

ARMY HISTORY

Summer 2014

PB 20-14-3 (No. 92) Washington, D.C.

IN THIS ISSUE

The Last Civil War Volunteers

The 125th U.S. Colored Infantry in
New Mexico, 1866–1867

By Russell K. Brown

6

The Evolution and Demise of the MASH, 1946–2006

Organizing to Perform Forward
Surgery as Medicine and the
Military Change

By Sanders Marble

22

U.S. Army Artifact Spotlight 20

The Professional Bulletin of Army History

ARMYHISTORY

The Professional Bulletin of Army History

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army

Chief of Military History
Robert J. Dalessandro

Managing Editor
Bryan J. Hockensmith

Editor
Diane Sedore Arms

Layout and Design
Michael R. Gill

The U.S. Army Center of Military History publishes *Army History* (ISSN 1546-5330) quarterly for the professional development of Army historians and as Army educational and training literature. The bulletin is available at no cost to interested Army officers, noncommissioned officers, soldiers, and civilian employees, as well as to individuals and offices that directly support Army historical work or Army educational and training programs.

Correspondence, including requests to be added to the distribution of free copies or to submit articles, should be addressed to Managing Editor, Army History, U.S. Army Center of Military History, 102 Fourth Ave., Fort Lesley J. McNair, DC 20319-5060, or sent by e-mail to usarmy.mcnair.cmh.mbx.army-history@mail.mil.

Those individuals and institutions that do not qualify for free copies may opt for paid subscriptions from the U.S. Government Printing Office. The cost of a subscription is \$20 per year. Order by title and enter List ID as ARHIS. To order online, go to <http://bookstore.gpo.gov>. To order by phone, call toll free 866-512-1800, or in the Washington, D.C., metropolitan area, 202-512-1800; by fax, 202-512-2104; or by e-mail, contactcenter@gpo.gov. Send mail orders to U.S. Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000.

The opinions expressed in *Army History* are those of the authors, not the Department of Defense or its constituent elements. The bulletin's contents do not necessarily reflect official Army positions and do not supersede information in other official Army publications or Army regulations. The bulletin is approved for official dissemination of material to keep the Army knowledgeable of developments in Army history and to enhance professional development. The Department of the Army approved the use of funds for printing this publication on 7 September 1983.

The reproduction of images not obtained from federal sources is prohibited.

Cover Image: A wounded soldier arrives at the 8225th Mobile Army Surgical Hospital in Korea, 1 September 1951. /U.S. Army

EDITOR'S JOURNAL

The Summer 2014 issue of *Army History* features two articles on very disparate topics. The first article, by Russell K. Brown, a retired Army officer and independent historian, details the saga of the last Civil War volunteers to be mustered out of service—the 125th U.S. Colored Infantry. This unit, recruited mostly from Kentucky slaves in early 1865, performed garrison and guard duties in Louisville until it received orders to proceed to the New Mexico Territory in early 1866. The regiment arrived in New Mexico and accomplished its missions admirably, although not without its trials and travails. Brown captures the 125th's grand adventure well and still manages to put a very human face to the story, primarily through the use of diaries and personal letters.

The next article, by Sanders Marble, the senior historian with the Office of Medical History at Fort Sam Houston, chronicles the inception, rise, and ultimately the fall of the Army's Mobile Army Surgical Hospital (MASH). The introduction of forward surgery elements, or mobile hospitals capable of executing complicated surgeries close to the front lines, came during the First World War and drew heavily from the British and French experiences. Marble examines the evolution of this type of unit as the Army's needs changed throughout the courses of World War II, the Korean War, the Vietnam War, Operation DESERT STORM, and finally into the twenty-first century.

The artifact in this issue's Army Artifact Spotlight is an interesting and timely piece as the seventieth anniversary of the D-Day landings is upon us.

The chief of military history, in his Chief's Corner, discusses the ongoing Army-wide effort to collect operational records from the Global War on Terrorism in order to support the writing of official histories. Because the Center of Military History has now been designated the sole repository for these records, we are working to overcome the inherent challenges that come with gathering, safely storing, and providing accessibility to hundreds of terabytes-worth of information.

In his Footnote, the chief historian talks about the fiftieth anniversary of the Vietnam War, furnishes some background to the opening stages of the conflict, and highlights the first brochure in the Center's U.S. Army Campaigns of the Vietnam War series.

I continue to invite readers to send me their articles and commentaries on the history of the U.S. Army as well as their thoughts and comments on this publication.

