Fallujah

A grinding ground war a decade ago reinforced the importance of airborne intelligence and precision.

orty miles west of Baghdad lies an Iraqi city that is once again, tragically, making the headlines: Fallujah. On Jan. 3, elements including al Qaeda sympathizers and insurgents from Syria declared control of the city.

The reports from Fallujah reopened memories of the fighting there 10 years ago. In 2004, Americans fought two bloody battles for Fallujah—two battles that together redefined the requirements for airpower in stability operations after hard lessons.

Fallujah in 2004—as in 2014—was no scene of a popular uprising or national movement.

Its strategic location astride a major highway and at the figurative heart of Iraq's restive Anbar province made it a rallying point for multiple groups testing the cohesion of Iraq's post-Saddam government.

The first battle of Fallujah began on April 4, 2004, under the name Operation Vigilant Resolve. A force of 1,300 marines assisted by US Army units and Iraqi forces launched a citywide sweep to root out insurgents and other forces opposing Iraq's interim government. They pulled back after several days of hard fighting to allow Iraqis to negotiate amongst themselves.

It didn't work. In November, US-led coalition forces again entered Fallujah, this time with a 10,000-man force supported by tightly choreographed airpower. What they found was an arsenal for insurgency. Weapons caches and material for making improvised explosive devices were all stockpiled in the city. Secretary of Defense Donald H. Rumsfeld later reported that 66 of 77 mosques in Fallujah searched by Iraqi troops turned out to be storing weapons for the insurgency.

Nearly 150 Americans died in the two battles to wrest control of Fallujah from the insurgents. US losses in the two battles totaled 51 dead in April and 95 in November, and more than 1,000 US troops were injured.

Despite the cost, the coalition had taken an important step. Fallujah's fight set a new pattern for operations to stabilize Iraq by galvanizing cooperation between the land and air components. Because of Fallujah, beefed-up ground forces had new tools and methods to take advantage of precision air strikes and intelligence, surveillance, and reconnaissance.

First Fallujah

Iraq was quiet for a time after the capture of Saddam Hussein in December 2003. USAF Gen. Lance L. Smith was a three-star at the time and serving as deputy commander of US Central Command. He recalled speaking with his boss, Army Gen. John P. Abizaid, about the eerie calm in January and February 2004. When it's quiet like this, they are plotting, Abizaid warned.

The calm soon changed. Insurgent attacks were spreading, and many had links pointing back to Fallujah. "The first time Fallujah popped up on the screen was when we were trying to locate al-Zarqawi," Smith said

A1C Christopher Komorek (r) scans the horizon for danger while A1C Kyle Sharp calls in close air support during combat operations in Fallujah Nov. 13, 2004.

in a recent interview. Abu Musab al-Zarqawi was a Jordanianborn terrorist who masterminded hundreds of bombings and beheadings. This made him the most wanted man in Iraq following the capture of Saddam.

"All of us know that for a long time Zarqawi has used Fallujah as a base of operations," Abizaid said in April 2004.

But the problems in Fallujah ran deeper. Swirling in the background was a drive by Sunni militant groups to push back against growing majority Shi'a control. "The Fallujah piece is Sunni," said a senior CENTCOM official at the time. He described the insurgents as "more or less the disenfranchised, former Ba'athists or former regime elements that really are out there, oftentimes unemployed, with little hope for the future."

Geography and history contributed. Long-established routes to Syria created a potential cash pipeline for insurgents. An influx of foreign fighters stirred the conflict as well.

The combination quickly turned Fallujah into a dangerous site—and a breeding ground for violence throughout Iraq. "Besides being a safe haven for leadership command and control, Fallujah was a center for making the [improvised explosive devices] that were being produced and used in other parts of the country to attack the coalition," Smith said.

It all came to a head in the spring of 2004.

On March 31, four American contractors were killed, burned, and brutalized by insurgents who then infamously hung two of the corpses from a bridge over the Euphrates River.

The same day, five US soldiers were killed by a roadside blast a few miles north of the city.

In CENTCOM's judgment, the ambush was a target of opportunity killing, but it demanded a response.

Fallujah was too dangerous to leave alone. Some 1,300 marines from the 1st Marine Expeditionary Force (I MEF) closed a ring around the city. Teams then struck into the city, hunting for those responsible for the slayings and drawing out other insurgents.

