

Chapter 8

THE MODERN BRIGADE, 1991-2003

Enhanced Brigades

In the early 1970s, the Army had embraced the “Total Army” concept, which made the reserve components, ARNG and USAR, full partners in the defense establishment with projected roles and missions upon mobilization. The Total Army concept had its ups and downs as the readiness of reserve component units fluctuated, based on recruitment, turnover, equipment, and training time factors. Various programs, such as the use of roundout brigades and the affiliation program, where Reserve Component (RC) units were made partners with similar active component units, were designed to enhance reserve readiness. After the Gulf War, where the roundout brigades remained nondeployed, the Army’s drawdown required the continuation of the program. Once the Army reached its 10-division structure in 1996, however, the roundout program was replaced. The new program, ARNG Enhanced Brigades, utilized the acronyms eSB (enhanced separate brigade) and eHSb (enhanced heavy separate brigade). The Army selected 15 separate Army National Guard brigades, most of which had been part of the roundout program, for special (enhanced) status. The program was a comprehensive planning, training, and equipment package designed to enhance the ability of the brigades to mobilize and be combat ready within between 90 and 120 days. The selected brigades received special attention from active component soldiers, most of whom were assigned to regionally based readiness groups.

In 1999, the Army initiated two new organizational changes to increase the readiness status of the enhanced brigades. The first was the activation of two division headquarters without assigned brigades of their own. The 24th Infantry Division (Mechanized), activated at Fort Riley, Kansas, and the 7th Infantry Division, activated at Fort Carson, were designated as Active Component (AC)/RC integrated divisions: divisional headquarters staffed with active duty soldiers, but with subordinate units consisting of assigned Army National Guard separate brigades. The divisions were the first units to combine active duty and nonmobilized reserve soldiers under the same headquarters in US Army history. Additionally, all the support elements normally assigned to the division were assigned directly to each brigade in their separate brigade configurations. The only previous parallel to this, was the assembly of the Americal Division in Vietnam in 1967. The divisions were organized to enhance pre- and postmobilization training, war preparation, and facilitate rapid deployment. The division headquarters oversaw the planning, preparation, and coordination of training for the assigned enhanced brigades.¹

The second change was the merging of the active component readiness groups with the Army Reserve exercise divisions into a new organization, the training support division. The readiness groups were regionally based active Army agencies designed to advise and support reserve component training. With the creation of the enhanced brigades in 1996, the readiness groups were the spearhead of the Army’s effort at supporting the brigades. The Army Reserve exercise divisions had been created in the mid-1990s to prepare and run training exercises for RC units. After 1999, the new training support division was specially tailored to support the enhanced brigades, containing a special eSB training support brigade for each enhanced brigade within its assigned region.

Enhanced brigades not assigned to an integrated division were given a status of “training association” with specified active component units, as well as being supported by eSB training support brigades in the AC/USAR training support divisions. A listing of the enhanced brigades follows in Table 13.

Table 13. National Guard Enhanced Brigades and AC/RC Divisions

Unit	Location	AC/RC Division (1999)
27th Infantry Brigade	Syracuse, New York	
29th Infantry Brigade	Honolulu, Hawaii	
30th Infantry Brigade (Mech)	Clinton, North Carolina	54th Infantry Division
59th Infantry Brigade	Little Rock, Arkansas	7th Infantry Division
41st Infantry Brigade	Portland, Oregon	7th Infantry Division
47th Infantry Brigade	Homestead, Oklahoma	24th Infantry Division
48th Infantry Brigade (Mech)	Macon, Georgia	24th Infantry Division
58th Infantry Brigade	Tampa, Florida	
75th Infantry Brigade	Indianapolis, Indiana	
101st Infantry Brigade (Mech)	Seattle, Washington	
116th Cavalry Brigade	Idaho, Idaho	
105th Armored Brigade	Tupelo, Mississippi	
218th Infantry Brigade (Mech)	Newberry, South Carolina	24th Infantry Division
256th Infantry Brigade (Mech)	Lafayette, Louisiana	
278th Armored Cavalry Regiment	Knoxville, Tennessee	

From 1994-1995, the Army Reserve lost its three maneuver brigades to force cuts. However, the training divisions of the USAR still retained from three to nine training brigades in each division. Between 1994 and 1999, the training divisions were reorganized into two new types of divisions: institutional training divisions, which, in addition to conducting the traditional entry training missions of the former training divisions, also assumed the reserve component military occupational specialty and NCO and officer training missions formerly conducted by US Army Reserve Forces (USARF) school units; and the previously mentioned exercise divisions, which planned and executed both computer simulated and on-the-ground training exercises, in specially prepared training “lanes.” Each of these divisions had subordinate training brigades, which carried the colors and traditions of brigades belonging to the divisions when they were tactical units. As mentioned above, the exercise divisions were merged with the active component readiness groups in 1999 to form new AC/RC training support divisions.

Force XXI and Other Tweaks

A combination of force reductions and an analysis of the 1991 Gulf War made the Army reanalyze its force structure. Technological advances promised to digitalize future Army organizations. Digitalization meant the linking of combat elements by computer, allowing for a

higher situational awareness and a speedy transmission of reports and orders, easing command and control and logistics accordingly. The Army formally initiated its new organizational study, coined Force XXI, in March 1994. Planners developed a divisional structure, referred to as the Interim Division Design, in 1995. The 4th Infantry Division (Mechanized) became the test unit at Fort Hood, experimenting with the interim design in 1996-1997.³

In terms of the brigade, Force XXI had three structural changes: it added a small brigade reconnaissance troop in armored HMMWVs at the brigade level, made the brigade organizational structure fixed, and proposed the removal of all organic combat service support elements from the brigade's combat battalions to the forward support battalions of the DISCOM. The reconnaissance troop, which was implemented Armywide, separate from Force XXI, will be discussed below. The fixed brigade included a division of one armored and two mechanized brigades. The armored brigade would consist of two tank battalions and one mechanized infantry battalion, the mechanized brigades of one tank battalion and two mechanized battalions. Each battalion would consist of only three line companies instead of the four found under AOE. As of 2003, the fixed one armored, two mechanized brigade structure, had not been adopted even in the 4th Infantry Division, which fielded two armored and one mechanized brigade, despite its designation, as an armored division.⁴ The combat service support modifications were based on the advantages of a centralized system of digitalized logistics, which allowed units to send logistics support requests quickly and accurately direct to the units responsible for providing the support. As of spring 2003, only the 4th Mechanized Division and parts of the 1st Cavalry Division were organized under Force XXI structure. The 4th ID was completely digitalized in Fiscal Year 2000, with the 1st Cavalry Division following. The rest of the Army retained modified AOE force structure organizations reflected in Limited Conversion Division XXI (LCD XXI), which reduced the line companies to three in each battalion and added a reconnaissance troop to the brigade.⁵

Even while the Force XXI study and test unit were being developed, tweaks and changes to Army brigade and division structure continued apart from Force XXI. Among these were the creation of divisional engineer brigades, the addition of an organic reconnaissance troop to the brigade, and the widespread adoption of the BCT concept.

In the Gulf War, virtually every brigade had a combat engineer battalion attached. Accordingly, the Army initiated a program called the Engineer Restructuring Initiative almost immediately after that war. The result was the addition of two engineer battalions and an engineer brigade headquarters to the heavy division. Unlike the aviation brigade, there was no pretense that the engineer brigade was a maneuver element. Instead, the brigade headquarters was considered much like the division's artillery (DIVARTY) headquarters, a specialty headquarters controlling troops usually placed in direct support of the division's maneuver brigades. Army thought flip-flopped back and forth about retaining the engineer brigade headquarters or simply assigning the battalions either directly to the division or the brigades. However, as of early 2003, the engineer brigade was still a basic component of the heavy divisions, though in most divisions the engineer battalions were attached directly to the brigades under the BCT concept. In 2004, as will be seen in the next chapter, the engineer brigade is to be converted into a fourth maneuver brigade headquarters in the division.

Separate brigades had long been authorized a brigade reconnaissance element, a troop

of armored cavalry. Divisional brigades would normally receive similar support from the divisional cavalry squadron. However, after the Gulf War, and in studies promulgated under Force XXI, planners focused on the need for an organic reconnaissance troop in each armored and mechanized infantry brigade assigned to a division. The troop would provide the brigade commander with direct reconnaissance assets already found at both the battalion and division levels, but lacking at the brigade level. In 1998, under LCD XXI, the Army authorized the troop, commonly referred to as the brigade reconnaissance troop (BRT), but officially given a cavalry designation.⁶ Troops were added to brigades over the next two years. This marked the first time since the creation of the brigades under ROAD in 1963 that the brigade had an organic combat element.

The brigade reconnaissance troop organization consisted of a troop headquarters and two scout platoons. The scout platoons were made up of six M1025 HMMWVs, divided into three squads. Each squad comprised two HMMWVs, one with a MK19 GMG or M240B medium machine gun and the other with the M2 .50 caliber machine gun. The HMMWVs were manned by a three-scout crew. The troop was often augmented with other reconnaissance assets, particularly Combat Observation Laser Teams (COLT), to provide specialized indirect fire observers.⁷ The troops as fielded and configured in 2003 are shown in Table 14.

Brigade/Cavalry Troops, 2003

Table 14. Brigade Reconnaissance Troops, 2003

Brigade	Cavalry Troop
1st Brigade, 1st Armored Division	Troop F, 1st Cavalry
2d Brigade, 1st Armored Division	Troop G, 1st Cavalry
3d Brigade, 1st Armored Division	Troop H, 1st Cavalry
1st Brigade, 1st Cavalry Division	Troop C, 10th Cavalry
2d Brigade, 1st Cavalry Division	Troop D, 9th Cavalry
3d Brigade, 1st Cavalry Division	Troop F, 9th Cavalry (2004)
1st Brigade, 1st Infantry Division	Troop D, 4th Cavalry
2d Brigade, 1st Infantry Division	Troop E, 4th Cavalry
3d Brigade, 1st Infantry Division	Troop D, 4th Cavalry
1st Brigade, 3d Infantry Division	Troop C, 1st Cavalry
2d Brigade, 3d Infantry Division	Troop E, 9th Cavalry
3d Brigade, 3d Infantry Division	Troop D, 10th Cavalry
1st Brigade, 4th Infantry Division	Troop G, 10th Cavalry
2d Brigade, 4th Infantry Division	Troop H, 10th Cavalry
3d Brigade, 4th Infantry Division	Troop B, 9th Cavalry

Despite many changes in Army organization, force strengths and the adoption of whole new generations of weapons systems and participation in conflicts as varied as Vietnam and Iraq, the brigade's basic design remained a flexible task force to which combat units were attached based on specific mission requirements. The reason the structure was retained was not institutional lethargy or resistance to change. It was retained because it worked. The brigade had proven to be a highly effective means of organizing to execute most aspects of modern warfare. Tweaks such as the reorganizing of the division support command to provide multifunctional support battalions for each brigade and the addition of an organic brigade reconnaissance troop were just fine-tuning an organizational concept that had repeatedly proven its value. But force drawdowns, stationing concerns, and the desire to create special types of forces in sizes smaller than division would impact on the brigade concept at the close of the century.

Stryker Brigades: Army Transformation Redux

In the modern era, the Army has suffered from the perennial problem of projecting forces to the far reaches of the globe quickly and with adequate firepower to deal with indigenous threats. Armored and mechanized units require a lot of shipping and extended periods of up to 30 days to arrive on the scene, unless propositioned equipment is used. Light units can arrive via parachute or aircraft relatively quickly, but are then often too light to successfully fight the heavy forces of the threat already there. The deployability versus survivability debate was not a new one. The testbed motorized division and light divisions formed in the 1980s were approaches to solving the same problem.

In October 1999, Army Chief of Staff Eric Shinseki announced the latest effort at providing a highly deployable and combat capable Army force with the creation of the Interim Brigade Combat Team (IBCT) project. Like the 9th Infantry Division motorization project from almost 20 years before, the IBCT project's goal was to use new technology to field lightweight motorized vehicles with adequate firepower. The program postulated the development of a family of wheeled armored vehicles to provide both troop carriers and assault guns.⁸

Instead of selecting a division to be the experimental force (EXFOR) for the IBCT, in April 2000, the Army selected two divisional brigades, which were stationed at Fort Lewis, away from their respective parent units in Korea and Hawaii. One brigade was a mechanized brigade, the other light. An additional four brigades were added to the program in July 2001, including a separate light brigade, a divisional light brigade, a light armored cavalry regiment, and a mechanized divisional brigade from the Army National Guard. The brigade package, once deployed, was designed to be used under a division or independently and be capable of deployment worldwide by air force transports within 96 hours. The brigade was to fill the deployment gap between early-entry units (light infantry and airborne) and the later deploying heavy forces.⁹

The centerpiece of the new brigade was a new light-armored wheeled vehicle. When the IBCT program commenced, the vehicle did not exist. The first brigade utilized a combination of Land Assault Vehicles (LAV-III) borrowed from the Canadian army and HMMWVs. General Dynamics and General Motors developed the new vehicle under a contract awarded in November 2000. The first models were delivered in March 2002. Initially called the Interim Armored Vehicle, the Army officially renamed the vehicle the Stryker after two unrelated Army Medal of Honor winners in February 2002. As developed, the Stryker is a 19-ton, 8-wheeled

armored vehicle with eight different variants and capable of speeds up to 60 miles per hour. A single C-17 Air Force cargo airplane can carry three Strykers. The first Strykers delivered were infantry carriers, capable of carrying a nine-man infantry squad and armed with either a MK19 GMG or .50 caliber machine gun. Other models included the mobile gun system (MGS), the first of which were delivered as test systems in June 2002. The MGS mounts a stabilized 105mm gun. Until it is fully fielded in 2005, the MGS units of the brigade will substitute the Stryker antitank missile variant. The other variants are reconnaissance, mortar, command, fire support, engineer, medical, and nuclear, biological, chemical (NBC) reconnaissance vehicles. In addition to the Strykers, the brigade would also utilize digital technology to provide wireless communications and sensors to enhance the unit's ability to maintain situational awareness on the battlefield.¹⁰

The first Stryker brigade was projected to be operational by December 2001, with the second a year later and the remaining four over the course of the next few years. However, developmental problems with the Stryker and its production delayed the program. The first IBCT, the 3d Brigade, 2d Infantry Division, commenced its final two-month field training at the Army training centers at Fort Irwin, California, and Fort Polk, Louisiana, in late March 2003. Upon successful completion of the tests, the brigade was considered operational. It began deploying to Iraq for employment in contingency operations in late 2003. Stryker units are shown in Table 15.

Table 15. Projected Stryker Interim Brigade Combat Team Units

3d Brigade, 2d Infantry Division	Fort Lewis, Washington
1st Brigade, 25th Infantry Division	Fort Lewis, Washington
172d Infantry Brigade	Fort Richardson, Alaska
2d Armored Cavalry Regiment (Light)	Fort Polk, Louisiana
2d Brigade, 25th Infantry Division	Schofield Barracks, Hawaii
56th Brigade, 28th Infantry Division (Mech)	Pennsylvania ARNG

Stryker brigade organization contained 309 Strykers and over 700 other wheeled vehicles. The brigade consisted of three combined arms infantry battalions and a new type of cavalry squadron, the reconnaissance, surveillance, and target acquisition (RSTA) squadron. The brigade also included antiarmor and engineer companies, a field artillery battalion, military intelligence and signal companies, and a brigade support battalion. The organization is structured to allow it to readily fight as combined arms units down to the company level.¹¹

The combined arms infantry battalions consisted of three companies, each organized with three infantry platoons (three Stryker infantry vehicles), a 81mm mortar section (three Stryker mortar carriers), and a MGS platoon (four Stryker MGS vehicles), as well as a sniper team. At the battalion level were also found reconnaissance and mortar platoons and a sniper squad.¹²

The RSTA squadron was organized with three reconnaissance troops and a surveillance troop. The reconnaissance troop was composed of three reconnaissance platoons and a mortar section. The surveillance troop consisted of a platoon of unmanned aerial vehicles (UAV), NBC reconnaissance platoon, and a multisensor platoon.