Bryan J. Hockensmith
Managing Editor



THE CHIEF'S CORNER

ROBERT J. DALESSANDRO

HISTORICAL RECORDS IN THE DIGITAL AGE: OPERATIONS ENDURING FREEDOM, IRAQI FREEDOM, AND NEW DAWN

In addition to our ongoing Army-wide efforts focused on improving history and museum programs, there have been some exciting developments over the past few months in our work to gather records to support the future histories of Operations ENDURING FREEDOM, IRAQI FREEDOM, and NEW DAWN. These campaigns were truly the first combat missions in a fully digital records age. Historians and researchers quickly realized that, although there was plenty of information available, digital recordkeeping was in no way akin to the after action reports, morning reports, or operation orders of the pre-digital age. In fact, searching records was counterintuitive; a researcher was far less likely to discover where a soldier was assigned, or what he or she did during Operation ENDURING FREEDOM, than to find out what that soldier's great-grandfather did during the Meuse-Argonne Offensive. Far more troubling was that, in many cases, this lack of information also applied to whole units.

Some months ago, the secretary of the Army and chief of staff of the Army both signed a memorandum designating the Center of Military History (CMH) as the sole repository for all operational records for the combat operations in Afghanistan and Iraq. This document set in motion a massive effort to identify and collect hundreds of terabytes-worth of information from units that had deployed following the terrorist attacks of 11 September 2001. The initiative also addressed concerns of the Army's senior leadership that records from our current operations were not being properly preserved and that, without these documents, both veterans' claims and the production of the future official history of the Army were being jeopardized. Given that CMH already had a significant collection of materials, gathered by deployed Military History Detachments, Army leaders felt that, by empowering one responsible agency, efforts could be focused to optimize success. Although this endeavor continues, to date we have collected some 120 terabytes of information from Army formations across every component of the force.

There are still some significant gaps; however, this collection has already become the definitive source for researching our current combat operations. Of importance far beyond the Department of Defense, those who have made significant use of this vital resource include the Departments of State, Justice, and Veterans Affairs.

Collection of the materials has been quite a challenge as the medium in which it comes to CMH varies, ranging from CD-ROM discs and computer hard drives, to paper documents and photographs; but our biggest hurdle has been creating finding aids for this massive assemblage of data, which includes every type of file and format imaginable. The final size of the collection is estimated to be in the neighborhood of 160 terabytes. To put that number into perspective, the digitized collection (in PDF format) of CMH's published works, which currently includes over 475 major volumes, monographs, and brochures, takes up approximately 8.37 gigabytes of hard drive space. This is only .5 percent of the estimated size of the ENDURING FREEDOM, IRAQI FREEDOM, and NEW DAWN collection. Imagine searching through the CMH publications catalog without any finding aids. We face this problem many times over! Fortunately, technology came to the rescue.

With the assistance of the U.S. Army Communications-Electronics Command, CMH was able to leverage cutting edge, federated search technologies, allowing us to conduct document-level keyword searches, enhanced with sophisticated search filtering. Together, these capabilities give the researcher an effective means to narrow a search and optimize his or her labors.

These efforts are especially essential in light of another recent development. A few months ago, the chief of staff of the Army directed CMH to help produce a short-term study of Operation ENDURING FREEDOM. (A short-term study of Operation IRAQI FREEDOM is already under way.) This single-volume, interim operational history of ENDURING FREEDOM will address major campaigns, operational performance, leadership, and other key

Continued on page 19



Summer 2014



Features



5 **News Notes**

20 **U.S. Army Artifact
Spotlight**

41 **Book Reviews**

54 **Chief Historian's
Footnote**

Articles

6

**THE LAST CIVIL
WAR VOLUNTEERS
THE 125TH U.S.
COLORED INFANTRY IN
NEW MEXICO, 1866-1867**

BY RUSSELL K. BROWN



22

**THE
EVOLUTION
AND DEMISE OF THE
MASH, 1946-2006
ORGANIZING TO
PERFORM FORWARD
SURGERY AS MEDICINE
AND THE MILITARY
CHANGE**

BY SANDERS MARBLE



NEWSNOTES

CENTER OF MILITARY HISTORY RELEASES NEW PUBLICATION

The Center of Military History (CMH) recently released its newest publication. This brochure, by Clayton R. Newell, is titled *The Regular Army Before the Civil War, 1845–1860*, and is part of the U.S. Army Campaigns of the Civil War series. This short study covers the fifteen years preceding the outbreak of the Civil War, to include the Mexican War; conflicts with Indian tribes; and exploration and governance of the vast American West. It was during this time that many young officers, who would later become senior civilian and military leaders on both sides during the Civil War, got their first taste of action. This brochure has been issued as CMH Pub 75–1 and will be available for purchase by the public from the U.S. Government Printing Office.