"They have cordoned off the city. They are in the process of systematically moving through the city, looking for targets that are identified," Rumsfeld said on April 7, 2004.

Overhead was US and coalition airpower—used for strikes and for surveillance. AC-130 gunships targeted specific sites, and marines called in precision air strikes against buildings harboring terrorists and insurgents.

Those on the ground met surprising resistance. "I knew we'd be fighting here, but I never thought I'd be calling for mortars and air strikes and all that," Marine Corps 2nd Lt. Joshua Jamison told a Montana newspaper. He was among the first to go in.

"It was like we kicked a hornet's nest," recalled Smith.

Just who was fighting? The largest group consisted of former regime elements, Iraqi extremists, extremists from outside Iraq, and the Zarqawi network, said Air Force Gen. Richard B. Myers, who was Chairman of the Joint Chiefs of Staff at the time.

Rumsfeld called them "Saddam leftovers." On top of this, according to Myers, were "thugs and gangs" associating themselves with Moqtada al Sadr, a radical Sunni cleric.

Another Way

It soon became apparent that the mess in Fallujah went well beyond what could be resolved with raids and sweeps. In mid-April, CENTCOM paused offensive operations in Fallujah to give the Iraqi Governing Council a chance to sort out the situation, explained USMC Gen. Peter Pace, vice chairman of the Joint Chiefs of Staff.

Iraqi forces were formed into the Fallujah Brigade in an attempt to control the city, while the marines remained outside.

CENTCOM did not declare victory. In fact, leaders gave every indication they expected to be back in Fallujah again. "We will have to eliminate that enemy in a way that does not allow that force to challenge us throughout Iraq and other places at other times," said Abizaid in a Pentagon briefing on April 30, 2004.

He was well aware insurgents had many ways out of Fallujah. "No doubt some of them will 'exfiltrate' out, and no doubt some of them will find other means to escape, like any insurgent, or blend in with the population. But it may still be necessary to conduct very robust military operations in Fallujah," he warned.

The foray into Fallujah was an eye-opener for CENTCOM's senior leadership. The 2003 invasion campaign had been largely a by-the-book drive to Baghdad. US forces encountered resistance

Matthew J. Apprend



Left: Marines fire on terrorists during the April 2004 battle of Fallujah. Above: Stills from Department of Defense videos taken during the November 2004 battle of Fallujah.

from Saddam's irregulars and sporadic improvised explosive devices and rear area attacks. However, the Iraq War in early 2004 had not yet settled into the organized insurgent resistance destined to prove so lethal and intractable in years to come. For coalition ground forces, the process of rooting insurgents out of urban nests was still unfamiliar. The city of Fallujah held hidden dangers. "Our guys didn't have a lot of experience with that kind of door-to-door fighting," said Smith of the April conflicts there.

Writer Bing West described the experience of marines in the city during the April battle. "The insurgents had some decent

snipers hiding among the maze of rooftops, waiting hour after hour," he wrote in his 2005 book about Fallujah entitled *No True Glory.* "Mortar attacks were common, day and night," he recounted. AH-1 Cobra helicopter gunships "attracted a fusillade of machine-gun fire and [rocket-propelled grenades]." Smart maneuver was nearly impossible under these conditions.

Of course, the coalition had manpower and firepower to overwhelm the city. According to a Knight Ridder report from Fallujah in April 2004, Col. John C. Coleman, I MEF chief of staff, said, "I can rubble that city and reduce it to crushed stone and walk over it quickly. But that is not the ideal; it may be the worst thing to do."

Indeed, that was far from the right strategy. Consequently, tactics for how to apply decisive force in Fallujah presented a real dilemma. The urban fighting was proving costly, but the coalition took great pains not to destroy the city or alienate the Sunni tribal leaders thought to be key to future stability in the area.

What marines and other forces needed was to take full advantage of the coalition's air dominance over the city and turn it into a usable tactical edge.

Airmen were not satisfied with the events of that April, either. "We went to school on what happened," said Lt. Gen. Walter E. Buchanan III in 2005. He had been head of US Central Command Air Forces during both Fallujah sieges of 2004.