The rest of the Stryker brigade consisted of a towed M198 155mm field artillery howitzer battalion, an antitank company equipped with TOW missile mounted Strykers (to be ultimately replaced with a new “bunker-busting” TOW), an engineer company geared to clearing obstacles, a military intelligence company specially designed to facilitate the use of human intelligence assets, an organic signal company to provide command and control support, and a support battalion consisting of a medical company, a support company, and a headquarters/supply company. The support battalion was designed to provide self-sustaining combat service support to the brigade for the first 72 hours of combat operations.¹³



Figure 37. Stryker Vehicles. Infantry Carrier (left) and Mobile Gun System (right)

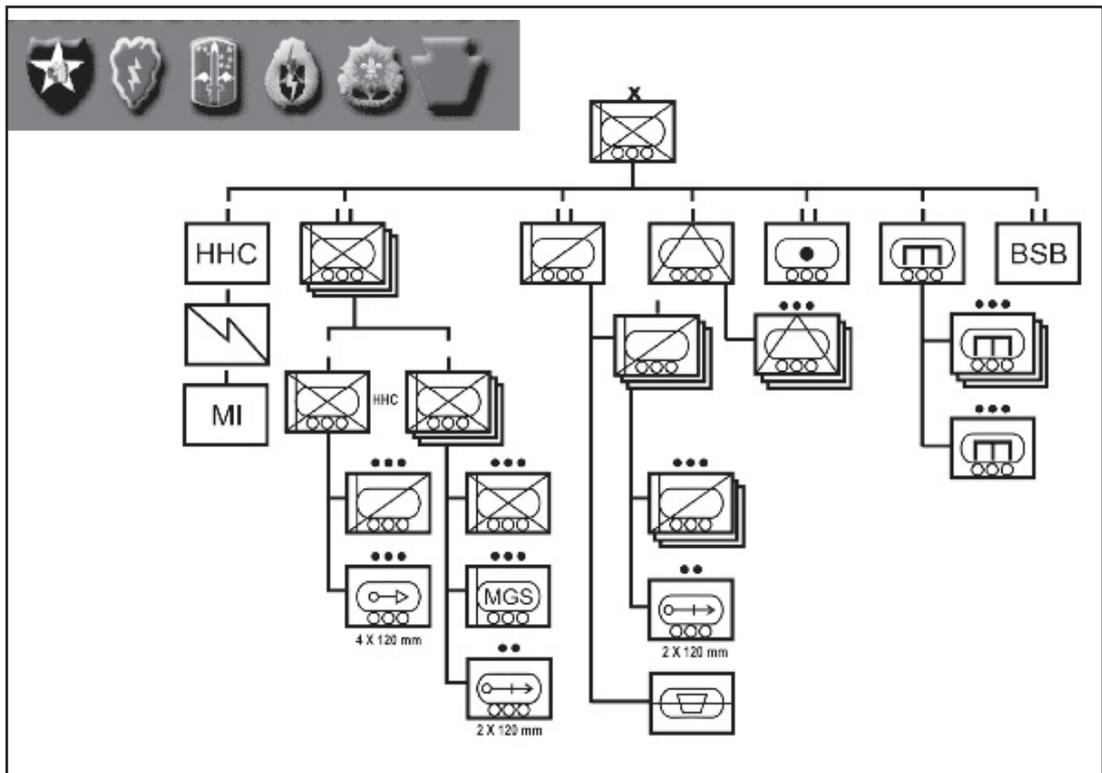


Figure 38. The Stryker Brigade

The Brigade Combat Team

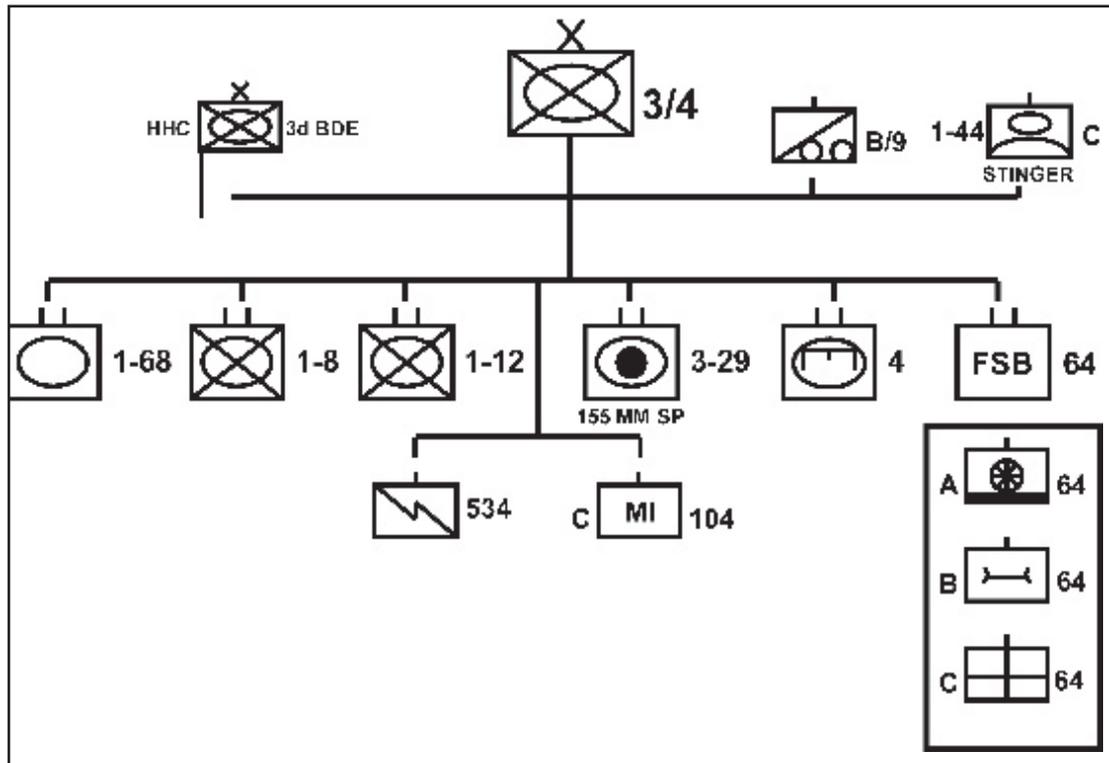


Figure 39. Brigade Combat Team, 2004

A combination of downsizing and stationing issues in the late 1990s affected the role of the brigade vis-à-vis the division. In 2003, there are more Army brigades stationed apart from their parent divisions than ever since the revival of the brigade in 1963. Ironically, at the same time, the Army's force of separate brigades, which at one point in the late 1990s was at zero, was now at only two: one theater defense brigade, the 172d Infantry, in Alaska and one special purpose brigade, the 173 Airborne, in Italy. In effect, the 21st century Army had replaced the self-contained separate brigade's role with divisional brigades, which had become self-contained through the use of the BCT concept.

The BCT is based on analogy with the pre-1957 RCT concept. It designates a brigade with, in addition to the 2-5 maneuver battalions typically attached to it, an attached slice of divisional support elements designated to support it. The terminology is a bit of a misnomer, as the brigade, unlike the old regiment, is a task force headquarters by design. Nevertheless the term BCT allows the Army to easily designate divisional brigades that are basically configured as self-contained units.

In 2003 almost all divisional brigades, whether collocated with their parent division or not, were organized as BCTs. Stationing considerations enhance the viability of the BCT, particularly when several large Army posts had two brigades from different divisions assigned to them without either divisional headquarters onsite. The designation of the test organization

for the Stryker brigades as BCTs, with no divisional headquarters, and the selection of Stryker Brigade Combat Teams (SBCTs) from three different divisions, a separate brigade, and an armored cavalry regiment, clearly indicated that SBCTs were being packaged as independent entities, rather than divisional components, despite their designations. Brigades active in 2004 and their home stationing are listed in Table 16. (Those in boldface are not stationed with their parent divisions or are separate by organization.)

An example of the organization of a typical brigade combat team organization is shown in Figure 39.

Brigades in the War with Iraq, 2003

In the March-April 2003 war with Iraq, the Army deployed far fewer ground combat maneuver brigades than in the 1991 Gulf War: eight versus 21 in 1991. However, the results were far more decisive in a much shorter period of time: in 22 days the Iraqi army was destroyed as a viable combat force and the capital city of Baghdad occupied, versus in 1991, a six-week air campaign followed by a four-day ground campaign against only a portion of the Iraqi army, which left much of that army intact. Brigades deployed in the ground campaign phase of Operation IRAQI FREEDOM are included in Table 17.

The campaign once again proved the utility and flexibility of the maneuver brigade on the modern battlefield. The three heavy brigades of the 3d Infantry Division (Mechanized) spearheaded the advance on Baghdad, moving almost 200 miles in less than 40 hours, then, after a preplanned logistical halt, which coincided with bad weather conditions, completed the movement to the Iraqi capital, after a major river-crossing operation, in two days, and secured major portions of the city over the course of several more days.¹⁴

The air assault brigades of the 101st Airborne Division (Air Assault) and a paratrooper brigade of the 82d Airborne Division, both supported by elements of the heavy 3d Brigade, 1st Armored Division, advanced after the 3d Mechanized Division, relieved brigades of that division containing bypassed cities and protected the long supply and communications line, while destroying enemy resistance at Samawah, Najaf, Karbala, and Hillah. The 173d Airborne Brigade parachuted into key positions in northern Iraq to assist the Kurdish forces and complete the defeat of the demoralized Iraqi forces on that front. The use of the 173d as a component of a Special Operations task force was a unique first in US Army history.¹⁵

Aviation brigades, both divisional and the corps-level 11th Aviation Group and 12th Aviation Brigade, saw extensive service in the Iraqi War. However, use of these organizations as maneuver elements was limited at best. The 11th was an attack helicopter organization, while the 12th provided mostly lift assets for maneuver units. The 3d Infantry Division's Aviation Brigade was, however, used in the later stages of the campaign near Karbala to control reconnaissance and security operations, traditionally maneuver-type missions.¹⁶

Other future works will undoubtedly fully document the activities of these brigades and the Marine, air and naval forces involved in Operation IRAQI FREEDOM. This work will now offer a preliminary analysis of the operations of the three maneuver brigades of the 3d Infantry Division (Mechanized) as the final case study in this history of brigade development and operations in the US Army.

Table 16. Brigade Stationing, 2004

Brigade	Home Station	Parent Unit Location	Type
1st Brigade, 1st Armored Division	Germany	collocated	armored
2d Brigade, 1st Armored Division	Germany	collocated	mechanized
3d Brigade, 1st Armored Division	Fort Riley, Kansas	not collocated	armored
1st Brigade, 1st Cavalry Division	Ft. Hood, Texas	collocated	armored
2d Brigade, 1st Cavalry Division	Ft. Hood, Texas	collocated	armored
3d Brigade, 1st Cavalry Division	Ft. Hood, Texas	collocated	mechanized
1st Brigade, 1st Infantry Division	Fort Riley, Kansas	not collocated	armored
3d Brigade, 1st Infantry Division	Germany	collocated	armored
2d Brigade, 1st Infantry Division	Germany	collocated	mechanized
1st Brigade, 2d Infantry Division	Korea	collocated	armored
2d Brigade, 2d Infantry Division	Korea	collocated	mechanized/air assault
3d Brigade, 1st Infantry Division	Germany	collocated	armored
3d Brigade, 2d Infantry Division	Fort Lewis, Washington	not collocated	SBCT
1st Brigade, 3d Infantry Division	Fort Stewart, Georgia	collocated	mechanized
2d Brigade, 3d Infantry Division	Fort Stewart, Georgia	collocated	armored
3d Brigade, 3d Infantry Division	Fort Benning, Georgia	not collocated	mechanized
1st Brigade, 4th Infantry Division	Fort Hood, Texas	collocated	Force XXI/Armored
2d Brigade, 4th Infantry Division	Fort Hood, Texas	collocated	Force XXI/Armored
3d Brigade, 4th Infantry Division	Fort Carson, Colorado	not collocated	Force XXI/ mechanized
1st Brigade, 10th Mountain Division	Fort Detrick, New York	collocated	light
2d Brigade, 10th Mountain Division	Fort Detrick, New York	collocated	light
1st Brigade, 25th Infantry Division	Fort Lewis, Washington	not collocated	SBCT
2d Brigade, 25th Infantry Division	Hawaii	collocated	light/SBCT
3d Brigade, 25th Infantry Division	Hawaii	collocated	light
1st Brigade, 82d Airborne Division	Fort Bragg, North Carolina	collocated	airborne
2d Brigade, 82d Airborne Division	Fort Bragg, North Carolina	collocated	airborne
3d Brigade, 82d Airborne Division	Fort Bragg, North Carolina	collocated	airborne
1st Brigade, 101st Airborne Division	Fort Campbell, Kentucky	collocated	air assault
2d Brigade, 101st Airborne Division	Fort Campbell, Kentucky	collocated	air assault
3d Brigade, 101st Airborne Division	Fort Campbell, Kentucky	collocated	air assault
172d Infantry Brigade	Alaska	separate	light/SBCT
173d Airborne Brigade	Italy	separate	airborne

Table 17. Brigades in the War with Iraq, 2003

Aviation Brigade, 3d Infantry Division (Mech)
1st Brigade, 3d Infantry Division (Mech)
2d Brigade, 3d Infantry Division (Mech)
3d Brigade, 3d Infantry Division (Mech)
1st Brigade, 101st Airborne Division (Air Assault)
2d Brigade, 101st Airborne Division (Air Assault)
3d Brigade, 101st Airborne Division (Air Assault)
101st Aviation Brigade, 101st Airborne Division (Air Assault)
159th Aviation Brigade, 101st Airborne Division (Air Assault)
2d Brigade, 82d Airborne Division
3d Brigade, 1st Armored Division (not employed as a unit during IRAQI FREEDOM)
173d Airborne Brigade

The 3d Mechanized Division's Brigade in the Iraqi 2003 Campaign

The V Corps' 3d Infantry Division (Mechanized) executed the main attack of the coalition ground assault to depose Saddam Hussein's Iraqi regime. The division's operation concept was to advance as fast and expeditiously to Baghdad as possible, acting as a dagger thrust to the heart of that regime. The daring thrust would deliberately bypass cities and, except for securing bridges for follow-on forces, remain on the Euphrates River's west bank until after defeating the Republic Guard forces defending the area around Karbala, 50 miles southwest of the capital. It was hoped the immediate presence of US forces near Baghdad would cause the collapse of the regime. Central Command (CENTCOM) deliberately designed its strategy to contrast with that used in 1991. The Iraqi command, advised by two former Russian generals, was expecting just such a replay.¹⁷ The 1991 campaign had consisted of a long air campaign, followed by a large-scale ground campaign where most units moved with friendly units on their flanks and nothing was bypassed. The design of the new campaign capitalized on advances in precision munitions, digital communications, and intelligence gathering. Using these advantages, the goal was to move too swiftly and unpredictably for the Iraqi defenders to respond with an effective defense. This switch was euphemistically referred to as "the running start."¹⁸

For Operation IRAQI FREEDOM, the 3d Mechanized Division's BCTs were initially organized into one tank-heavy brigade force, one mechanized-heavy, and one balanced brigade force with two mechanized and two tank battalions. The task organization are shown in Table 18.