FORTIETH ANNUAL CONGRESS OF THE INTERNATIONAL COMMISSION OF MILITARY HISTORY

The International Commission of Military History (ICMH) will hold

its fortieth annual congress from 30 August to 6 September 2014 at the Golden Sands Resort in Varna, Bulgaria. The theme of the conference is “The First World War, 1914–1918.” Some of the topics scheduled to be covered are “Technological Development on the Eve of the First World War,” “Economic Considerations and Reasons for the War,” and “Sea and Air Power,” as well as a special roundtable on “The Balkans on the Eve and During the First World War, 1912–1918.” For more information, please visit the ICMH Web site: <http://www.bc-mhll40.com>.

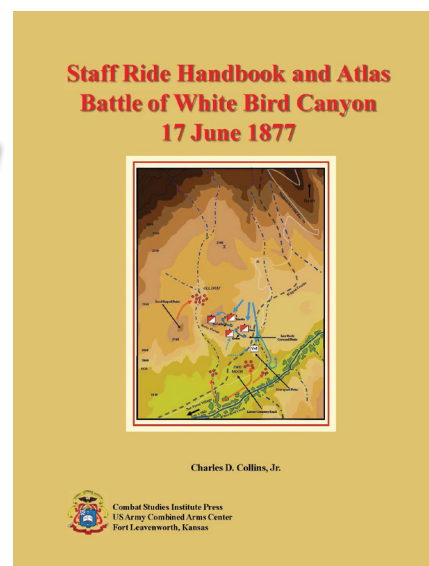
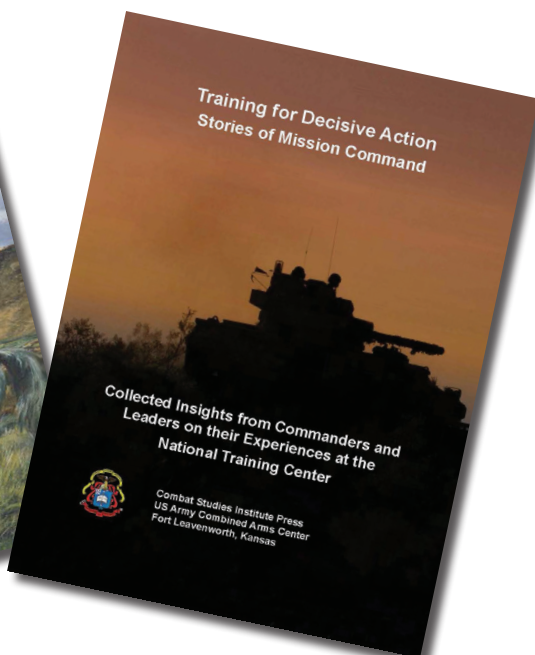
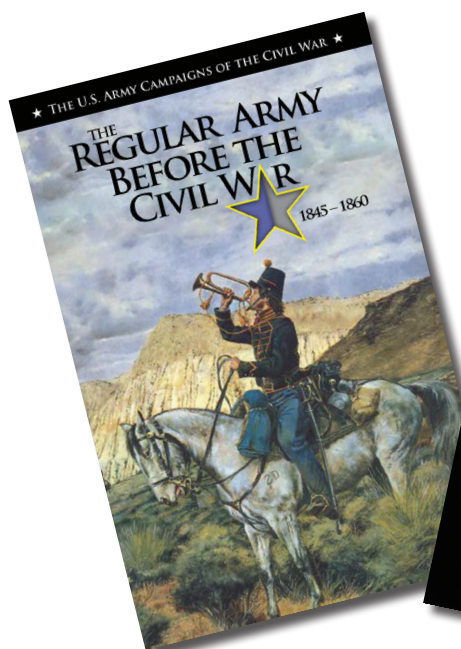
NEW PUBLICATIONS FROM THE COMBAT STUDIES INSTITUTE PRESS

The Combat Studies Institute (CSI) Press recently published two new titles. The first of these is *Training for Decisive Action, Stories of Mission Command: Collected Insights from Commanders and Leaders on their Experiences at the National Training Center*, edited by Carl W. Fischer. This anthology of senior

participants’ observations of the Decisive Action Training Environment is intended to serve as both a teaching tool and as a repository of analyses reflecting the current understanding of Army doctrine.

The second publication, by Charles D. Collins Jr., is the *Staff Ride Handbook and Atlas for the Battle of White Bird Canyon, 17 June 1877*. This volume examines the road to war between the U.S. Army and the Nez Perce Indians and analyzes the Army’s disastrous first engagement. This staff ride guide is the first of twelve that will combine CSI’s traditional handbook with the format of CSI’s atlases, for example, the *Atlas of the Sioux Wars* (2006) and *The Cheyenne Wars Atlas* (2010).