Learning the lessons was no easy task. For example, Fallujah as seen from the air was a "town full of literally flat brown roofs and a couple of mosques here and there," in Buchanan's words. What looked like three buildings from the ground appeared to be one long flat roof from the air, he noted.

Joint terminal attack controllers had a hard time describing target sites, and the coalition force as a whole lacked reference points beyond the major east-west roadways. All told, the first battle of Fallujah was no way to fight in the new conditions of Iraq.

Preparing for Part Two

Sporadic fighting continued in Fallujah through the summer. It was only a matter of time until the coalition had to mount a more thorough campaign in the city. If fighting spread, it could jeopardize all the gains of Operation Iraqi Freedom.

Success in the second battle of Fallujah required several quick fixes in air component planning and tactics. While many of these were already in the works, planning for Fallujah's second battle focused and accelerated the process. "We knew it was going to be air intensive because of the urban environment," said Buchanan.

All agreed that ground forces needed airborne overwatch as they moved through the streets where their sight lines were blocked. As Buchanan explained, "When you've got ground forces that are running in parallel down through an urban environment, ... it's very difficult to coordinate lead elements."

Maps were one solution. "We had learned our lessons from first Fallujah on maps. We went into this fight with everybody having the exact same map all the way down to the company commander up to the folks in the airplanes," Buchanan commented.

As the combined force air component commander, he also set up the keypad grid system over Fallujah to provide a common frame of reference for airspace deconfliction and for ground attack. The kill box or keypad system had first been used in Operation Desert Storm, then again in the march up to Baghdad in 2003. Now it became a standard feature that planners could set up quickly over any area of Iraq.

Fighters with targeting pods watched and passed information on movement of friendly units as well as scanned for adversaries. For the second battle of Fallujah, Buchanan added more layers of aircraft on call over the city. He ensured there were a number of Air Force JTACs brought in to lend their unique expertise in controlling close air support strikes.

(Continued on p. 41)





Another problem was identifying and targeting insurgents and distinguishing them from noncombatants. The insurgent is a "smart guy and he is taking full advantage of living, hiding, and operating in and amongst the local populace and making himself look like them," Buchanan said.

Above: Airpower takes out an insurgent stronghold with precision weapons as marines move forward through Fallujah. Below: Soldiers clear an area in Fallujah during the November 2004 battle. The marines added some overhead imagery of their own. Smith discovered their new drones when he traveled to Fallujah that fall to meet with Lt. Gen. John F. Sattler, who had just taken over command of I MEF.

"Let me show you something," Sattler told Smith. In the months following the April battle, the marines had deployed new Scan Eagle low-altitude drones that were transmitting live video overhead Fallujah.

"Can it talk to the Army?" Smith enquired.





"No," Sattler told him. As good as the pictures were, Smith realized the marine-only Scan Eagle was a work-around. Ground operations needed more extensive theater coverage from the medium-altitude MQ-1 Predator.

But these were the days before multiple combat air patrols from unmanned airplanes flew over Iraq. Smith said that, at the time, they did not have enough for 24-hour coverage over Fallujah.

Where Predator flew it was wildly popular. "We've seen people setting up mortars and actually located improvised explosive devices and were able to prevent somebody with weapons from being able to shoot or injure any of our troops," Predator sensor operator USAF Capt. Catherine Platt of the 17th Reconnaissance Squadron told Dallas TV station reporters.

Still, the air component had to keep an eye on the whole theater picture. CENTCOM officials worried that attacking insurgents in Fallujah would spark more fighting in other parts of Iraq. Buchanan remembered a "very clear intelligence signal that the insurgents, once we put pressure on Fallujah, were going to try and cause a fight somewhere else."

USNC photo by Lance Cpl. James Voorhis

Mosul, al Qaim in Anbar province, and southern areas of Iraq were all concerns. To compensate, Buchanan put extra airpower in place using an aircraft carrier and other assets. The air component was "actually providing increased coverage in the north over Mosul and on the western edge, waiting to see if the insurgents erupted."

The larger design was to place organic Marine Corps air in close linkage with marines on the ground. The air component apportioned Air Force, Navy, and other assets to add to the layers of close air support coverage over Fallujah and to pin down any pop-up fighting in other sectors of Iraq.

