthlessly the coalition pursues Iraqi forces if they do break and try to head home, Iraq could suffer several tens of thousands of military casualties. There might also be many civilian deaths. The best case is one in which air superiority is particularly effective and Iraqi troops panic when confronted with large coalition armored formations. High casualties to US and other coalition forces and high casualties to Iraqi forces and civilians can produce a range of unpleasant

---

12. Discussion in late October of adding another 100,000 troops to the force in Saudi Arabia raises some important problems. These additional forces seem unnecessary for defense, so their purpose is clear--to establish an offensive option. But any effort to maintain a force of over 300,000 people in the Gulf region over the long term is sure to founder on a host of obvious political, financial, and administrative difficulties. If the Administration chooses to commit another 100,000 troops, they will then have a difficult time deciding <u>not</u> to have a war in the spring.

political effects. As has been clear all along, a decision for war is fraught with many terrible uncertainties.

Finally, war termination may not be easy. Hussein may simply refuse to surrender or cease fire, forcing the coalition to go deeper and deeper into Iraq, or to engage in ever more destructive coercive bombing of Iraq's civil infrastructure. It will be difficult to bring the troops home if the adversary fails to admit defeat.

In light of these likely difficulties with a war option, what are the alternatives? The coalition has three choices. 1. Compromise. Unfortunately, the only compromises that seem appealing to Iraq involve concessions that are too great: major border adjustments; a political shift in the Kuwaiti regime; successful pressure on Israel to withdraw unconditionally from the West Bank. Even if any of them could be achieved, and only the first seems plausible, they would all so reward Iraq that Hussein would be emboldened; we and his neighbors would have to expect some future challenge. 2. Prepare politically and militarily for a long economic siege against Iraq to wear down its morale, economy, and military machine. 3. Fight the war. Neither "siege" nor "war" is particularly attractive, but the containment of ambitious powers is seldom achieved without considerable discomfort. Neither "siege" nor "war" has yet received full and systematic attention in our public discussion of the Gulf crisis. Some might also argue that option 1, major concessions to Iraq, deserves further discussion.

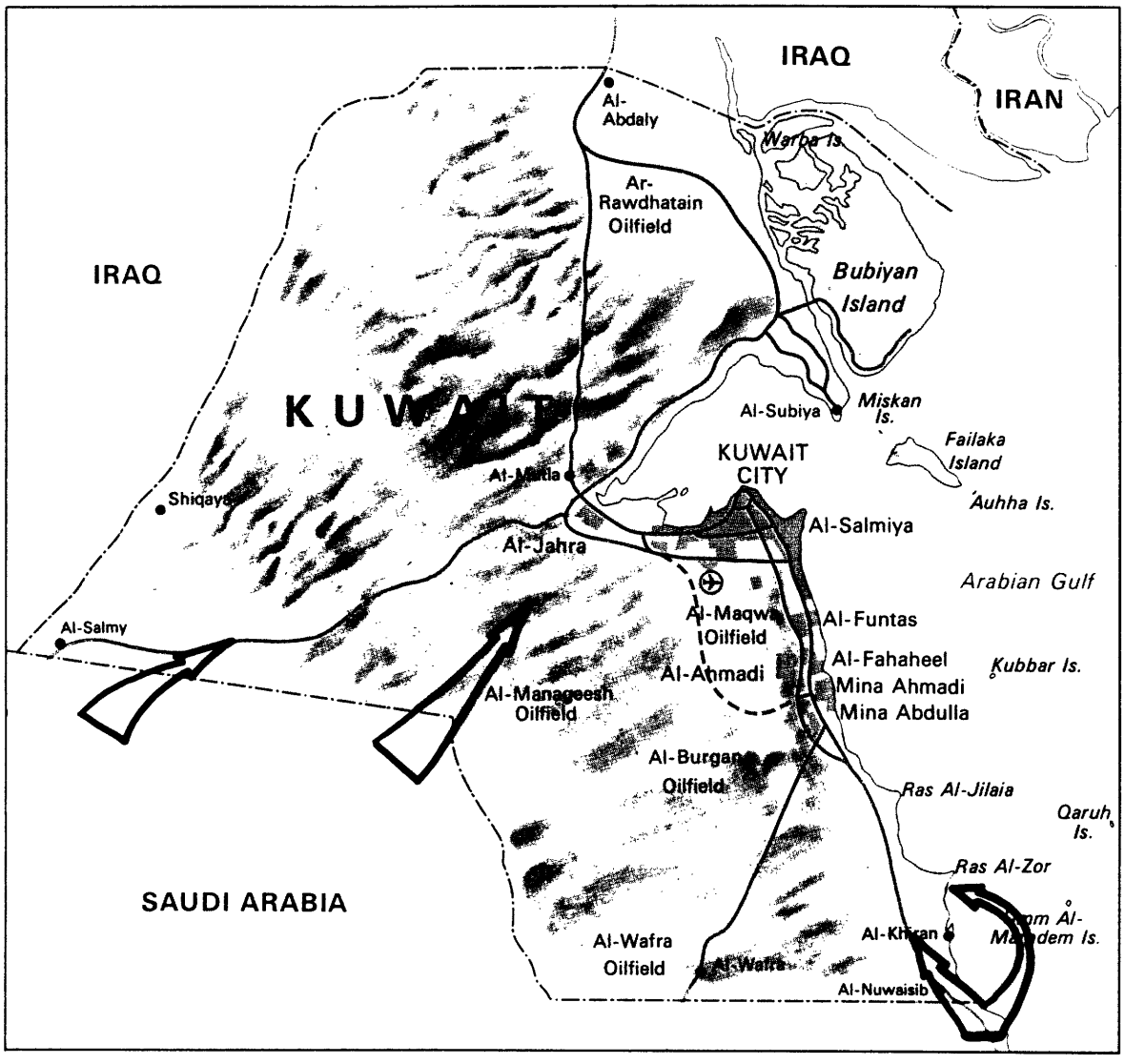
By a careful examination of the public information on the military situation, this paper has largely tried to illuminate option 3, but much more remains to be done. Option 2 requires a somewhat different kind of consideration. Those expert in the economic performance of developing countries; the conduct of multilateral diplomacy, particularly within the UN; the international politics of the Middle East region; and Arab domestic politics should come forward with their appraisal of the "long siege."