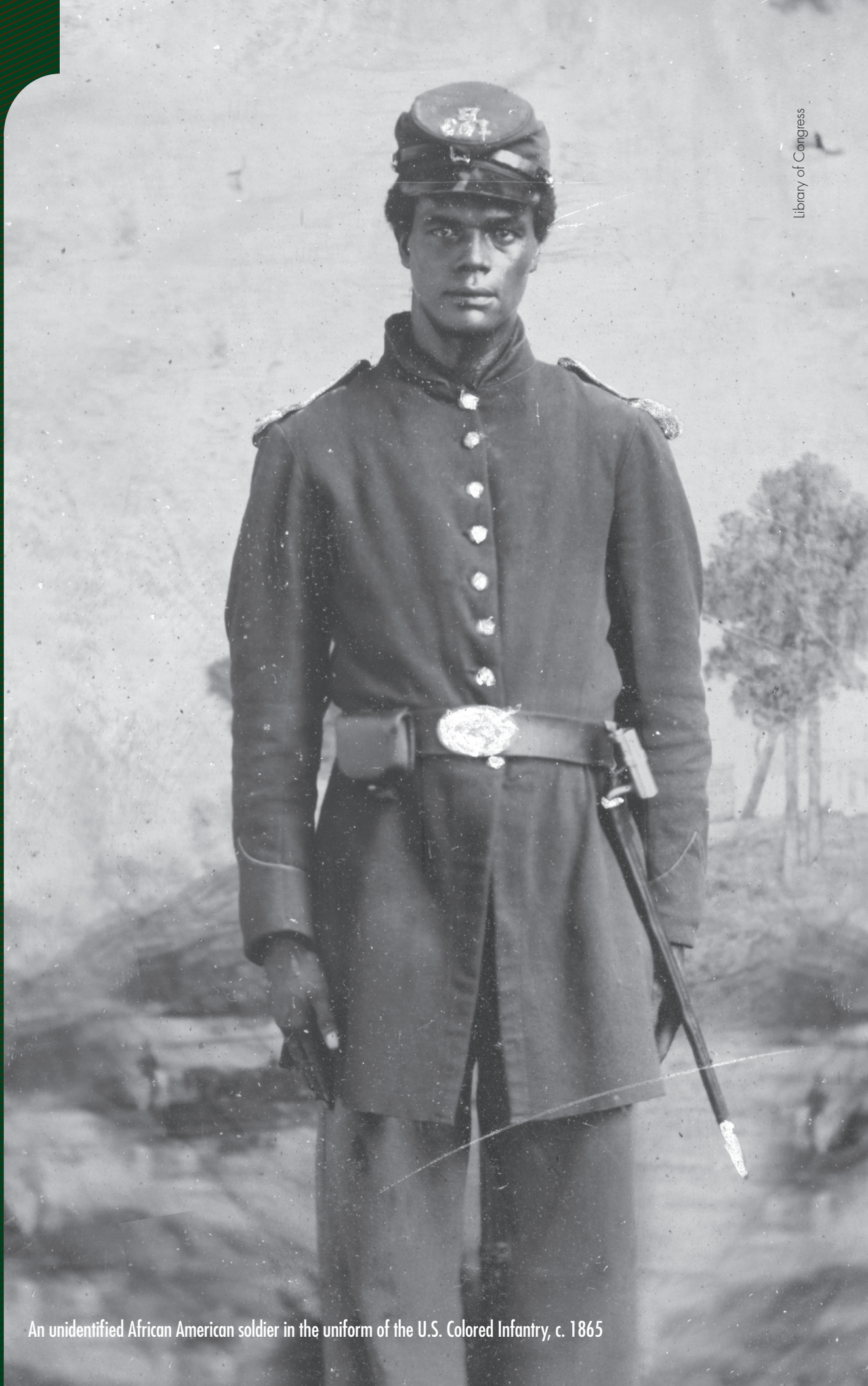
Both titles are available as a free PDF download on the CSI Press Web site at <http://www.cgsc.edu/carl/resources/csi/csi.asp>.



ABOUT THE AUTHOR

Dr. Russell K.

Brown is a retired U.S. Army major. He has a bachelor's degree from the University of Maryland and holds master's degrees from Pepperdine University and Augusta College (now Georgia Regents University). He was awarded a doctorate in U.S. military history from Columbia Pacific University in 1986. He is the author of four books, most recently *"Our Connection with Savannah": A History of the First Battalion Georgia Sharpshooters, 1862-1865* (Macon, Ga., 2004), and almost 200 articles, contributions, and book reviews on military biography and history.



