



Center for Strategic & International Studies
Washington, DC

Iraq War Note: The True Nature of Urban Warfare
By Anthony H. Cordesman
March 30, 2003

The last 11 days have made it clear that the Battle of Baghdad is actually Iraqi defense in-depth. This is a defense that began at Basra and Umm Qasr and now is attacking US and British rear areas and supply lines throughout the theater with every asymmetric means available. The resulting mix of missiles, rockets, Fedayeen, regular forces, Republican Guards, Baath Party agents, Popular army forces, and intelligence and security stiffeners is Saddam's best way to use small cadres of loyalists to inflict disruptive attacks, cause casualties, try to force the US and UK to fight in the cities in the rear (potentially alienating them), and devote resources and air strikes to missions other than the attacks on Baghdad.

The Battle of Baghdad is Deep into Its 10th Day

At the same time, the US and UK have been fighting urban warfare in downtown Baghdad and its environs for more than 10 days. Precision air strikes have been used, rather than ground forces, and there is no clear picture of the result. It is exceedingly silly, however, for some media to talk as if the battle would not begin until the ground forces got to the city.

It is equally silly to ignore the constant use of precision airpower in heavily populated areas, or to assume that when ground forces do close in on populated areas and Baghdad that bombing will not continue to be used – along with precision artillery – to strike at Saddam's forces. The Pentagon has said from the start that the rules of engagement are that force protection has priority over minimizing civilian casualties and collateral damage, and that this is a fundamental part of "effects-based" bombing. Simulations, discussions and analyses that ignore the continuing role of air in urban warfare are simply decoupled from reality.

Moreover, as the US and UK suppress the surface-to-air missile defenses around Baghdad, massive amounts of non-stealth fixed wing air can be used over the city from stand off positions outside the range of Iraqi AA guns and short range missiles. As artillery comes within 20-30 kilometers of the city, it can be used far more freely against open area targets that the regime values.

Secure attack corridors will gradually open for attack and assault helicopters. These will be available at the edge of the outer defenses first, but will move inwards as the Iraqi defenses collapse. For all of the talk of house by house or street by street fighting, it is not clear that this will take place all that often without fixed wing and helicopter support.

Attrition and Disruption in Baghdad

There is also a so far largely invisible, but critical, aspect of the ongoing Battle of Baghdad. It is unclear just how disruptive military action is to civilian and economic life, and Baghdad is supposed to have stockpiled large amounts of food, medicine, etc.



Center for Strategic & International Studies
Washington, DC

The fact remains, however, that a greater urban area for a city of five million people must already have begun to have food distribution problems; economic life can only be paralyzed for limited amounts of time before it has a major effect. Oil smoke is probably having more medical and morale impacts on civilians than US airpower, and all of Iraqi society comes under severe strain.

The antiseptic nature of the targeting cannot have antiseptic effects. Similarly, the regime may not lose control of Iraq, but it is being gradually cut off from Syria and is cut off from Jordan. One silent effect of US forces in the Kurdish zone is that one route through Turkey is shut, the ports in the south are closed, and movement from Turkey through Mosul is certain to be a problem.

Past wars have shown people can withstand incredible shortages and hardships in urban areas during war, and that bombing and military operations that impact civilian life rarely produce any collapse of a defense. The fact remains, however, that at some point in the next week or so, the Battle of Baghdad will really be the siege of Baghdad in a country that imported nearly 50% of its food, and whose margins are thin at best.

MOBA Before MOUT

Acronym haters are going to have to get used to the difference between Military Operations in Built Up Areas (MOBA) and military operations in urban terrain (MOUT). The differences are very serious and will affect all coverage and analysis of the war,

Built-up areas begin long before the edge of the city shown on maps and generally are not detectable even with maps of six-meter resolution. Infantry, tanks, and artillery can use virtually any building, wall, or structure to hide behind and rapidly improvise concealment and sheltering. If well chosen near key roads, bridges, crossings, etc., they can become excellent fire bases against points where US and British forces have to concentrate. They can either be held to the last or used on a shoot and scoot basis to delay the advance, inflict some losses from good defensive positions, and run.

In short, MOBA may already have begun for the forward scouting elements of 3rd Infantry Division, and will begin for the Marines as they move about half-way between Al Hillah and Baghdad, MOBA, however, can also be fluid combat with fire at considerable range and constant maneuver.

As such, the US and UK can often take account of airpower and use it almost in free fire because of the low density of civilians in some areas. Helicopters are more survivable and can leap frog Iraqi positions. While Iraqi forces can often embed in civilian towards with brigades and key roads, many are also relatively open. In such cases, the US can use artillery in large amounts.

Iraq has the advantage of force density, prepared defensive and fire points, surveyed firing grounds for its tanks and artillery where ranges are precisely known to key target areas, and being able to infiltrate slowing and with limited visibility to US air power and intelligence. It also



Center for Strategic & International Studies
Washington, DC

can often exfiltrate with limited visibility at night or slowly. In many cases, it can use low signature towed artillery, anti-tank and AA guns/missiles, and trucks rather than heavy forces to hold a given point –again using up expendable forces rather than hardcore armor and loyalists.