The division had additional attached assets including a PATRIOT antimissile battalion (5-52d ADA), and a logistical corps support group.

Table 18. Initial Brigade Organization, 3d Infantry Division (Mech), 2003

3d Infantry Division (Mech) Major General G Buford C. Bloom III, Commanding	
1st Brigade Combat Team COL William F. Gimsley, commanding	2d Brigade Combat Team COL David G. Perkins, Commanding
TF 2-7th Infantry (Mech)	TF 3-5th Infantry (Mech)
TF 3-7th Infantry (Mech)	TF 1-4th Armor
1-11-69th Armor	1-4-4th Armor
C-1st Cavalry (III)	1-4th Cavalry (III)
1-41st Field Artillery	1-4th Field Artillery
Battery, 1-80 Air Defense Artillery	Battery, 1-3d Air Defense Artillery
11th Engineer Battalion	10th Engineer Battalion
3d Forward Support Battalion	26th Forward Support Battalion
3d Brigade Combat Team COL Daniel B. Allyn, Commanding	Aviation Brigade COL Curtis Polls, Commanding
TF 1-16th Infantry (Mech)	8-7th Cavalry (CIMSS) Reconnaissance
TF 1-30th Infantry (Mech)	1-80 Aviation
TF 2-69th Armor	2-80 Aviation
2-73rd Armor (from 8d Ede, 1st Arm Div)	
D-10th Cavalry (BRT)	
1-10th Field Artillery	
Battery, 1-80 Air Defense Artillery	
317th Engineer Battalion	
203rd Forward Support Battalion	

The issuing of Force XXI Battle Command Brigade and Below (FBCB2) systems to all commanders, company and above, greatly enhanced the division's ability to command and control. This recently fielded digitalized system enabled commanders to have almost immediate situational awareness involving friendly forces, and to a lesser sense, enemy forces, by providing a display of force locations.¹⁹

The three brigades of the 3d Mechanized crossed the berm separating Kuwait from Iraq between dusk and dawn of 20-21 March 2003. The division was on the left of the coalition ground forces front. To the west (left) was open desert, a flank which intelligence sources indicated was devoid of Iraqi troops. To the east, 1st Marine Division elements of the I Marine Expeditionary Force (I MEF) crossed the frontier near Safwan, astride the main road (Highway 8) from Kuwait to Nasiriyah. The I MEF's initial mission was to secure the Rumaylah Oil Field, then to advance on Highway 8 to Nasiriyah, cross the Euphrates River, and move on

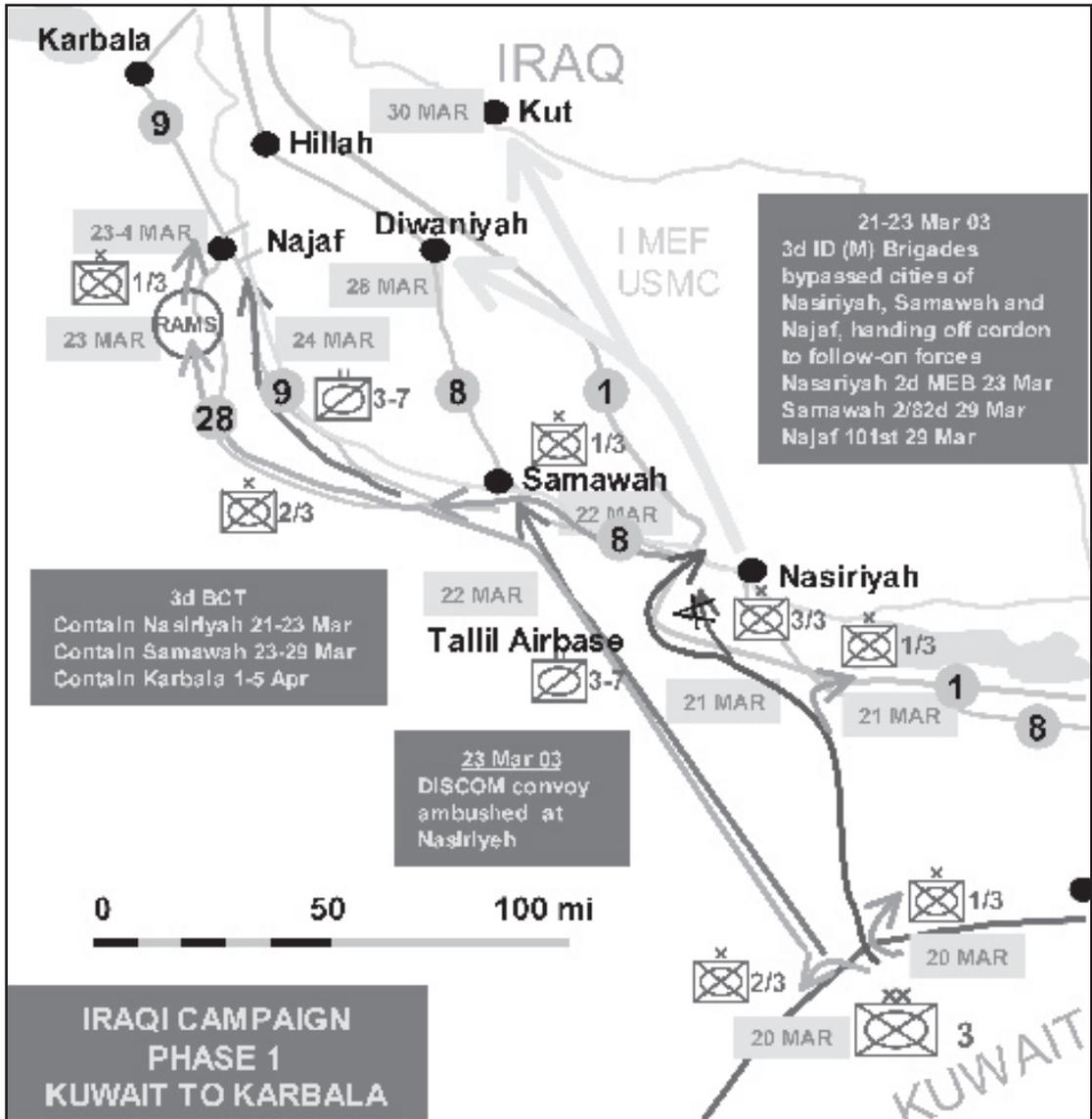


Figure 40. Drive on Karbala, 2003

Baghdad west of the river. To the right (east) of I MEF, was the UK 1st Armoured Division. Along with the UK 3d Commando Brigade, the division had the mission of securing the area around Basra.

The 3d ID was to advance cross-country in two columns from Kuwait to the Euphrates River Valley near Nasiriyah and Samawah. Each brigade had a specific mission as it crossed into Iraq. The 1st on the right and 2d Brigade on the left initially cleared the border defenses and established breaching lanes, allowing the divisional cavalry squadron, 3-7th Cavalry, and the bulk of the 1st and 3d Brigades to pass through and commence the two pronged advance to the Euphrates River. Each brigade then followed the forward elements.²⁰

The cavalry squadron advanced rapidly on the left through open desert to the vicinity of Samawah, where its mission was to isolate the city from the south and east by securing two bridges over a canal southwest of the city, which also would secure Route 28, the main axis of advance the division intended to follow past Samawah. The tank heavy 2d Brigade was right behind the cavalry troopers, with the job of advancing north up Route 28, past the 3-7th Cavalry to the vicinity of Najaf to the northwest, and securing the projected site of the divisional and corps logistical base southwest of the city.²¹

The axis of advance on the right consisted of the 1st and 3d Brigades. The pincer had the mission of securing the line of advance near Nasariyah, including the large Tallil Airbase complex south of the city along with Routes 1 and 8, and the Highway 1 expressway bridge over the Euphrates River west of Nasariyah. This bridge was important because the Marines would use it later in their advance to the Tigris River. After securing these objectives, the brigades would then hand off to elements of the 2d Marine Expeditionary Brigade (MEB), which was responsible for rear area security in the Nasiriyah area, and continue the advance along the Euphrates River Valley to Samawah and Najaf. The initial advance was cross-country through empty desert with rear elements following on roads or trails.

The division advanced an average of 150 miles on the first day with a march rate of about 24 miles an hour. The brigades advanced differently. On the left, the 2d Brigade, following behind 3-7th Cavalry, divided into two elements. All the tracked vehicles moved rapidly cross-country through the rugged desert terrain, while the wheeled elements moved separately on a paved road at a slower pace. On the right, the 1st Brigade advanced cross-country, at first in a wedge formation with one battalion task force in the lead flanked by the other two, then later with all three abreast of each other.²²

Except at the border, the Iraqis did not oppose the advance to the Nasariyah area. The 1st Brigade, tasked with covering the right (east) flank, moved and secured the Jalibah airfield east of Tallil Airbase and west of the Rumaylah oil fields then being secured by the Marines. After this, the 3d Brigade passing through the 1st to attack the Tallil area and defeat the defending Iraqi 11th Infantry Division.

The 3d BCT formed up southeast of Tallil at a desert location designated Assault Position Barrow, then attacked Tallil in a series of maneuvers utilizing its three forward task forces (one tank battalion was retained in reserve) to isolate the airfield then secure it. Advancing in the late afternoon of 21 March, TF 2-69th Armor, following behind the brigade reconnaissance troop, advanced on the left along the Route 1 expressway bypassing the airfield and up to the highway bridge over the Euphrates River, a location designated Objective Clay. Throughout the afternoon and evening, the task force fought and defeated dismounted Iraqi elements to secure the south side of the bridge, doing so by 2350 on 21 March and then crossing the river and securing the north bank by 0500 on 22 March.²³ While the bridge battle was raging, the brigade's other two committed task forces went into action. TF 1-15 Infantry's mission was to secure a barracks area northeast of the Tallil Airfield, designated Objective Liberty. Moving out in the evening of 21 March, the task force secured the objective in the early morning hours of the 22 March against minimal opposition that melted away (or surrendered including an Iraqi air defense general), completing the isolation of the airfield. TF 1-30th Infantry, with responsibility for clearing the airfield, then advanced directly on it from the southeast,

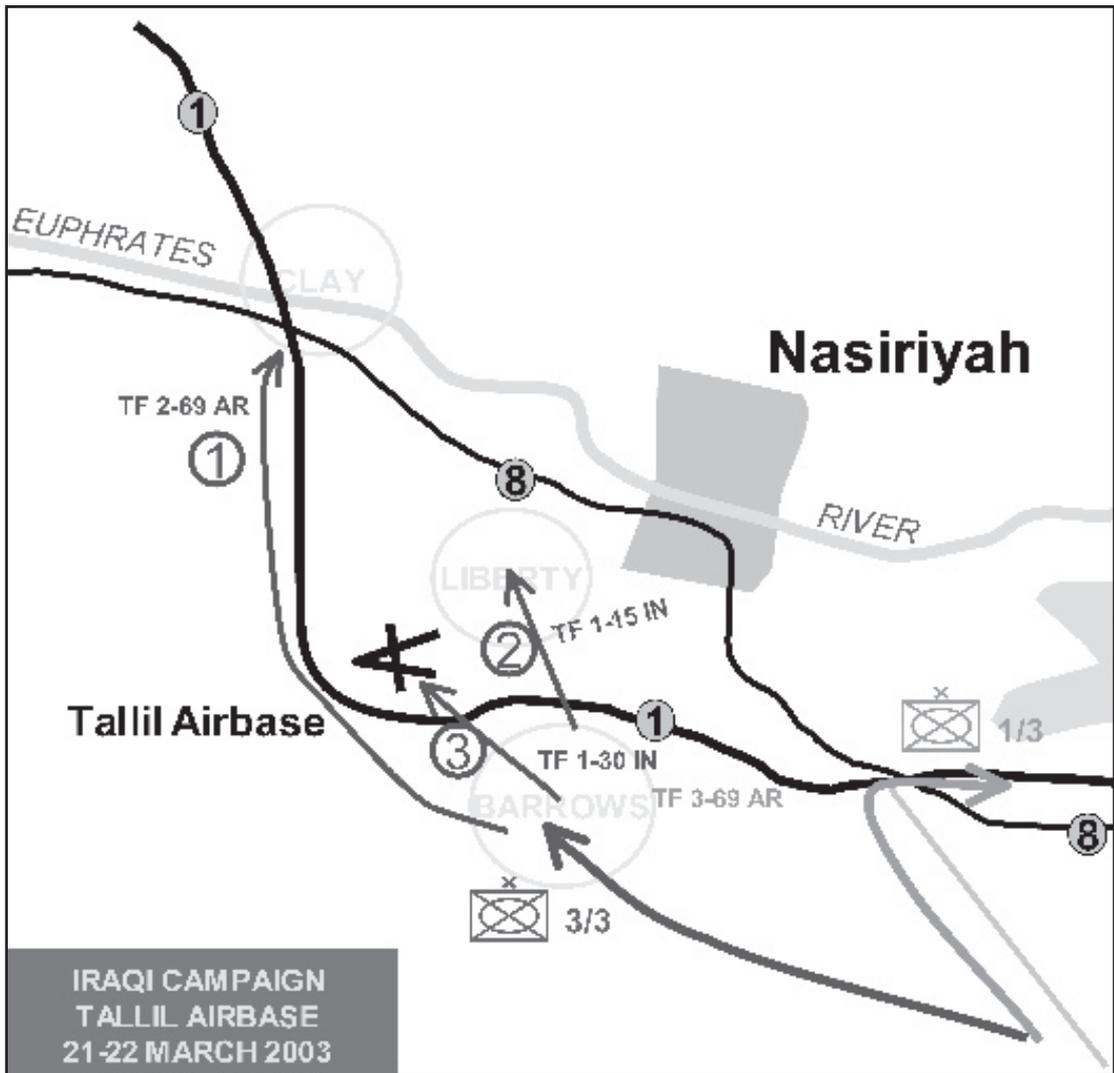


Figure 41. Tallil Airbase, 21-22 March 2003

breaching the berm surrounding the airfield and assaulting across it supported by artillery, attack helicopter, and air fires, seizing Tallil against light resistance.²⁴

In a maneuver that would be repeated throughout the campaign, the 3d Brigade consolidated its gains and provided security forces to contain Nasariyah, while the 1st Brigade passed through it and advanced along Route 8 to Samawah to the west. The 3d Brigade remained in the Nasariyah area until relieved by the 2d MEB moving up from the east on Routes 8 and 1 on 23 March. The brigade then moved off to the northwest to secure the road to Samawah.

At Samawah, the 3-7th Cavalry's ground elements arrived after dawn on 22 March. The following 2d Brigade's tracked vehicle elements caught up with the cavalry troop and, after resting, bypassed the Samawah area, heading to Najaf. The cavalry squadron advanced to secure its objectives—two canal bridges—on the south side of the city, designated as Objective

Chatham, linking up with Special Forces elements on the way. The cavalymen then became involved in a fierce firefight with Iraqi paramilitary forces, but soon gained the upper hand. On the same day, the 1st Brigade advanced along Route 8 beside the Euphrates River from the Nasiriyah area toward Samawah, engaging the enemy briefly before handing the battle off to the cavalry squadron and following the 2d Brigade around Samawah westward along Route 28 to the vicinity of Najaf. The cav squadron remained around Samawah containing the city and was attached to the 3d Brigade on the 23d.