Before the offensive, the final step was to complete what Buchanan called "shaping" operations. Fallujah itself was emptying in the autumn of 2004. In fact, US Army Gen. George W. Casey Jr., the Multinational Force commander, estimated that more than half the 200,000 residents had left.

Using integrated surveillance, the air component conducted discrete air strikes on known insurgent strong points to prepare the battlefield. "Most of those bombs that were dropped during that time frame were in fact Air Force and Navy, as we went es-

Above: Army 1st Lt. Richard Kehoe inspects a submachine gun confiscated during a raid on a suspected Iraqi arms dealer to insurgents in January 2005. Here: A Marine Corps tank opens up its main gun against insurgents during a battle in Fallujah.



US troops perform a house-to-house clearing patrol through a street in Fallujah.

sentially down in the industrial section of Fallujah, down into the southeastern section, and going on in," said Buchanan.

This time around, coalition forces had prepared for what lay ahead. "We knew what kind of forces we had to have available and what kind of fight to expect," Smith said.

Second Fallujah

The second battle of Fallujah began Nov. 7, 2004, after it became clear that Fallujah continued to fester as an insurgent base. Advance elements of the 10,000-strong coalition force moved to block exits and isolate the city. Aircraft hit a series of preplanned targets, then shifted to on-call response.

Iraqi forces led the attack up the western peninsula, to establish government control over the Fallujah General Hospital. Marines took two bridges to block westward movement from the city.

"The enemy is fighting hard but not to the death," said Army Lt. Gen. Thomas F. Metz, the multinational ground force commander, at a DOD press briefing. "There is not a sense that he is staying in particular places."

Signals intelligence flashes indicated the fight was going well. "If you've heard any of the enemy radio intercepts, they clearly show that the enemy was reeling and panicking from this attack," Army Lt. Col. James E. Rainey said in a 2006 oral history interview. Coalition airmen supplied nearly all precision guided ordnance for the second battle in Fallujah.

"The air plan was real difficult because of the collateral damage concerns," Smith said. Sunni tribal leaders were angry with al Qaeda and insurgents and giving the coalition some assistance. As a result, "we had a lot of incentive not to go in there and blow up the whole place," Smith explained.

Precision was the rule. That included strafing, which Buchanan deemed to be precise. "From a pilot's perspective, if I've got the right target underneath my pipper aiming device, my strafe and rockets are pretty good, very accurate. It's all pilot technique," he said.

By the time of the second Fallujah battle, the air component also had a new and effective weapon: the GBU-38. This 500-pound

bomb was the newest weapon in the satellite guided Joint Direct Attack Munition family. It allowed air strikes to precisely take out targets with a much smaller explosive package. Previously the precision JDAM seeker kit had been available only on 2,000-pound Mk 84 bomb bodies or 1,000-pound Mk 83s. USAF F-16s at Balad AB, Iraq, started flying with the GBU-38 in early fall 2004.

In eight days of deadly, intense fighting, Fallujah was "secure"—100 percent of it was passable for coalition and Iraqi forces, although sporadic fighting continued. However, subsequent enemy communications traffic suggested much of the top insurgent leadership had bugged out of Fallujah before the battle.

After November, the war in Iraq picked up pace. Smith recalled that by then there was a lot of activity in Baghdad and other parts of Iraq.

Locally at least, the success of the second battle of Fallujah bought years of peace. "Fallujah became a city," said Smith. "Stores and restaurants reopened, people moved back in. For a long time it looked like the example for what an Iraqi city could be."

The improved air and ground cooperation in Fallujah taught the coalition valuable lessons in how to use its tremendous advantages in precision weapons and ISR. These gains altered the coalition's method of operations as the Iraq War intensified and provided a stronger template for success in other battles from Anbar province to Baghdad to Basra. The battlespace pictures, precision targeting, and armed overwatch of ground forces by aircraft advanced a long way in Fallujah—and became standard operating practice in the years since.

Still, Casey's comments at the start of the November 2004 battle held one last warning.

Fallujah, he said, would not be truly secure "until a well-trained Iraqi security force can take over the presence in Fallujah and maintain security so that the insurgents don't come back, as they have tried to do in every one of the cities that we have thrown them out of."

A decade later, those words still ring true.

Rebecca Grant is president of IRIS Independent Research. Her most recent article for Air Force Magazine was "How Many Aircrew?" in January.