However, the US and UK are far more fluid. They have far better intelligence assets and much better armored and weapons, and the Marines have LAVs – some amphibious – that can move rapidly down small and unexpected routes and bypass strong points or outflank them. Helicopters are ideal ways of bypassing light forward strong points in MOBA or attacking them from unexpected areas. Iraq lacks the force density to hold the entire southern perimeter of Baghdad in strength and cannot afford heavy main force meeting engagements where fixed wing air can attack its positions and rear. Systems like JSTAR still work in lightly built up areas. There are many UAVS in addition to the Predator, and ambushes always can be made to work in two directions.

It should also be stressed that the best US tactic is to attrit Iraqi main force units as much as possible in the field from the air while destroying lighter units in Baghdad until a synchronized move of Marine, Army, possibly British armor, and air power can be carried out to overwhelm key points in the perimeter defenses of Baghdad and then rush forward to outflank and disrupt the Iraqi forces, cut them off and paralyze them, or force them into rapid retreats that become killing grounds for US and British air power. It would also be nice – although not necessary – to have Army light forces pressing and disrupting from the West, and some kind of unpredictable Army and/or Marine special forces, raiding, or similar presence from the north and east.

One great unknown is chemical and biological weapons. Another great unknown is how much armor, artillery, and AA defense the Iraqis will be able to pull into the periphery of Baghdad. Some other wild cards are how much the regime will try to defend Tikrit, make it a last stand city, or have contingency plans to flee to Syria or some other location versus allow itself to be trapped in the city.

MOUT

One classic definition of MOUT is a “fist fight in a dark room.” At some point, both Iraqi knowledge of the buildings and terrain, and US advantages in night vision devices and training, will come do to close quarters combat and traditional infantry combat. House by house or street-by-street, this is grim fighting indeed. There also is no way to know how much of this fighting will occur. Much depends on how many Iraqi forces make it back into the city, and how well the Iraqi Special Republican Guards, Popular Army, and Fedayeen will fight. Much depends on sheer numbers willing to fight and die and how much of the city is really held and how many defenders are willing to die in place – a critical aspect of urban warfare where staying and dying is a critical part of effective street fighting.

This aspect of MOUT, however, is the worst case that US forces both train for and seek to avoid. Wherever possible, the rules are bypass and/or destroy with air and artillery, and not get into this kind of encounter. They are also to fight the key centers of regime power and not the



Center for Strategic & International Studies
Washington, DC

entire defended area of the city, and to seize open spaces like palaces and airfields if they are left undefended and if the US can establish true air supremacy over part of the city.

One military expert on urban warfare notes that such battles will be shaped by the following facts:

- Baghdad is huge. (Both a problem and an opportunity)
- Baghdad is complex (mostly low level buildings, intersected by rivers, broad boulevards, etc.)
- The US-UK objective is to find the core of Saddam's regime and kill it. They don't need to fight through the entire city to achieve this objective.
- There are parts of the city (largely Shia areas) that may pose fewer problems than the Sunni areas. Franks' initial plan anticipated that these areas would either revolt against Saddam or join the US and UK -- both highly improbable now.
- The technological advantages of Coalition forces will be used to advantage throughout, but will be much less advantageous in dense areas. If the US and UK are clever, they will do most of the fighting at night.
- Tanks must operate with infantry, and are vulnerable to unsophisticated weapons.
- Casualties will be high (could be extremely high), unless the Regime collapses.
- Determining combatants and non-combatants could be one of the biggest problems US and British forces face.
- Victory is one thing; occupation is another. Unless there is quick stabilization, and an image of an Iraqi in charge, the US and UK will have enormous force protection problems. No one can predict how possible avoidance and destruction will really be, but one key fact should be born in mind. A house-by-house and street-by-street fight is not a better way of avoiding civilian casualties and collateral damage than sudden decisive shock in terms of airpower and artillery, provided it is focused and collapses the enemy resistance. Historically civilian casualties are surprisingly low in both cases – people learn to run and hide.

Urban environments are also much more open and filled with roads and open fire zones than most simulations and exercises show. In many cases, an armored unit with helicopter escorts and good intelligence can move surprisingly quickly through surprisingly open areas. Key strong points like bridges also present problems for the defender because good defenses are vulnerable to air power and concentrated defenses can be outflanked by helicopters – depending on the quality of Iraqi AA and light surface-to-air missile fire, which is a great unknown. Another great unknown is how much Iraqi armor and artillery will survive to go into Baghdad.



Center for Strategic & International Studies
Washington, DC

The problem of bridges is an acute one at all points during the fighting, but blown bridges, trying to repair them under fire, major bridging in urban areas, Marine raids across water barriers, etc., also adds a new dimension. The urban war may prove to be a battle of bridges, main roads, and last ditch regime strong points than a battle of neighborhoods, although a retreat into loyal neighborhoods for house-by-house defense is certainly possible.

The Limits of Maps, Satellite Photos, and Two Dimensional Images

One key point-the reality of urban warfare cannot be derived from two-dimensional maps, satellite photos, or three dimensional constructs from even 6 meter satellite mapping. Close-in and open urban warfare is highly three-dimensional and angles of fire, the nature of bridge and road approaches, and how a given neighborhood can be fought are simply not clear from the aids available to the media.

The US military can sometimes get precise three dimensional constructs, and usually get a good general idea, but only troops and embeds can really get the flavor of such fighting. It can also develop in radically different ways, depending on the arms and training of the defending force, how close to the main objective the fighting is, how dense the buildings and obstacles are, etc.