After relief by the Marines, the 3d Brigade came forward and completed the isolation of Samawah after being relieved by the Marines at Nasiriyah. While containing the city, Iraqi paramilitary forces repeatedly abandoned the defensive advantages of the urban landscape to execute charge-style attacks against the 3d Brigade's armored forces, with predictable results. The brigade remained around the city until relieved by the 2d Brigade, 82d Airborne Division, on 29 March. Upon relief, it moved to an assembly area northwest of Najaf to prepare for future operations near Karbala.²⁵

Najaf, the sacred Shiite city, was next on the horizon for the 3d Mechanized's brigades. This large city was also to be isolated. As a Shiite city, resistance was expected to be less than fanatical. This was to prove not to be the case. Objective Rams, a patch of desert southwest of Najaf along Route 28, had been designated to be the division's main logistical base for the final drive on Baghdad. The battle to secure Objective Rams and isolate Najaf involved the 1st and 2d Brigades and the 3-7th Cavalry Squadron. The 2d Brigade, in the lead, was to secure Objective Rams, completing a 230-mile advance in less than 40 hours. 1st Brigade would then pass through Objective Rams and isolate Najaf from the north (the direction of Baghdad). The 3-7th Cavalry would come up Route 8 along the Euphrates River and isolate Najaf on the east.

As at Samawah, the Iraqi enemy resisted mostly with paramilitary forces operating out of, but not remaining within, the city. While Objective Rams was expected to be deserted, it was not. A mix of Iraqi irregulars and regulars occupied the site defending a radio tower communications facility. The defenders were not aware of the swift American advance, expecting instead an airborne insertion.²⁶ The 2d Brigade's lead elements, a tank-heavy battalion task force, arrived at Objective Rams in the last hours of 22 March, about a day earlier than originally projected, and then fought and defeated the fanatical, but suicidal Iraqi militia, securing the objective by 1000 on the 23d, assisted by close air support and field artillery fires. Subsequently, in a second phase of action, Iraqi raiders from Najaf repeatedly attacked brigade elements on Objective Rams. The brigade remained at Objective Rams in a defensive posture for the next two days.²⁷

The 1st Brigade, after being relieved at Nasiriyah, had bypassed Samawah and followed the 2d Brigade to Objective Rams, then passing through to advance farther to the northwest along Route 28 to an intermediate objective, Raiders, late on the morning of the 23d. The advance on Objective Raiders cut Najaf off from the northeast and would be followed immediately by an advance to the east to secure a bridge over the Euphrates River at Kifal, designated Objective Jenkins. This latter move isolated Najaf from the northeast. Highway 28 from Objective Rams to Raiders cut across the high escarpment upon which Najaf sat. The road there, a cut through the escarpment, was a natural choke point with restrictive terrain on both sides and no place to maneuver. Iraqi forces were dug in astride Route 28 and along both sides of the escarpment with

infantry and well-placed artillery. As the 1st Brigade began its advance from Objective Rams, direct and indirect fires started racking the lead elements. In response, the brigade called upon its supporting fire elements to clear the way. After firing smoke to obscure the column from enemy view, the direct support field artillery battalion, the 1-10th Field Artillery, unleashed 58 separate fire missions that suppressed the Iraqi resistance. 1st Brigade secured Raiders in the early morning hours of the 24th and prepared to move on Jenkins. Later in the day, the brigade established blocking positions along Route 9 running north out of Najaf between Raiders and Jenkins.

At dawn on the 25th, the advance on Jenkins commenced in the height of a sandstorm. A task force organized around an air defense artillery (ADA) battery and tank company secured the western approaches to the bridge on Jenkins several hours prior to the advance of the bulk of the brigade. The Iraqis defended the near side of the bridge from prepared positions with now typical fanaticism. The ADA team engaged the defenders for 9 hours with artillery fire until infantry from 1st Brigade's TF 3-69th Armor, including Company B, 3-7th Infantry, arrived and cleared that portion of Kifal west of the river. Immediately thereafter, a platoon of tanks forced its way across the bridge to the east bank while the Iraqis tried to blow it up. The detonation, while failing to topple the structure, damaged it to the point that tanks had to be led across one at a time. This the TF did, until it had moved its entire complement of tanks to the far bank. The forces now across the river then repulsed repeated Iraqi dismounted suicidal attacks, while establishing a strong defensive position. With the bridgehead achieved, the 1st Brigade had completed the isolation of Najaf from the north.²⁸

Meanwhile near Nasiriyah on the 23d, while the forward elements of the division were at Najaf, the wheeled elements of the division support command continued their slower movement to Objective Rams. As the line of communications extended great distances, initially bypassing urban areas, the danger for rear area convoys was accordingly increased. One of the division support command convoys was ambushed after misrouting into unsecured portions of Nasiriyah resulting in prisoners of war and casualties, primarily from the maintenance company of the PATRIOT battalion attached to the division.

Back forward at Najaf, the divisional cavalry squadron now joined the 1st and 2d Brigades in the fight. To complete the isolation of the city, the 3-7th Cavalry Squadron, upon relief of its containment mission at Samawah, was to advance on 24 March up Route 9, 45 miles along the Euphrates River to Objective Floyd, centered on a two-part bridge across the Euphrates River near the town of Abu Sukhayr, south and east of Najaf. The cavalry's route paralleled to the east that of the 2d and 1st Brigades moving to Objective Rams. The advance along Highway 9, was, however, constricted by terrain to the one road and the movement quickly became a running fight. The cavalrymen had to break up a series of large ambushes established by Iraqi paramilitary and militia forces, who were equipped with rocket propelled grenades (RPGs) and antitank missiles. Additionally, the beginning of a three-day sandstorm, which restricted visibility, resulted in some combat taking place at close range. Fighting at Faysaliyah was the fiercest, particularly when a canal bridge collapsed, blocking a road, damaging an M1 tank, and requiring a detour and bypass, while temporarily stranding a tank—Bradley, hunter-killer team on the far bank. With the squadron still fighting all along the route, at dawn on 25 March, advance elements reached the southern edge of Floyd after a 9-hour, 45-mile movement down a road, now forever known to the troops as "Ambush Alley."²⁹

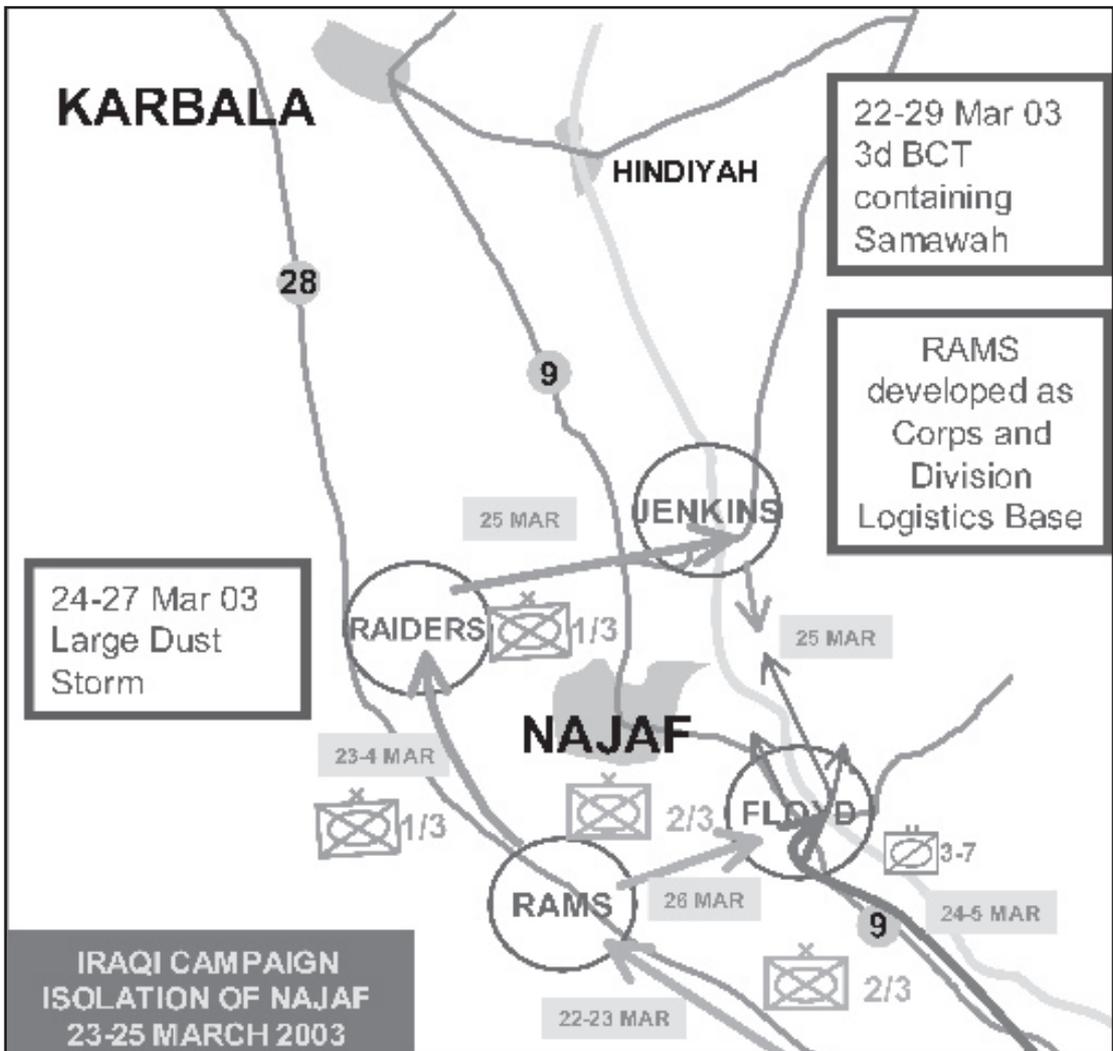


Figure 42. Isolation of Najaf, 23-25 March 2003

Upon finally reaching the vicinity of Objective Floyd, 3-7th Cavalry immediately attacked to secure the bridge. This attack, in the midst of the dust storm, relied on thermal and night vision sights. Iraqi paramilitary personnel fiercely defended the bridge. Nevertheless, by late morning it was secure and part of the squadron was able to move north along the east bank of the river through Abu Sukhayr to secure a dam and another bridge to the north. Again resistance was tooth and nail against the advance, with fighting at close range because of the poor visibility induced by the sandstorm.³⁰

As Iraqi pressure increased, 3-7th Cavalry was soon fighting simultaneously on three separate fronts on both sides of the Euphrates River. Ammunition supply was soon running low. Division responded quickly by placing the 1st and 2d Brigades on alert to assemble forces to reinforce or link up with the cavalry squadron. At dusk on the 25th, the 1st Brigade dispatched elements from a tank task force, 2-69th Armor, out of its bridgehead at Kifal, down the east

bank of the Euphrates to the cavalry, bringing limited resupply. The two units linked up within 3 hours of the start of the 3d Brigade's movement. Meanwhile to the southwest, 2d Brigade, charged with securing Objective Rams and relieving the cavalry squadron in place, did so on the 26th, completely blocking Najaf off from the south. For this mission the brigade received two additional tank battalion task forces that had been guarding the division rear elements as they occupied Objective Rams.

Operations around Najaf were hindered by the massive sandstorm, which blanketed all of southern Iraq and Kuwait for three days (25-27 March) and reduce visibility to zero. The storm, however, did not prevent the brigades of the 3d Infantry Division (Mechanized) from completing the isolation of Najaf and the establishment of a large logistical base at Objective Rams, in preparation for expected subsequent operations against the Iraqi Republican Guard near Karbala and on to Baghdad.³¹

While the command was earmarked to take an operational pause before advancing against the Republican Guard units expected to be near Karbala, by the end of 26 March 2003, all three brigades of the 3d Mechanized Division had all been diverted from this primary mission, to conducting security missions along the route of that advance. From 25 to 29 March virtually all movement north ceased. To the south, the 3d Brigade was cordoning Samawah. Fifty miles to the northwest, the 2d Brigade from the south and the 1st Brigade from the north were containing Najaf.

In order to allow the brigades to begin preparations for the Karbala-Baghdad operation, V Corps dispatched the 101st Airborne Division (Air Assault) and the 2d Brigade, 82d Airborne Division, to relieve them of their security missions. Elements of the 82d relieved the 3d Brigade around Samawah on the 29th, while the same day, the 101st relieved the other two brigades around Najaf. Both the 101st and 82d would spend the next few days reducing these enemy resistance centers, located on the 3d Mechanized Division's lines of communication.³²

Upon relief, the 3d Division's brigades moved to the vicinity of Objective Rams to continue refitting and reorganizing for the next operation, a process that had been ongoing even while the units were arrayed around Samawah and Najaf. During the Najaf operation, the division reorganized its task organization under its three maneuver brigade headquarters. With the 3d Brigade, first at Nasiriyah, then at Samawah, containing pockets of resistance, TF 2-69th Armor was detached to the 1st Brigade on 22 March for its advance on Objective Raiders. The tank battalion attached to the 3d Brigade from the 1st Brigade, 1st Armored Division, the 2-70th Armor, along with the 2d Brigade's 1-64th Armor, were detached to provide security for the Division Support Command at Objective Rams on 24 March. Both battalions were then attached to the 2d Brigade on the 26th for the relief operation at Objective Floyd. When the division began preparing for the Karbala operation on 29 March, the 2-70th Armor was permanently detached to the 101st Airborne Division (Air Assault) and TF 1-15th Infantry was detached from 3d Brigade to 2d Brigade for the duration of the Karbala-Baghdad operation. This gave the division a configuration of 1st Brigade with two mechanized infantry task forces and a tank task force, 3d Brigade with a mechanized and a tank task force and 2d Brigade with two mechanized and two tank task forces. 2d Brigade would, in turn, detach one of its mechanized TFs, TF 3-15 Infantry, to provide security for the division's Euphrates River crossing site for several days. The task organization would then revert to that of the start of

the campaign once Baghdad was reached, with the 3d Brigade receiving back its original habitually attached battalions.³³

The final operation of the campaign consisted of an advance to bypass Karbala, a crossing of the Euphrates River, and a movement directly on and then isolating Baghdad. With Baghdad isolated, the brigades would subsequently execute forays into the city, the intensity of which would depend on resistance and the status of the Iraqi regime. 3d ID had responsibility for isolating Baghdad west of the Tigris River, which bisected the city from the north to the south. I MEF advancing up from the southeast, had responsibility for the portion east of the Tigris River. For this operation all three divisional maneuver brigades would be employed in key roles, each with a final objective in the encirclement of Baghdad from the north (3rd Brigade), west (1st Brigade), and south (2d Brigade).³⁴

Baghdad is east of the Euphrates River. With Army forces at Objective Rams west of the river, it had to be crossed before advancing on the Iraqi metropolis. The terrain west of the Euphrates River was restrictive to the movement of large armored forces, being cut with berms, canals, irrigation ditches, rock quarries, and the urban precincts of Karbala. The only passable terrain, both for forward movement and ultimately for the division's line of communications, was through the 2-mile wide gap between Karbala and the large lake referred to by the Iraqis as the Salt Sea, but commonly called Lake Karbala by the Americans. Intelligence analysis indicated that the enemy was shaping the Karbala Gap, west of the city, into an artillery and missile killing ground. Despite this, the terrain forced the US forces to advance through the gap. Accordingly, in the days before the renewal of offensive operations, V Corps made every effort to find and destroy all enemy weapons capable of ranging the gap.³⁵

The nearest and best Euphrates crossing site to the Karbala Gap was northwest of Karbala where Route 9 crossed the river on two four lane highway bridges at Musayyib. Using this crossing site would be obvious to the defending Iraqis. In order to deceive them as to the true intentions of the US forces, V Corps devised various feints and misleading activities prior to the actual advance.