An unidentified African American soldier in the uniform of the U.S. Colored Infantry, c. 1865



THE Last Civil War Volunteers

The 125th U.S. Colored Infantry in New Mexico, 1866–1867

BY RUSSELL K. BROWN

In his broad review of the employment of U.S. Colored Troops during the Civil War, former U.S. Army historian William A. Dobak necessarily gave only a few brief sentences to the service of the 125th U.S. Colored Infantry (USCI) in New Mexico, 1866–1867, noting that it was among the last of the Civil War volunteers, black or white, to be mustered out of service. In fact, this regiment was *the* last organized Union unit to be disbanded.¹

The 125th USCI was recruited, mostly from slaves, at Louisville, Kentucky, from 12 February to 2 June 1865. Kentucky was the last state in which African American troops were recruited; the Emancipation Proclamation did not apply there because it was a previously neutral, and now loyal, border state, and the Abraham Lincoln administration did not wish to antagonize loyal slave owners. When the regiment was recruited, many of the slaves enlisted without their owners' consent, as shown in the soldiers' service records. Later, some of the owners claimed and were paid compensation for their lost property.²

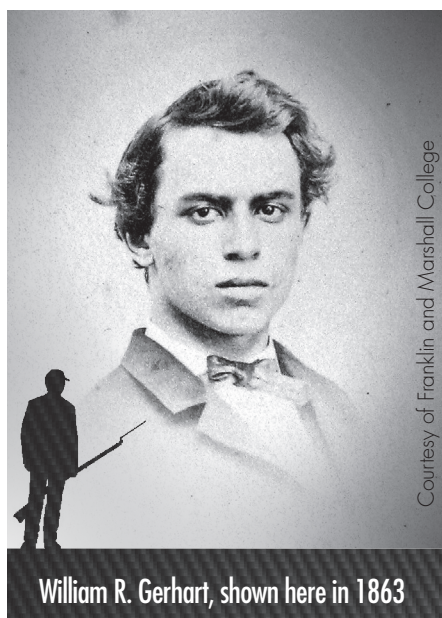
The first regimental commander was 27-year-old Col. Charles D. Armstrong, formerly a captain in the 2d Kentucky Volunteer Cavalry. The

second-in-command was Lt. Col. Alexander Duncan, age thirty-two, a veteran captain of the 11th Ohio Volunteer Infantry, and the major was William R. Gerhart, twenty-two years old, who had seen active duty with Battery I of the Pennsylvania Independent Light Artillery during the Gettysburg Campaign. Duncan and Gerhart had served previously in other black regiments.³

The regiment's personnel performed garrison and guard duty at Louisville and several points in the north central states ranging from Ohio to Wisconsin, until they were assembled at Cairo, Illinois, in early April 1866 for transfer by steamboat to Fort Leavenworth, Kansas. A total of 26 officers and 610 men made the trip under the command of Colonel Duncan, while another 2 officers and 102 men were absent. One of those absent was Colonel Armstrong, who resigned his commission shortly before the regiment left Cairo, pleading the need to care for an invalid sister. Armstrong submitted his resignation on 25 March, and it was accepted on 12 April.⁴

The ultimate destination of the regiment—New Mexico—had been known since March. The purpose of sending black soldiers to the Southwest was to replace white volunteer

troops who were leaving the service after the Civil War. The troops of the 125th traveled north up the Mississippi River on the steamboat *Adam Jacobs*, arriving at St. Louis, Missouri, about 14 April. Men who did not wish to go to the far West had been deserting the regiment ever since they learned of their distant mission. At St. Louis, on the morning of 14 April, 1st Sgt. Henry Belay of Company H ran through the sleeping men on the boat telling them to resist the orders of their officers "unless they wanted to follow [them] to the Devil," and that he himself "would die before he would go any further." According to Capt. William L. Seran, Company H commander, the regiment "chang[ed] boats at St. Louis, Mo., where a mutiny was attempted; but failed without casualties; by the vigilance and competency of the officers—and prompt arrest of the leaders; I put my 1st Sergeant in arrest and reduced him to the ranks for mutinous talk. Not a man of my co[mpany] made a break." In addition to the fifteen men who were arrested for mutiny, the regimental descriptive book listed the names of six other men who deserted at St. Louis. Capt. Obadiah M. Knapp, commanding Company G, noted in