Bibliographical Note

The following sources have proven most useful. Press coverage has been of tremendous utility, especially that of the Boston Globe, New York Times, Los Angeles Times, and the Washington Post. Military oriented publications such as Air Force Times and Aviation Week and Space Technology have also been consulted. The Military Balance, 1989-1990, published by the International Institute for Strategic Studies provided a baseline for force estimates. Greater detail is available in The Middle East Military Balance, published by the Jaffee Center for Strategic Studies at the University of Tel Aviv. We have exploited the 1983, 1987-1988, and 1988-1989 editions.

Barry R. Posen
Professor of Arms Control and Defense Studies
Massachusetts Institute of Technology

Barry R. Posen is Associate Professor of Political Science at MIT. Dr. Posen did his undergraduate work at Occidental College and his graduate work at the University of California at Berkeley, where he earned an M.A. and Ph.D. Prior to coming to MIT, Dr. Posen was Assistant Professor of Politics and International Affairs at Princeton University. He has held a number of other prestigious positions: Guest Scholar at the Brookings Institution; Post-Doctoral Fellow at the Center for International Affairs at Harvard; Council on Foreign Relations International Affairs Fellow; Rockefeller Foundation International Affairs Fellow; Guest Scholar at the Georgetown Center for Strategic and International Studies; and Woodrow Wilson Center Fellow, Smithsonian Institution. His book, The Sources of Military Doctrine, won the American Political Science Association's Woodrow Wilson Foundation Book Award for the best book published in political science in 1984, and Ohio State University's Edward J. Furniss Jr. Book Award for the best first book in the field of security studies. Dr. Posen's current activities include work on the control of escalation, U.S. military strategy and force structure, and nationalism. His forthcoming book, Inadvertent Escalation, will be published by Cornell University Press in 1991.


IRAQ
IRAN
Al-Abdaly
Warba Is.
Ar-Rawdhatain Oilfield
IRAQ
Bubiyan Island
KUWAIT
Al-Subiya
Miskan Is.
Failaka Island
KUWAIT CITY
Al-Mutla
Shiqaya
Auhha Is.
Al-Salmiya
Al-Jahra
Arabian Gulf
Al-Maqwa Oilfield
Al-Funtas
Al-Salmy
Al-Ahmadi
Al-Fahaheel
Mina Ahmadi
Mina Abdulla
Kubbar Is.
Al-Manageesh Oilfield
Al-Burgan Oilfield
Ras Al-Jilaia
Qaruh Is.
Ras Al-Zor
SAUDI ARABIA
Al-Khiran
Um Al-Maradem Is.
Al-Wafra Oilfield
Al-Wafra
Al-Nuwaisib