As part of this strategy, V Corps directed the 3d Mechanized Division to conduct a feint to deceive the Iraqis as to the division's planned Euphrates River crossing point. East of Karbala, a bridge crossed the Euphrates River at Hindiyah on a road that went on to Hillah, established next to the ruins of ancient Babylon. This bridge was designated Objective Murray. The real crossing site, a dual-span expressway bridge located northeast of Karbala on Route 9 in Musayyib, was designated Objective Peach. While elements of the 101st Airborne Division feinted from near Najaf toward Hillah from the southwest, as a prelude to the advance on the Karbala Gap, the 2d Brigade, 3d Infantry Division, would do the same from Objective Rams to Objective Murray. Additionally, the 2d Brigade would clear the area in front of the projected division advance of small enclaves of enemy soldiers.

On 30 March, the 2d Brigade moved out to clear the division front between Najaf and Karbala, using its two mechanized infantry task forces to clear enemy forces from rock quarries. Artillery and attack helicopters supported the task forces. The following day saw the whole V Corps in motion with various feints and air attacks designed to divert enemy attention from the Karbala Gap and allow for the destruction of Iraqi artillery and missile units. For

the 3d Infantry Division, the main effort was the 2d Brigade's feint to the bridge at Hindiyah, Objective Murray. The 2d's mission was to draw Iraqi units away from the main attack near Karbala and deceive the enemy into thinking the main crossing would occur at Hindiyah. Starting at 0600 on 31 March, with two mechanized task forces covering the flanks, TF 4-64th Armor moved down the main road through Hindiyah to the Euphrates bridge, clearing the town in the process, while being supported by field artillery and engineers. Resistance was intense, consisting of mortar and artillery fire and the ubiquitous RPGs fired from buildings and street corners. The defenders were a mix of irregular Fedayeen troops and elements of the Republican Guard Nebuchadnezzar Division's the 2d Battalion, 23d Infantry Brigade. This was the first encounter between the 3d Mechanized Division and elements of the Republican Guard. The tankers secured the west side of the Euphrates bridge in less than an hour and, after engineers removed demolitions from the structure, fought the enemy on the far bank for several additional hours. The defenders began using civilians as shields and hostages to cover their movements and firings. As the operation was a feint, TF 4-64 did not cross the river. Allowing the enemy to believe his defense had succeeded, 2d Brigade withdrew to blocking positions on Route 9 southeast of Hindiyah late in the afternoon. The blocking positions were designed to support the operations of the other two brigades the next day, as well as to deceive the Iraqis into expecting another attack at Hindiyah.³⁶

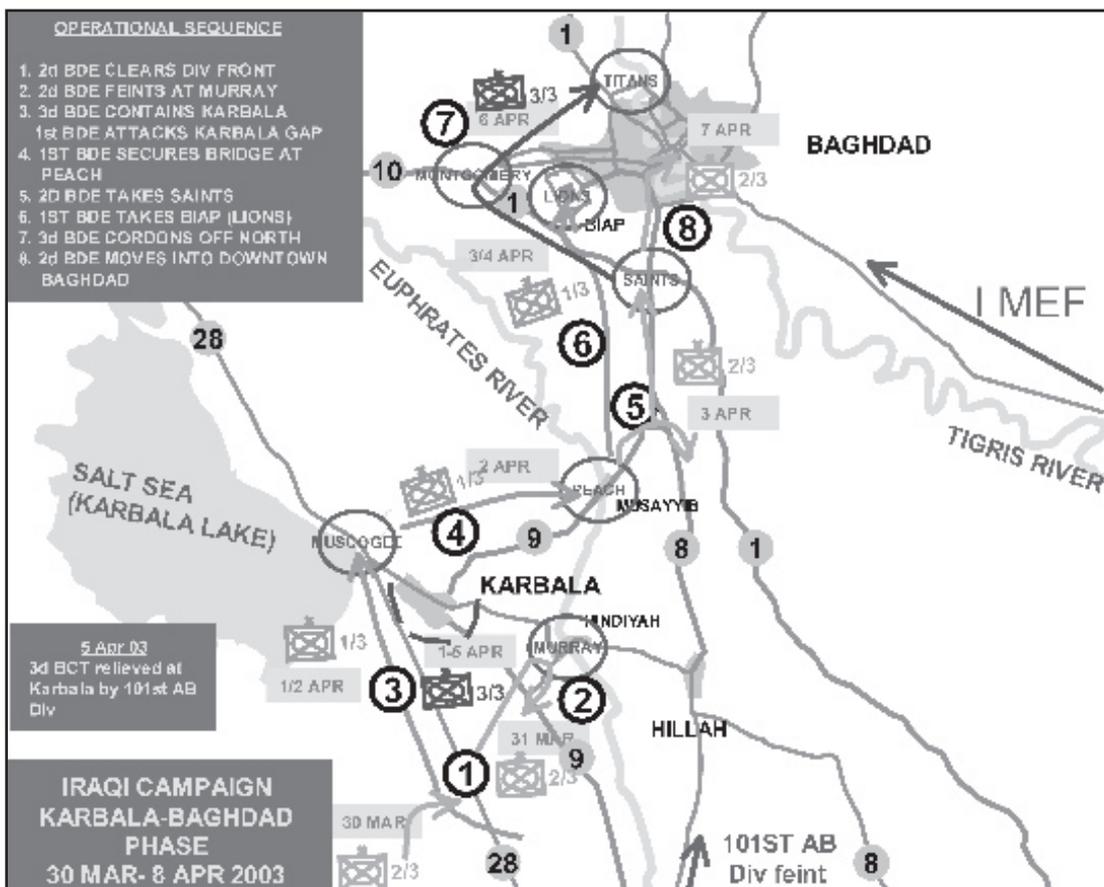


Figure 43. Drive on Baghdad, 2003

The real attack began during the night of 1-2 April. The 1st Brigade, led by TF 3-69th Armor on the right and TF 2-7th Infantry on the left, advanced through the Karbala Gap, securing the Gap by 0700 against surprisingly light opposition. The expected resistance from the Republican Guard's Medina Division did not materialize. Counterbattery fire, in coordination with 2d Brigade's feint, had shattered the Iraqi missile-artillery fire ambush before it could be executed. Objective Muscogee, a dam/bridge complex located in the northwest corner of the gap, received special attention from the tank task force, while the mechanized TF fended off the now routine attacks of irregulars from inside the western portion of Karbala. The bridges and dams were seized by 0600 on 2 April and the gap was cleared before full daylight. Artillery and attack helicopter fires supported the advance, particularly in suppressing Iraqi artillery. 1st Brigade elements contained Karbala to the west as the 3d Brigade moved up on the right, in its now familiar role, and set up positions to contain Karbala from the east.³⁷

The division leadership, particularly the Assistant Division Commander (Maneuver), Brigadier General Lloyd Austin, wanted to maintain the momentum created by the quick seizure of the gap and advance straight to the Euphrates bridges (Objective Peach) and cross the river. Before 0700, the 3d Brigade assumed full responsibility for containing Karbala and securing the gap, while the 1st Brigade prepared to advance to Objective Peach. An attached engineer brigade headquarters, the 937th, was also brought forward to coordinate traffic flow through the gap.³⁸

The 1st Brigade then advanced on Objective Peach at midday on 2 April. The lead element, TF 3-69th Armor, reached the area of the bridge very quickly and by 1500 had secured the west bank of the twin span Highway 9 expressway bridges which were located north of Musayyib. Artillery, close air, and attack helicopters mechanized infantrymen from the 3-7th Infantry battalion, along with engineer troops assigned to the brigade combat team's engineer battalion, crossed the river on rubber rafts to the far bank to secure the bridges before the Iraqis could blow them up. This attempt was only partially successful. The enemy fired the demolitions on the northern span before the engineers could stop them. Despite the explosion, the bridge still stood, though it had a big hole in its center and structural damage that caused its center to sag toward the river below. The southern span, however, was captured intact and soon TF 3-69th Armor was across. The rest of the day and night involved securing the bridgehead, defending it against the inevitable counterattacks on the east bank, and preparing to pass the 2d Brigade through the bridgehead to continue the advance.³⁹

The 2d Brigade, fresh from its feint at Hindiyah, had the mission of following 1st Brigade and passing through it at Objective Peach and advancing to secure Objective Saints, on the south side of Baghdad. Objective Saints controlled the important intersection of Routes 1 and 8, blocking Baghdad west of the Tigris River from the southern part of the country. Urged to come forward rapidly, the 2d Brigade initially tried to move to the west of Karbala rather than through the gap itself. While geographically shorter, this route was on soft or rugged terrain unfavorable to armored and wheeled vehicles. The road network was poor, muddy, and laced with irrigation ditches and canals. As a result, part of the brigade had to ultimately turn back and go through the gap after all. Delayed so, the 2d Brigade was unable to reach Objective Peach until early on 3 April.⁴⁰

While awaiting the 2d Brigade's arrival, the 1st Brigade, in its bridgehead positions, repulsed a major, well-coordinated Iraqi armored attack. The Medina Division's 10th Armored

Brigade executed perhaps the best counterattack conducted by the Iraqis in the whole campaign on the 2d Brigade at dawn. Despite its quality, the American defenders repulsed the attack and the Iraqi commander was killed.⁴¹

After the counterattack, 2d Brigade crossed to the east bank and passed through the 1st Brigade, leaving a mechanized TF (3-15th Infantry) behind to provide security at the bridges and advancing one mechanized TF (TF 1-15th Infantry) in an axis north along on the southern edge of Baghdad. The advance met light resistance, mostly of the paramilitary variety and some elements of the Nebuchadnezzar Republican Guard Division, and reached Objective Saints in roughly 3 hours. The mechanized infantrymen fought in the early afternoon of 3 April to secure that objective, supported by close air and artillery fires against dug-in Iraqi mechanized and dismounted forces. While the fight for Objective Saints was taking place, 2d Brigade dispatched an armored task force (TF 4-64th Armor) to secure Highway 8 south of its junction with Highway 9. The remnants of the Medina Division were supposed to be in that area. The TF defeated and destroyed small Iraqi armored forces whose defenses were facing the opposite direction, apparently attributed to the success of the feints at Hindiyah. The 2d Brigade's last crossing task force, TF 1-64th Armor, followed TF 1-15 Infantry to Objective Saints. All brigade units consolidated at Saints for the evening. Baghdad was effectively isolated from the south.⁴²

After securing Objective Peach, 1st Brigade prepared to execute its on order mission of occupying the Saddam International Airport, codenamed Objective Lions, on the west side of Baghdad. The brigade began moving almost as soon as the last elements of 2d Brigade passed through on their way to Objective Saints. But many things were happening at once to slow up the 1st Brigade: 3-7th Cavalry, the division reconnaissance element, had to first pass through as it was to advance before the 1st Brigade to secure its left (west) flank; the brigade had to hand off crossing site security responsibilities first to the battalion left behind by the 2d Brigade, then to the divisional engineer brigade; all the brigade's units had to assemble to cross; and additional engineer units were arriving to add more bridges. While the advance started on time, 1st Brigade units were, however, strung out from the beginning of the movement and would arrive at the objective piecemeal rather than *en masse*.⁴³

The 1st Brigade's advance would initially be via restrictive country roads directly north from the Objective Peach area to Highway 1, a major expressway running northwest to southeast below Baghdad. Once astride this road, brigade elements would travel down the highway to within a mile and a half of the Baghdad airport complex, then conduct a coordinated assault on the airfield. Traveling in advance of the brigade, the 3-7th Cavalry would continue down Route 1 to its intersection with another major highway, Route 10, northwest of the airport. There the squadron would guard the flank of the brigade as it attacked the airport.⁴⁴

Late in the afternoon of 3 April, the advance began. During the first part, the movement through the countryside, 1st Brigade soldiers encountered their first positive reaction from Iraqi civilians who cheered the passing vehicles not very far south of Baghdad. The restrictive terrain and a small ambush delayed the movement. Nevertheless, Highway 1 was soon met and the BCT initiated planned supporting fires against Objective Lions. The lead element, TF 3-69th Armor, arrived in the environs of the airport at a little after 2200. With the rest of the brigade strung out to the rear, TF 3-69 commenced the attack on its own, advancing and

assaulting the southern end of the large airfield complex, attacking throughout the night of 3-4 April. The task force secured a perimeter and repulsed counterattacks. Brigade follow-on elements began arriving at dawn, with TF 2-7th Infantry entering from the south and establishing blocking positions facing Baghdad on the eastern side of the complex. Engineers and other elements arrived to assist in clearing debris from the airfield. The 1st BCT cleared barracks, compounds, and bunkers methodically, while outside the airport, paramilitary forces and occasionally T-72 tanks fired at the Americans. One company-sized dismounted attack was repulsed mainly through the heroism of an engineer platoon sergeant who took over the .50 caliber machine gun mounted on a destroyed M113 APC and fired suppressive fires until he was mortally wounded. 1st Brigade had established a major base of operations blocking Baghdad from the west.⁴⁵

While the 1st and 2d Brigades maneuvered against Baghdad, the 3d Brigade remained outside Karbala, screening the city, deflecting desultory charges from paramilitary forces and waiting for relief from the 101st Airborne Division. After this relief took place on 5 April, the brigade moved through the Objective Peach crossing site and up to 2d Brigade's operating base at Objective Saints, where the brigade had all its habitually attached elements rejoined it for the first time since the Battle of Tallil. From Saints, the 3d BCT began executing its mission of isolating Baghdad from the north by advancing down Highway 1 to its junction with Highway 10 (Objective Montgomery), where 3-7th Cavalry had been holding off Iraqi attacks since late on the 3d. From Objective Montgomery, the 3d Brigade advance to the northeast, along the way to establish blocking positions at major roads, intersections, and then securing the Highway 1 bridge over the Tigris River. These positions, collectively known as Objective Titans, were held by the brigade until Baghdad fell. Brigade elements fought the Iraqis sporadically and later sent a task force to support the defenders at Objective Lions. On 9 April Brigade elements advanced into Baghdad itself.⁴⁶

Once Baghdad was isolated, the original plan was to probe the defenses of the large city gingerly. However, intelligence indicators, including the reactions of a captured Republican Guard colonel who was stunned to see American forces so close to Baghdad, showed that aggressiveness could possibly secure the city without a block by block fight.⁴⁷ The colonel was captured on 5 April when the 2d Brigade sent its TF 1-64th Armor on a raid north up Route 8 from Objective Saints into Baghdad then over to the west to Objective Lions, the now renamed Baghdad International Airport, and returned through the countryside to Objective Saints. The raid, while resisted fiercely, was also resisted erratically. No organized urban-style defense materialized, though one M1 tank was disabled when antitank fire hit its rear deck. With enemy fire not allowing the tank to be safely recovered, it was destroyed in place and abandoned, becoming an instant landmark. The success of the raid made a large-scale movement into downtown Baghdad seem very plausible.⁴⁸

Accordingly, the 2d Brigade still south of the city at Objective Saints, received the mission to advance into the downtown districts of the city on 7 April on a brigade-sized raid. If successful, the raid would be transformed into a physical occupation of the center city. The brigade advanced in force to the center city early on the 7th, with its two tank battalion task forces racing into the downtown area to secure key installations, while the mechanized battalion task force followed to secure the supply line and key intersections. The Iraqi irregulars

defending the city let the tank battalions pass after short firefights, having finally learned the futility of using RPGs and truck mounted machine guns against the formidable Abrams tank. These enemy fanatics, however, reappeared when the mechanized task force, TF 3-15th Infantry, moved to secure the key highway intersections between the airport and the Tigris River, which snaked its way through the heart of Baghdad. After a running daylight battle at three intersections, designated Objectives Moe, Larry, and Curly, the infantrymen totally routed the disorganized defenders, while the rest of the brigade completed its 12-mile advance into the heart of the city in 2 hours and secured key bridges, palaces, and government buildings in the former stronghold of Saddam's regime.