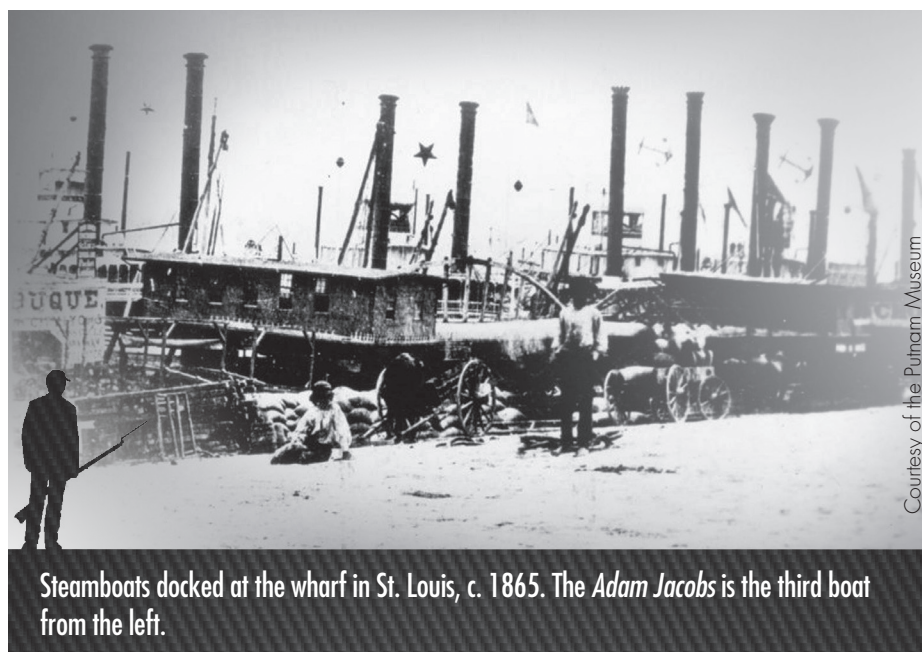


Courtesy of Franklin and Marshall College

William R. Gerhart, shown here in 1863

his diary on 26 April, "The mutineers were arrested today beginning with the 1st Sergt of Co. H & on down, Co 'G' furnishing none."⁵

The regiment traveled on to Fort Leavenworth on the steamer *Columbian*, arriving on 20 April. There, the unit outfitted itself for the long overland march and departed on the Santa Fe Trail, leaving Fort Leavenworth on 3 May 1866 and arriving at Fort Union, New Mexico, on 1 July 1866, a distance of seven hundred fifty miles according to regimental records. It made a massive display crossing the Plains. Nineteen-year-old Lt. James H. "Harry" Storey, a native of Newcastle-on-Tyne, England, had joined the regiment at Fort Leavenworth on the morning of departure. In a letter from the trail to his father in Brooklyn, New York, he mentioned a horse herd of 900 head; Captain Seran remembered a train of 100 to 125 mule teams carrying supplies for the military posts in New Mexico plus a party of some two hundred miners and migrants traveling with the soldiers for protection. Seven of the officers were accompanied by their wives, as were some of the non-commissioned officers (NCOs). Captain Knapp, twenty-six years old and unmarried, formed a mess with three lieutenants and the wife of one of them, while an NCO's wife was engaged as their cook. Lieutenant Storey was detailed in charge of the fifteen mutineers in irons; he messed with two of the officers and their wives.⁶



Courtesy of the Putnam Museum

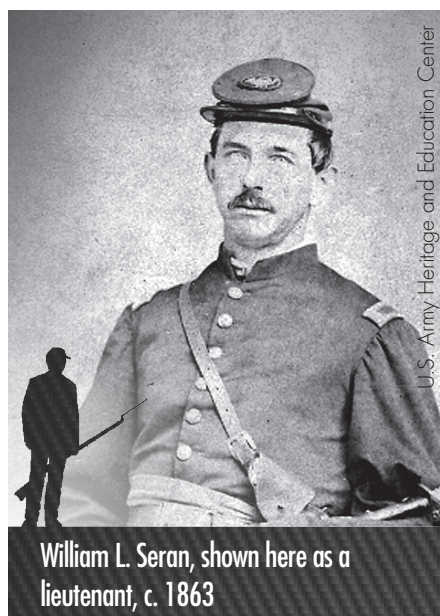
Steamboats docked at the wharf in St. Louis, c. 1865. The *Adam Jacobs* is the third boat from the left.

The fear of the trip to New Mexico caused a few more men to desert in early May, some at Fort Leavenworth, and a few soon after departure. One man died, allegedly from fright of the unknown. Captain Knapp recorded that Pvt. Doctor Richardson, only mildly sick, died at Fort Leavenworth on 27 April and that Pvt. Ben Carter, a good man, had deserted the night before. Knapp's first sergeant, William Boone, opined that Richardson "died more of grief because he was going out on the plains." To Knapp, his men were "poor ignorant superstitious [*sic*] creatures. How they are to be

pitied in every respect." As for Carter, "I suppose the terror of a trip to New Mexico was greater than his fear of the law and self respect combined."⁷