While the 2d Brigade advanced into downtown Baghdad, an Iraqi surface-to-surface missile made a direct hit on the brigade's tactical operations center (TOC) at Saints, killing or wounding a number of soldiers and putting that key communications node out of action for 2 hours. However, the flexibility of the brigade organization and its redundant command and control facilities allowed this hit to only have a minor impact on combat operations.⁴⁹

The success of the mechanized infantrymen at securing the line of communications, allowing resupply into the forward elements deep in the city, transformed the 2d Brigade's raid into a permanent move into downtown Baghdad. The 2d Brigade and the US Army was in Baghdad to stay, securing the west bank of the Tigris River. The 2d Brigade remained and had two more days of steadily decreasing fighting. The arrival of elements of the I MEF on the opposite side of the Tigris River on 9 April marked the effective end of the Saddam regime's organized resistance. As Marine forces secured the east bank of the river, statues began toppling because the Iraqi people realized their moment of liberation had arrived.⁵⁰

The 3d Mechanized Division's masterful use of the brigade in the Iraqi war was the climax of over 50 years of force design at the organizational level just below division. The brigades, formed up with supporting and attached elements as BCTs, provided the necessary flexibility and fightability to execute complicated combat maneuvers, fight several different battles at the same time, and shift missions almost on the head of a dime. At one point the three divisional maneuver brigades were each fighting outside a different key Iraqi city, Nasiriyah, Samawah, or Najaf, which were separated by between 60 and 75 miles, on a total frontage of over 150 miles. The ability of the brigade to disperse, then mass for operations like the Karbala-Baghdad drive, and its ability to fight alone or as part of the larger mix, bodes well on its future as a US Army organizational element.

NOTES

1. Memorandum, AFOP-TR, dated 20 Nov 2001, Subject: Active Component/Reserve Component (AC/RC) Integration Item 96-10, Active Component/Army National Guard (AC/ARNG) Integrated Divisions.
2. Despite its designation, the 116th Cavalry Brigade is by organization a standard separate armored brigade with two tank battalions (designated cavalry battalions) and a mechanized infantry battalion. The brigade designation comes from an old Idaho Army National Guard unit.
3. Jim Caldwell, "Army Leaders Announce New Design Framework for Army XXI Heavy Division," *Army Communicator* 23 (Summer 1998), 14.
4. The 4th Infantry division, as of April 2003, contained five tank battalions and four mechanized battalions.
5. "Army Announces Final Drawdown Plan," *Army News Service* (15 January 1999), <<http://www.dtic.mil/armylink/news/Dec1998/a19981223downsize.html>>.
6. Ibid. LCD XXI also reduced tank and mechanized battalions to three (rather than four companies) and had other small changes throughout divisional structure.
7. Discussion of the BRTs is primarily based on Captain Ross F. Lightsey, "Establishing and Using the Brigade Reconnaissance Troop," *Infantry*, (Jan-Apr 2000), 10-14.
8. Brochure produced by the GM-BDLS Defense Group, entitled "Stryker Family of Vehicle," in November, 2001; Major Gregory A. Pickell, "The New Interim Brigade Combat Team: Old Wine in New Bottles?" *Military Review* 82 (May-June 2002), 71-72; Brian J. Dunn, "Equipping the Objective Force," *Military Review* 82 (May-June 2002), 29-31; Richard J. Dunn III, "Transformation: Let's Get It Right This Time," *Parameters* 31 (Spring 2001), 22-28.
9. Ibid.
10. Scott R. Gourley, "Significant Events in Transformation: Stryker Battalions Enter Evaluation Phase," *Army* 53 (February 2003), 65-66. General Dynamics later bought out GMC's portion of the venture in March 2003. The MOH winners were PFC Stuart S. Stryker, World War II, and SP4 Robert F. Stryker, Vietnam.
11. Ibid. Headquarters, Department of the Army. Field Manual (FM) 3-21.31, *The Stryker Brigade Combat Team*. (Washington, DC: US Army, 2003), 1-14.
12. FM 3-21.31, 1-15.
13. Ibid., 1-20.
14. 3d Infantry Division, *Operation Iraqi Freedom After Action Report*, Final Draft, 12 May 2003, 6-3.
15. US Army Operation Iraqi Freedom Study Group. *On Point: The US Army in Operation Iraqi Freedom*. Draft Manuscript. (Fort Leavenworth, KS: US Army Combat Studies Institute, 15 August 2003), 4-87.
16. 3d Infantry Division, *Operation Iraqi Freedom After Action Report*, 5-5.
17. David A. Fulghum, "The Pentagon's Force-Transformation Director Takes an Early Swipe at What Worked and What Didn't in Iraq." *Aviation Week & Space Technology* 158 (28 April 2003).
18. *On Point*, 3-11
19. 3d Infantry Division, *Operation Iraqi Freedom After Action Report*, 8-2.
20. *On Point*, 3-35, 3-39-43, 3-45, 3-48.
21. Ibid., 3-48, 3-70, 4-16-7.
22. Ibid., 3-48, 3-85.
23. Ibid., 3-59, 3-62.
24. Ibid., 3-61-2.
25. Ibid., 3-80-1.
26. Ibid., 4-17.
27. Ibid., 4-17-9.
28. Ibid., 4-59-62
29. Ibid., 4-23-5; Sean Naylor, Sean, "'Like Apocalypse Now' 7th Cavalry Squadron Runs Gauntlet of Iraqi Fire During Its Longest Day," *Army Times*, 7 April 2003, 14-16.
30. *On Point*, 4-63-4.
31. Ibid., 4-10-11.
32. Ibid., 4-69-70, 5-12. V Corps was holding the 101st back for use in isolating Baghdad; the 82d's brigade was the theater reserve.
33. 3d Infantry Division, *Operation Iraqi Freedom After Action Report*, xi-xix.
34. *On Point*, 5-6.

35. Ibid., 5-4-6.
36. Ibid., 5-19-20, 5-19-24-26.
37. Ibid., 5-52.
38. Ibid., 5-53.
39. Engineers would quickly rig the northern bridge so it could be used and install as float bridge next to it, minimizing the effects of the demolition. *On Point*, 5-55.
40. Ibid., 5-60.
41. Ibid., 5-61.
42. Ibid., 5-61-63.
43. Ibid., 5-65-66.
44. Ibid., 5-66. The Highway 10/Highway 1 intersection was codenamed Objective Montgomery.
45. Ibid., 5-66-68, 5-72-73.
46. Ibid., 5-82, 5- 87
47. John Diamond and Dave Moniz. "Iraqi Colonel's Capture Sped Up Taking of City." *USA TODAY*, 9 April 2003.
48. *On Point*, 6-17-18.
49. Ibid., 6-31-33.
50. Ibid., 6-51, 6-8-9. 6-22, 6-34-6

CONCLUSION AND THE FUTURE OF THE BRIGADE

Conclusion

The maneuver brigade is as viable a fighting formation in 2004 as it was in 1775. The combined arms brigade of the Revolutionary War soon gave way to a pure formation throughout the 19th and early 20th centuries. But combined arms returned with the adoption of the combat command task force concept for the new ROAD brigade in 1963 and its evolutionary ancestors, the AOE brigade, the 2003 BCT, and the 2004 UA Brigade, making the brigade, operating as part of a division or apart from a division, the true fulcrum for maneuver and firepower.

Before World War I, the brigade was the basic unit through which US commanders fought their armies. The reason for this was a historically poor replacement system. The replacement system allowed regiments to wane in strength. Brigades had to remain of a size suitable for command by a general officer and were maintained not by a state government, but by the Army. Therefore, they did not wane. Instead brigades were simply reorganized with more, but smaller regiments. Throughout the 19th century, a commander could expect that the brigades he would maneuver would be roughly 2,000 soldiers, no matter the state of his replacement system or the size of his regiments.

World War I saw the organization of the first permanent fixed brigades. The large size of the World War I square division, its organic brigades, and its design for use in trench warfare, saw the flexibility and maneuverability of the brigade wane. When the division was redesigned to fight in World War II, the brigade echelon was deleted completely, with the regiment taking over its former role.

However, modern armored warfare with its fluid movements and mission-oriented tactics, saw the adoption of the combat command in lieu of the regiment or brigade as the tactical headquarters between battalion and division levels in the armored division. The combat command concept—a flexible headquarters without any troops of its own except those temporarily assigned to execute specific missions—proved a highly successful way to execute armored operations.

In 1963, the Army adopted the combat command concept across the board, enlarged it and renamed the unit with the more traditional title of brigade. This brigade, controlling attached maneuver battalions and supported by combat support and service support units from the division, has remained ever since.

During the recent war in Iraq, the brigade played a prominent role as the basic maneuver unit. At one time, the 3d Infantry Division (Mechanized) was fighting three separate battles on three fronts, spread over a large geographical expanse. Each battle was directed by a reinforced brigade. The division maneuvered by employing its brigades as separate entities working in coordination. For example, when the 3d maneuvered to simultaneously bypass both Samawah and Najaf, cities about 50 miles apart, one brigade contained Samawah, while the other two maneuvered to surround Najaf. Once relieved at Samawah, the brigade there in turn moved around the other two brigades to advance an additional 50 miles beyond Najaf toward Karbala. Upon their own relief, the other two brigades moved up to Karbala from outside Najaf to participate in the operations to seize Baghdad. In the subsequent direct advance on

Baghdad, one brigade contained Karbala, one secured the Euphrates River crossing site, and the third passed through to advance onto Baghdad. After being relieved at the crossing site, the brigade there then passed through the advance brigade and secured the Baghdad airport. The commander of the 3d Mechanized Division continually rotated or flip-flopped his brigades to maintain initiative with fresh troops, while at the same time providing security and protection along a narrow axis of advance and long supply line, while simultaneously containing several major urban areas until follow-on troops could take over that mission.

The jury is still out on the effectiveness or reality of the combat aviation brigade as a maneuver brigade. While the Army considers it so, there are no real historical examples of the brigade being used in actual combat as a maneuver force, except to lay down fires, a task that division artillery and field artillery brigades also do quite well, with no claim of being a maneuver element.¹ During the 2003 Iraqi War, the 3d Infantry Division's Aviation Brigade retained this role, while also performing some limited reconnaissance and security missions for the division.

The Future of the Brigade: Stryker Brigades and Units of Action

In the last few years several military theorists, most notably Colonels Douglas MacGregor and John Brinkerhoff, have urged the Army to reorganize itself with the brigade as its basic tactical unit, rather than the division. MacGregor compares the division to the unwieldy, though highly successful, phalanxes of ancient Greece and favors a more flexible design based on the brigade. One of the oft-cited points is that European armies, particularly the German *Bundeswehr*, are organized on a brigade basis, with the division as primarily a command and control headquarters. However, this ignores the small size of the German army and its focus on fighting in central Europe.² MacGregor and Brinkerhoff would both place the brigade directly under a corps headquarters, deleting the division echelon of command completely from the force structure.³ As will be seen below, the division has remained, at least for the foreseeable future, even as brigades assume more independent roles and missions.

The future of the brigade and division and which will be the Army's organizational building block, may well depend upon the size and future missions of the force. And even before the advent of the UA/UEX (unit of action/unit of employment) concept in 2003, explained below, while the division was still the primary unit, the brigade had, in any event, assumed many independent roles formerly associated primarily with the division. Size considerations after the drawdown had basically already converted the Army National Guard into a brigade-based force. Stationing considerations for the active force resulted in almost a third of the brigades, 8 out of 31, being either separate by design or detached from their parent division. The SBCT program virtually ignored the division in its organizational development, and the almost universal application of the BCT concept means, in many respects, that the US Army was already a brigade-based force.

The brigade's future as a key Army organizational element seems assured by its key role as the UA in the Army's Future Force program, originally called the Objective Force. This program, initially an extension of the Stryker Brigade, or "interim," program, is a long-term force development initiative aimed at the development and fielding of a Future Force, or final developmental force, capable of employing technological advances to accomplish military

objectives in a joint environment in the 21st century. As part of this force development initiative, the Army focused on two levels of unit deployment packages, a force called the Unit of Employment, typically of division size, but capable of being army or corps in size, and a brigade-sized element, the Unit of Action.

While the UEx concept shows many innovative shifts from current divisional doctrine and organization, including an emphasis on tailorability, being able to command forces from other services, jointness, and a capability to command a theater operation or a portion of a theater operation, the UA falls in well with previous brigade force design concepts.

The brigade-sized UA is considered modular in design, with subunits and capabilities being added or subtracted based on mission, environment, and other factors.⁴ In this respect, the UA meshes exactly with all brigade organizational schemes employed by the Army since the adoption of the ROAD brigade in 1963 and is, in fact, an extension of the current informal, but virtually universal use of BCTs. The first designed UA was an outgrowth of the Stryker Brigade Program. The Stryker Brigade UA was organized as a high-technological unit employing advances in digital communications and armored combat vehicles, not yet developed, with a quick deployment capability. Though modular in design concept, the Army's Objective Force Task Force developed a basic organizational structural design for the UA brigade, illustrated in Figure 44.

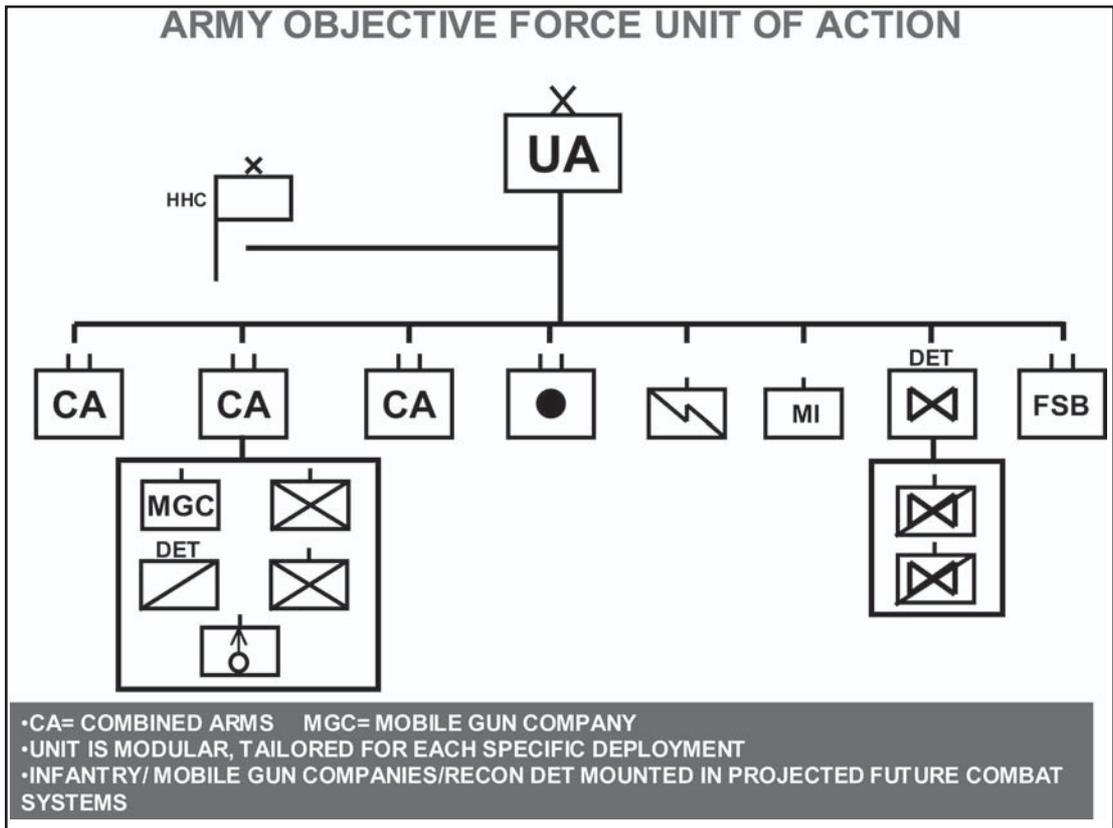


Figure 44. UA Brigade Design⁵

The brigade, as configured doctrinally, contained three combined arms battalions, composed of two infantry companies mounted in a Stryker wheeled, armored or a follow-on vehicle, a similarly mounted company-sized reconnaissance detachment, mortar battery, and a mobile gun company equipped with a armored gun Stryker wheeled or follow-on vehicle system.⁶ In a departure from previous organizations, the logistical element of the brigade, a forward support battalion, would contain its own organic security element and the reconnaissance element would contain two air cavalry troops.⁷

The desired missions for the Stryker UA Brigade are outlined below:

Table 19. Projected Stryker Unit of Action Missions⁸

<ul style="list-style-type: none">▪ Orchestrates engagements▪ Smallest combined arms unit that can be committed independently (brigade and below)▪ Enables massing of effects without massing of forces▪ Deployable anywhere in 96 hours—fights immediately upon arrival▪ Shift toward tactical standoff engagement with continuous operations at a higher tempo▪ Complements precision strike with precision maneuver▪ Gains and maintains positional advantage▪ Interfaces with coalition forces and nongovernmental organizations on the ground

As mentioned in the previous chapter, the new revised Stryker Brigade UA was organized with an additional maneuver battalion called the Reconnaissance, Surveillance and Target Acquisition Squadron or RSTA. Under the UA implementation plan established in 2004 (discussed below), one maneuver battalion will be deleted from all UA maneuver brigades, except the Stryker UA, which would retain three combined arms battalions along with the RSTA squadron.

The development of the UA, first with the Stryker Brigades, then across the board to all Army brigades, light and heavy, and its establishment as the smallest combined arms unit that can be committed independently, is a direct evolutionary advance in the history of the maneuver brigade from its predecessors, the AOE brigade, the ROAD brigade, and the combat command. Its use as the new basic maneuver unit of the Army, with the UEx division becoming more a controlling headquarters and facilitating force, harkens back to the earliest days of the US Army, when Washington used his brigades as the basic maneuver unit of the Army.

In early 2004 the Army announced plans to adopt the UA concept Armywide. The concept extended the idea of modularity to mean that the brigades needed to be self-contained and as identical in structure as possible, so that they could be shifted between controlling divisions and missions as necessary. While divisions will continue as operational headquarters, usually controlling four maneuver brigades, in essence the Army redesign concepts for the 21st century, replace the division as the basic tactical unit with a “brigade-based modular Army.”⁹ The current mix of light brigades (infantry, light infantry, airborne, air assault) and heavy brigades

(armored and mechanized infantry) will be transformed into three basic types by the end of the conversion process: heavy (from the former armored and mechanized infantry brigades), medium (the new Stryker brigade combat teams created from former light infantry divisional brigades), and light (from the remaining light, airborne and air assault brigades). The modular concept of interchangeability shuns specialized units. The formerly specialized air assault and airborne brigades will remain specialized, while at the same time being reorganized identical with the other light UA brigades.¹⁰ The projected goal, as this work goes to press, is the creation of four brigades with the equivalent combat power, out of the division's previous three maneuver brigades, and to standardize all divisional aviation brigades.¹¹ To do this, the new brigades have been reduced from three maneuver battalions to two, but a cavalry squadron, RSTA, will replace the former brigade recon troop. Army leadership contended that the new, smaller brigades would have greater, up to one and a half times, the combat power than the previous, larger brigades. The creation of more, though smaller brigades, would increase the flexibility at the operational level by allowing brigade rotations and deployments based on personnel replacement cycles done by unit rather than by individual.¹² The new brigades most resemble in organization the combat commands in the light armored division in World War II, which, in typical organization, included a single tank battalion, a single armored infantry battalion, and a single armored field artillery battalion. This smaller structure had been maintained in the armored division up until the adoption of the ROAD brigades in 1963.¹³ To make the brigades modular, each heavy brigade (armored and mechanized infantry) and each light brigade (infantry, light infantry, airborne, air assault) is to be organized similarly. The brigades would be capable of working under any division headquarters.¹⁴ In a new concept, long debated within the Army, the two maneuver battalions in the heavy UA brigade are to be organized as a combined arms organizations, with two tank, two mechanized infantry, and one engineer companies. This made each maneuver battalion similar in organization. The eight maneuver companies organized in two battalions reflected well with the typical predecessor AOE brigade, which had nine maneuver companies organized in three battalions. The addition of three reconnaissance troops in the RSTA actually gives the new brigade (if the AOE recon troop is included) a net gain of one maneuver company in the heavy UA brigade over its immediate predecessor. This organization is depicted in Figure 45.¹⁵

The divisional aviation brigade would also be standardized. Each brigade would consist of two attack helicopter battalions with 24 Apache attack helicopters each, an assault aviation battalion with 30 UH-60 Blackhawk light utility helicopters, a medium company of eight CH-47 medium cargo helicopters, a command and control helicopter company with eight Blackhawks, organic aviation maintenance, and a unit, probably designated as a company, of unmanned aerial vehicles.¹⁶ Division would come to resemble the integrated divisions. Previous practice saw different sized AH-64 and UH-60 battalions in aviation brigades in different divisions.

This reorganization of the aviation brigade into the modular configuration, however, still retains the dichotomy found in previous such organizations—on the one hand it controls maneuver fighting elements such as the attack helicopter battalions, and on the other administrative/support elements, such as the assault and medium aviation battalions and companies. The desire to consolidate all aviation assets into one organization creates this duality and continues the debate into the future as to whether the aviation brigade is a true maneuver element or an administrative one like the division artillery headquarters.

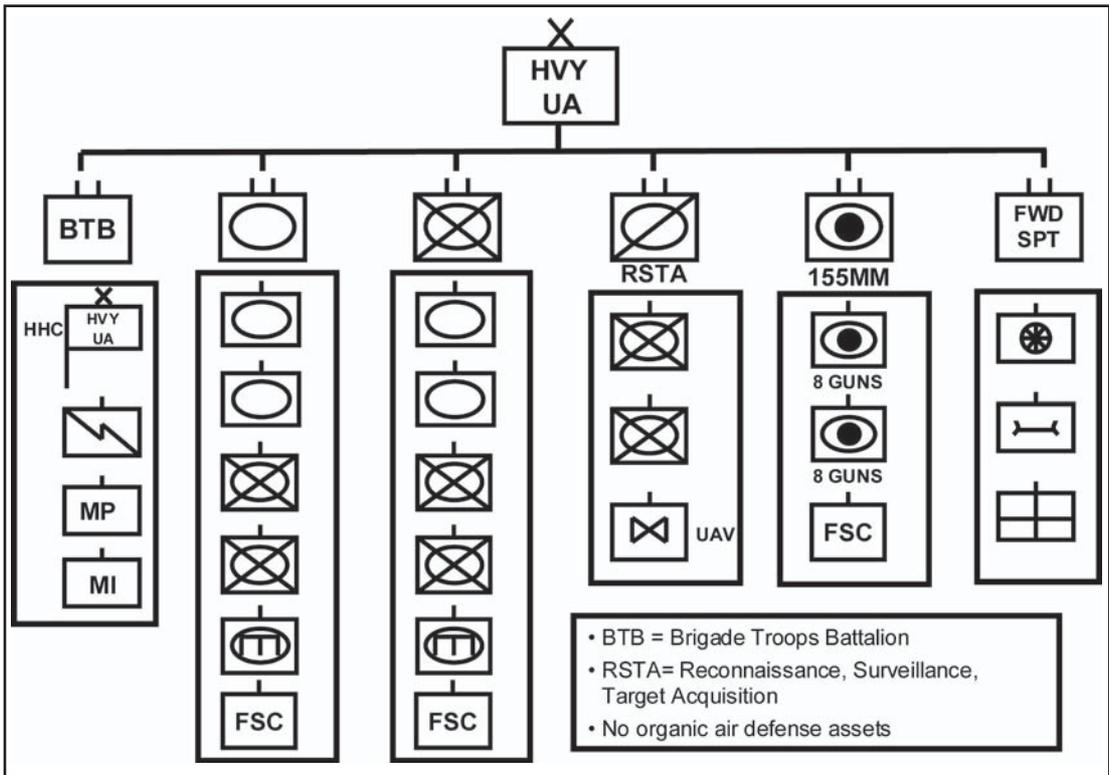


Figure 45. Heavy UA Brigade, 2004

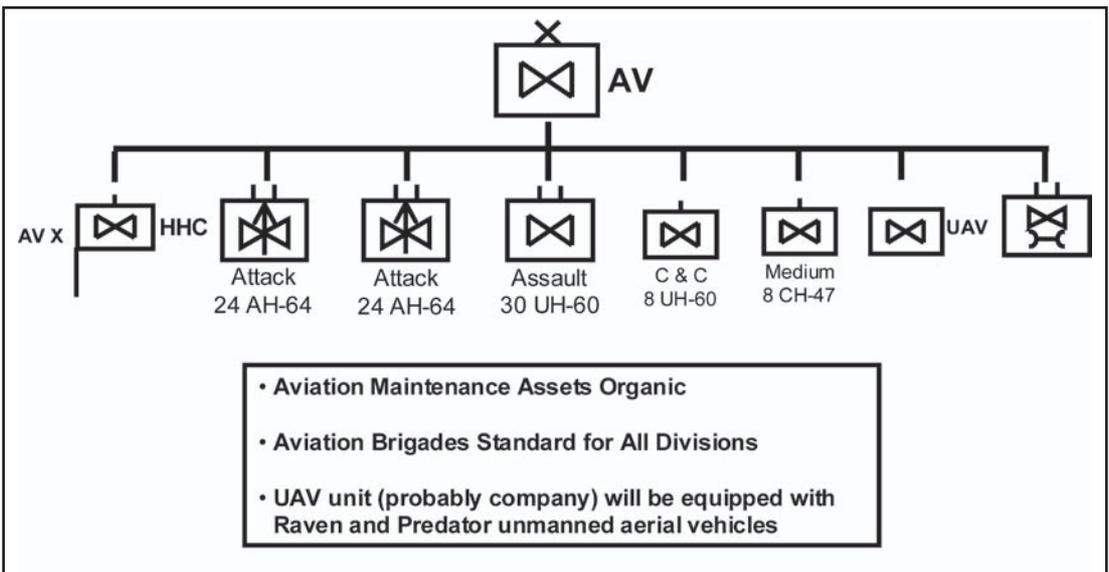


Figure 46. Modular Divisional Aviation Brigade, 2004

The reorganization of the divisional aviation brigade also reflects the concept Army force developers called modularity. As with the maneuver brigades, a divisional aviation brigade could fight under any division headquarters.¹⁷

When the modular brigade redesign is completed in 2007, the reshuffling of maneuver assets into the UA brigades will result in the creation of 15 new brigades in the active Army and the transformation of the 15 enhanced Army National Guard brigades into 22 UA BCTs. While the brigade has been a very flexible organization in its own structure since the creation of the first ROAD brigades in the early 1960s, the UA brigade, with its interchangeable, modular structure, will add a level of flexibility at the operational and strategic levels as well. For the first time since George Washington's reorganization in 1778, the brigade will be the Army's basic tactical combined arms unit. With the transformation of the division into essentially a controlling headquarters, the Army's future, as has been much of its past, clearly belongs to the brigade.

As this study concludes, it should be noted that there have been no recent historical examples to support the need for or desirability change the structure of the brigade. The latest military operations, particularly the 2003 Iraqi campaign, tend to validate the flexibly

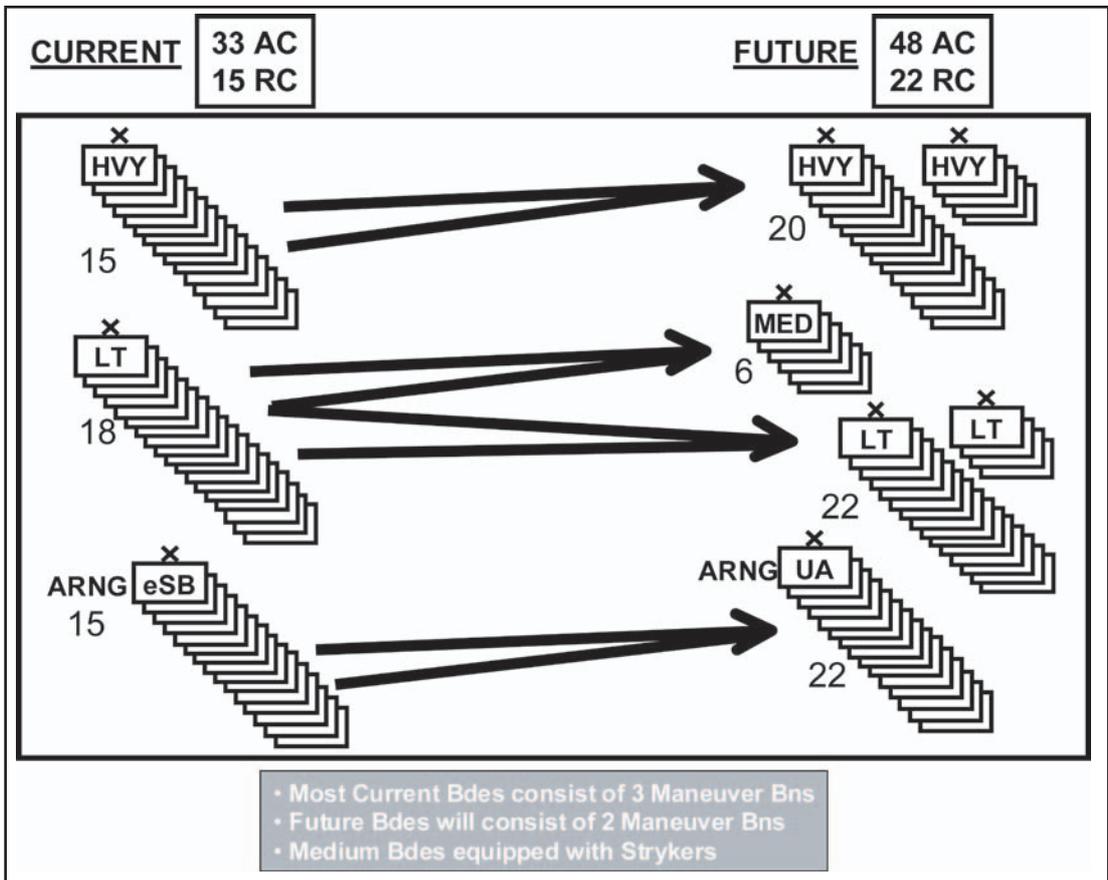


Figure 47. Army Brigade Restructuring, 2004

organized ROAD/AOE style BCT. At no time were brigades broken up into smaller units to add flexibility to maneuver. Under the AOE concept, the modular elements are the combat and combat support battalions and companies, not brigades. In the 2003 campaign, the 3d Infantry Division (Mechanized) commander had the capability to organize his brigades by their particular missions, a capability he used often. It remains to be seen whether the UA brigades will provide similar flexibility while adding flexibility at levels above brigade. For a historical example of the Army's use of a similarly sized unit at the brigade level, the armored division combat command which lasted from 1943 to 1963, was similarly organized to the new UA brigade, with a battalion each of infantry, tanks, and field artillery. The adoption of the combined arms maneuver battalion in the UA brigade, permanently organized as it fights, is the most revolutionary change in the brigade since the adoption of ROAD in 1963. The UA brigades may, due to their additional numbers, provide a flexibility to Army operations at a level higher than that of the AOE brigades, enhancing the rotation of brigade-level units and allowing for a unit replacement personnel system keyed into the brigade level rather than the individual. Level as was done previously. With additional brigades, some units can be allowed to be unready as they take in an influx of new soldiers. The lessons for this will be those of the future rather than those of past history of the brigade.