Several officers also failed to make the Plains crossing. In March, the regimental surgeon, William T. Day, had been ordered to make a list of officers and men who were unfit for a long march. He singled out Capt. William W. Leverett, with a foot injury, and Lt. Isaac P. Aiken, with a damaged kneecap, as unable to march to New Mexico. (In infantry regiments in that era, company officers marched on foot with their men; only field grade officers were mounted.) Leverett had been left behind in Kentucky on staff duty and was discharged effective 12 April. Aiken's case was sadder. He traveled with the regiment as far as Fort Leavenworth, but once he arrived he was sent to the hospital, "decidedly insane," and was left behind to be discharged effective 9 April. Lt. William W. Wiggins, though not named in Surgeon Day's letter, was also discharged at Fort Leavenworth, effective 9 April.⁸

Generally, the trip was enjoyable but not without its memorable events and difficulties. There were buffalo hunts, long marches without water, and sudden hail and thunderstorms. Colonel Duncan showed himself to be a commander of uneven temperament. On one occasion, when he issued an order that many thought was unlawful,

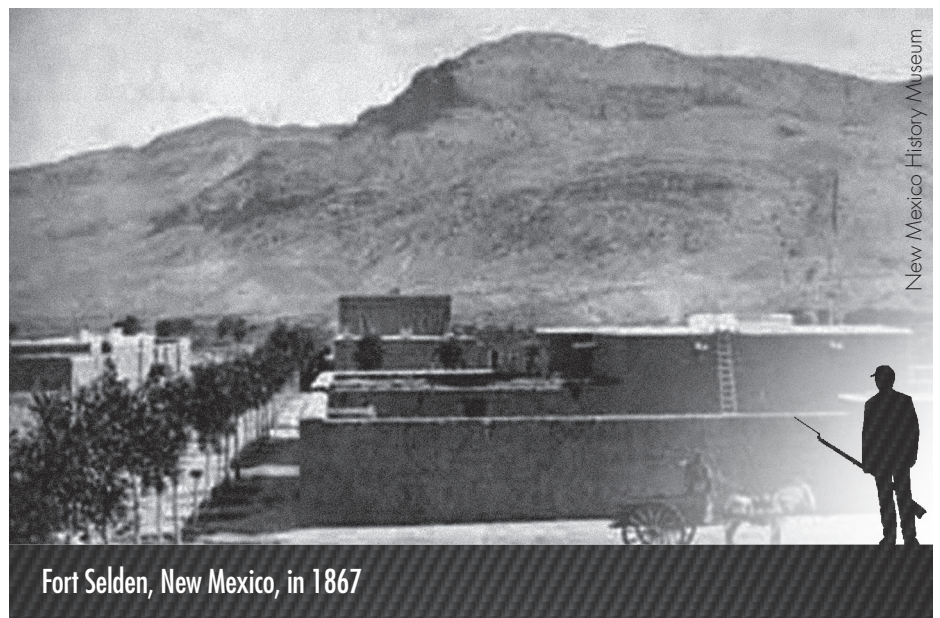


U.S. Army Heritage and Education Center

William L. Seran, shown here as a lieutenant, c. 1863

fifteen of his officers addressed him a note so saying. Duncan threatened to put them all under arrest unless they retracted their complaint and apologized. Six of them refused, and he arrested them and told them he would levy a charge of mutiny against them and leave them at Fort Larned, Kansas, for trial. A few days later, Duncan called them to his tent, told them that he was very sorry and that they should return to duty. Lieutenant Storey termed Duncan "neither a soldier or Gentleman." Later in the year, when Storey applied for a Regular Army commission, Duncan endorsed the application, writing that he found Storey, "a good and attentive officer" and "a young man well qualified for an officer in the army."⁹

Once in New Mexico, the companies of the 125th USCI were assigned to various posts across the region, including Forts Bascom, Craig, Cummings, McRae, Selden, and Stanton. At some of the posts, Selden for example, they shared duties with the white regulars of the 3d Cavalry and 5th Infantry. One detachment of the regiment founded a new post, Fort Bayard, upon arrival in August 1866. Two companies were assigned as far south as Fort Bliss, Texas. Captain Seran recalled, "My year at Bliss was the most pleasant of my