NOTES

1. The 10th Mountain Division's Aviation Brigade was used as a command and control headquarters in the Mogidishu peacekeeping operation from August 1993 to February 1994. The brigade, which was heavily augmented, controlled two infantry battalions, an assault aviation battalion, and a forward support battalion, the 46th, apparently activated in anticipation of the division activating a third brigade, which it never did, and the forward support battalion was inactivated in 1993, and armored and mechanized elements from the 24th ID (M). See Colonel Lawrence E. Casper, "The Aviation Brigade as a Maneuver Headquarters," *Army* 45 (March 1995), 20-23.
2. Jonathan M. House, *Combined Arms Warfare in the Twentieth Century* (Lawrence, KS: University Press of Kansas, 2001), 261-63.
3. Douglas A. Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21st Century*, (Westport, CT: Praeger, 1997), 68-69, 227; John R. Brinkerhoff, "The Brigade-Based New Army," *Parameters* (Autumn 1997), 62.
4. US Army Training and Doctrine Command (TRADOC) Pamphlet 525-3-90, *O&O, The United States Army Objective Force Operational and Organizational Plan for Maneuver Unit of Action*, TRADOC, dated 22 July 2002, 25.
5. *Ibid.*, 26-47.
6. *Ibid.*, 33-40.
7. *Ibid.*, 41, 47. Recent plans to modularize the Army brigade would indicate that this Stryker brigade model will lose one of its combined arms battalions.
8. Lieutenant General John M. Riggs, "Building an Army... FCS [Future Combat Systems] as Part of the Objective Force," briefing dated 9 November 2001, US Army Objective Force Task Force, slide 6R.
9. Ann Roosevelt, "Army Chief Approves Major Aviation Restructuring," *Defense Daily* (January 30, 2004), 4. The redesign into four smaller maneuver brigades and an aviation brigade does bear more than a passing resemblance to the Pentomic redesign of the 1950s, with its five small subordinate elements.
10. Jim Garamore, "Army to Restructure, Will Grow by 30,000," *American Forces Information Service News Articles* (January 29, 2004); Roosevelt, 5.
11. The fourth maneuver brigade headquarters would come from conversion of the divisional engineer brigade headquarters.
12. SFC Marcia Triggs, "New CSA Vision: More Brigades—Smaller But Lethal," *Army News Service* (October 8, 2003); Jon R. Anderson, "Army Studies Forming Careerlong Brigades," *Stars and Stripes* (February 17, 2004)
13. Of course, the original concept for the combat command was to only have two of them in the armored division, making each somewhat larger. However, in practice, the Reserve Command became a third combat command. This structure was formalized after the war as mentioned in the section of the text dealing with the combat command.
14. Donald H. Rumsfeld, "New Model Army," *Wall Street Journal* (February 3, 2004); Rowan Scarborough, "Major Overhaul Eyed for Army: Schoomaker Crafts Retooling," *Washington Times* (February 3, 2004), 1; Garamore.
15. Elaine M. Grossman, "Army Eyes 'Joint Fire Control Teams to 'Enable' Lighter Troops," *Inside the Pentagon*, (January 29, 2004), 1; Schoomaker, 1.
16. Ann Roosevelt, 4.
17. *Ibid.*

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GLOSSARY

AAA	antiaircraft artillery
AAsslt	air assault
AC	active component
ACCB	air cavalry combat brigade
ACR	armored cavalry regiment
AD	armored division
ADA	air defense artillery; branch of Army responsible for tactical and operational defense against air attack
AEF	American Expeditionary Force
AGS	assault gun system
air assault	units moved into battle via helicopter
airborne	units moved into battle via aircraft, usually synonymous with paratroopers
airmobile	units moved into battle via helicopter (term used between 1965 and 1974)
ANGB	Air National Guard Base
AOE	Army of Excellence
AO	area of operation
APC	armored personnel carrier
armored	units composed of elements mounted in armored tracked vehicles; tank units
ARNG	Army National Guard
Arty	artillery (term used between 1957 and 1972 when field artillery and air defense artillery were one branch)
ARVN	Army of the Republic of Vietnam
assault	aviation units equipped with light utility helicopters, designed to land combat troops under fire
assault support	aviation units equipped with medium utility helicopters, designed to land combat troops and equipment, usually not under fire
AT	antitank
ATP	ammunition transfer point
battalion	a unit of roughly 500 soldiers composed of companies and commanded by a lieutenant colonel; in regimental organizations with only one battalion (before 1898), virtually synonymous with term regiment
battery	lettered company-sized unit in the artillery
BCT	brigade combat team
Bde	brigade
BG	battle group (1957-1963)
BMMC	brigade materiel management center
Bn	battalion

brevet	system of honorary promotions used in US Army before 1914
brigade	unit of either regiments or battalions of roughly 3,000 soldiers, commanded by either a brigadier general or colonel
BRT	brigade reconnaissance troop
BSA	brigade support area
BSB	brigade support battalion
<i>Bundeswehr</i>	Army of the Federal Republic of Germany
CAB (H)	combined arms battalion (heavy)
CAB (L)	combined arms battalion (light)
CARS	Combat Arms Regimental System
Cav cavalry	reconnaissance troops; troops mounted on horses (before 1943)
CCA	Combat Command A
CCB	Combat Command B
CCC	Combat Command C
CCR	Combat Command Reserve
CD	cavalry division
CENTCOM	Central Command
CFV	cavalry fighting vehicle, M3 Bradley
CMH	US Army Center of Military History
Co	company
COHORT	Cohesion, Operational Readiness, Training; US Army program of the 1980s-1990s which trained company-sized units of soldiers together and retained them as a unit throughout their Army term of enlistment
COLT	Combat Observation Laser Team
Combat Command	task organized command found in US Army armored divisions from 1942 to 1963
company	lettered unit composed of platoon, of roughly 100 soldiers, commanded by a captain
component	major subdivisions of the Army-active component (Regular Army and nonregular soldiers on active duty) and the reserve components-Army Reserve and Army National Guard
CONARC	US Army's Continental Army Command
corps	large units consisting of divisions and designated by Roman numeral identifiers (since 1917)
COSVN	Central Office for South Vietnam
CS	combat support; units whose function is to directly support combat units, such as engineers, signal troops, military police, and military intelligence
CSC	combat support company
CSG	corps support group
CSI	Combat Studies Institute
CSS	combat service support; logistics support units such as supply, maintenance, transportation

direct support	support unit placed in exclusive support of a specific unit, while not being technically assigned to it
DISCOM	Division Support Command
DIVARTY	division artillery
Division	unit consisting of brigades or regiments, with a strength of between 10,000 and 20,000 soldiers, typically commanded by a major general
dragoon	mounted infantry (term replaced in US Army in 1861 when dragoons became part of the cavalry)
DRB	division ready brigade
DRS	Division Restructuring Study
DSC	Distinguished Service Cross
DZ	drop zone; designated point for paratroopers to be airdropped
eHSB	enhanced heavy separate brigade
EOY	end of year
eSB	enhanced separate brigade
EXFOR	experimental force
FA	field artillery; branch of Army responsible for providing fire support (cannons, rockets, missiles) to support the Army in the field
FASCO	forward area support coordination officer
FAST	forward area support team
FAV	fast attack vehicle
FBCB2	Force XXI Battle Command Brigade and Below
FCS	Future Combat Systems
Field Force	corps-sized headquarters used in Vietnam
FM	field manual
force structure	the design and structural organization of the Army
FROG	free rocket over ground
FSB	fire support base; forward support battalion
FSSE	forward service support element
functional	a combat service support unit with only one type of function (a transportation company, a supply company, etc.)
GHQ	general headquarters
GMG	grenade machine gun
Group	Army organization, commanded by a colonel, consisting of non-organic subordinate battalions,
HHC	headquarters and headquarters company
HMMWV	high mobility multipurpose wheeled vehicle; replaced jeep and other vehicles in Army in 1980s
HQ/HQs	headquarters
HTLD	High Technology Light Division

HTMD	High Technology Motorized Division
HTTB	High Technology Test Bed
IA	Operations officer
IAP	International Airport
IBCT	Interim Brigade Combat Team renamed Stryker Brigade Combat Team (SBCT)
ID, ID (M)	infantry division; infantry division (mechanized)
I MEF	I Marine Expeditionary Force
Joint	a military operation or organization in which the forces come from more than one armed service, such as the Army and the Air Force
KTO	Kuwaiti Theater of Operations
LAB	light attack battalion
LAV	land assault vehicle
LCD XXI	Limited Conversion Division XXI
legion	brigade-sized unit consisting of infantry, artillery and cavalry, used by the Army briefly in the 1790s
LOGPAC	logistics package (consolidated convoy of logistics resupply)
LST	landing ship, tank
LW	<i>Landwehr</i> - in World War I (a category of German reservist troops)
LZ	landing zone (for helicopter-borne troops)
maneuver	combat troops capable of maneuvering against enemy forces on the battlefield-usually refers to infantry, cavalry, and tank units and sometimes attack helicopter units
MARCENT	US Marine Corps Central Command
MEB	Marine Expeditionary Brigade; US Marine Corps organization consisting of an infantry regiment reinforced with support elements including tactical air (fixed wing)
Mech	Mechanized (infantry); mechanical; shorthand term used to indicate a mechanized infantry unit
mechanized	troops mounted on tracked vehicles
MEF	Marine Expeditionary Force; US Marine command roughly equivalent to a corps, consisting of a division (sometimes two) reinforced with various assets including tactical air
MG	machine gun
MGS	mobile gun system
MI	military intelligence
MMC	also DMMC, BMMC; Materiel Management Center; Division Materiel Management Center; Brigade Materiel Management Center

MOS	Military Occupational Specialty
Mot	motorized; on wheels; not mech
MRF	Mobile Riverine Force
multifunctional	combat service support units organized to do various CSS functions
NA	National Army
NBC	nuclear, biological, chemical
NCO	noncommissioned officer
NVA	North Vietnamese army
Obj	objective
OPCON	operational control
OPFOR	opposing force
ORC	Organized Reserve Corps
ord	ordnance; branch of the Army responsible for ammunition and maintenance
PATRIOT	Phased Array Tracking Radar Intercept On Target
PDF	Panamanian Defense Force
pentomic	Army organizational structure used from 1957 to 1963 which had five battle groups subordinate to infantry divisions in lieu of regiments or brigades
PL	phaseline
Platoon, plt	Army unit of about 30 soldiers led by a lieutenant
POW	prisoner of war
RC	Reserve Components (the Army National Guard and Army Reserve)
RCT	regimental combat team
RDJTF	Rapid Deployment Joint Task Force
REFORGER	Return of Forces to Germany; annual exercise where Army units from the continental United States practiced deploying to Central Europe, begun in late 1960s when 24th Infantry Division (Mechanized) redeployed to United States, leaving one brigade in Germany
Regiment	Army unit commanded by colonel traditionally consisting of subordinate companies or battalions (partially after 1861 and totally after 1898); after 1957 purely an administrative entity (with several exceptions such as the ACR); regiments are usually referred to by branch without the regimental designation: 3d Infantry instead of 3d Infantry Regiment
Reserve	in World War I (a category of unit in the German army initially made up of reservist personnel)
rgt, regt	regiment
RIF	reconnaissance-in-force (operation conducted in Vietnam when the enemy's location was not known)

ROAD	Reorganization Objective Army Division; Army organization adopted in 1963 which restored the brigade as the major subordinate unit of the division
ROCID	Reorganization of the Current Infantry Division; official name of the Pentomic division concept
roundout	program where RC units filled out AC force structure
RPG	Rocket-propelled grenade launcher; a very common Soviet-made short-range shoulder fired antitank rocket launcher; unlike the US LAW, the RPG was reloadable; the latest version was the RPG-7
RSTA	reconnaissance, surveillance, and target acquisition
Salv	salvage
SBCT	Stryker Brigade Combat Team
separate	a unit not an organic component of any higher unit
signal	communications branch of the Army
Spt	support
squadron	battalion-sized unit in the cavalry
SROTC	Senior Reserve Officer's Training Course
SWA	Southwest Asia (i.e., the Persian Gulf region)
TAOR	tactical area of responsibility
team	company-sized combined arms force formed on a temporary basis
TF	task force; battalion-sized combined arms force formed on a temporary basis; in World War II also sometimes used for larger-sized such forces
TOC	Tactical Operations Center
TOE	table of organization and equipment
TOW	highly effective antitank guided missile (ATGM) used in US Army in 1970s to present
TRADOC	US Army Training and Doctrine Command
trains	company and battalion CSS assets pooled together for self-defense and operations
TRICAP	triple capability; experimental US Army division 1971-1975
troop	company-sized unit in the cavalry
UA	Unit of Action
UAV	unmanned aerial vehicle
UE, UEx, UEy	Unit of Employment Doctrinally, the acronyms UEx and UEy have supplanted UE. UEx indicates a deployable unit of employment at the division or corps level, while UEy indicates a deployable unit of employment at levels higher than corps

UK	United Kingdom
USAC	United States Army Corps
USAR	United States Army Reserve
USAREUR	United States Army, Europe
USARF	United States Army Reserve Forces; designation used for Army reserve school units
USARS	United States Army Regimental System
VC	Viet Cong
VHF	very high frequency; type of radios used by aviation and higher headquarters organizations
<i>Volksgrenadier</i>	honorific designation given some low grade German divisions near end of World War II
Volunteers	component of the Army before 1917, in which individuals and units were formed to fight specific wars or campaigns, with most units formed on a state basis

APPENDIXES