Fort Selden, New Mexico, in 1867

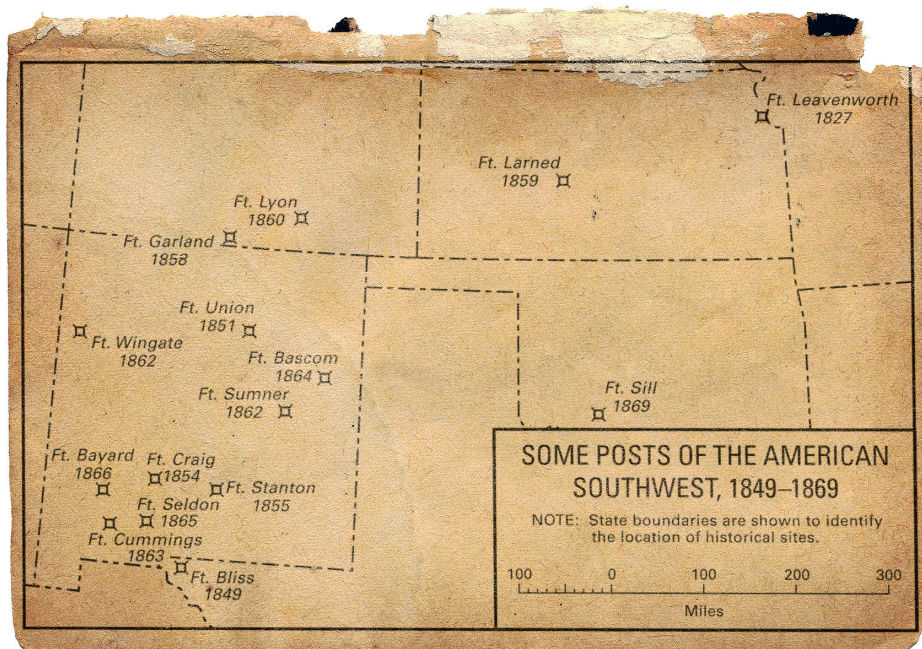
life." On returning to the post after a two-month absence in 1867, by-then Maj. Obadiah M. Knapp told his mother, "Fort Bliss is not to be beat in any respect. Did I not think I was almost 'home again' when I entered it yesterday."¹⁰

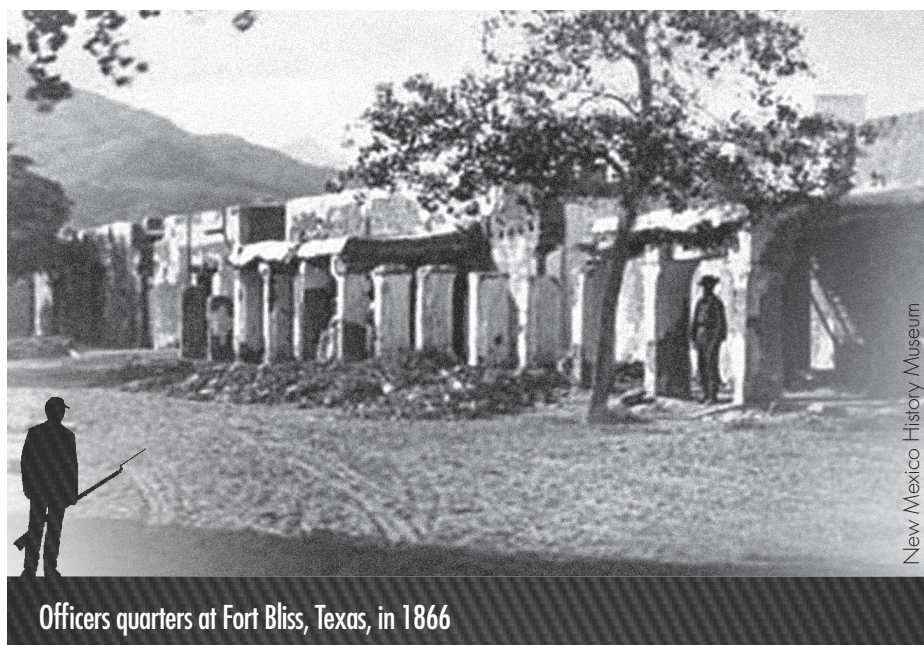
Six companies of the 57th USCI also served briefly in 1866 at Forts Bascom and Union, New Mexico, and Forts Garland and Lyon in Colorado. For the most part, they performed duty as laborers, often mending roads, an assignment they detested. The 57th USCI was mustered out of service in

December 1866 at Fort Leavenworth. The federal government's callous treatment of a number of African American troops who took their discharges in New Mexico and made their own way to Kansas deserves a separate article.¹¹

Life in garrison for the 125th USCI was punctuated by scouting and patrols to suppress marauding bands of Indians and by occasional mining expeditions undertaken by individual officers as a form of private enterprise. Other activities included chasing cattle rustlers, herding livestock, and escorting travelers, wagon trains, and the mail. At least some of the men of the 125th were mounted on mules to keep up with the fleet Indian riders. On one scouting mission in September 1866, Lieutenant Storey combined two activities. He left Fort Selden with a party of ten mule-mounted soldiers to investigate a report of Mescalero Apaches in the San Andreas Mountains. On 13 September, wrote Storey, "a party of about 35 Indians made their appearance on a ridge," but his men never engaged them because a group of private citizens who had joined the scout refused to advance. However, the expedition was not a complete waste of time: they "discovered a vein of [rock] with good indications of silver."¹²

Other encounters were more sanguine. In the same month as Storey's



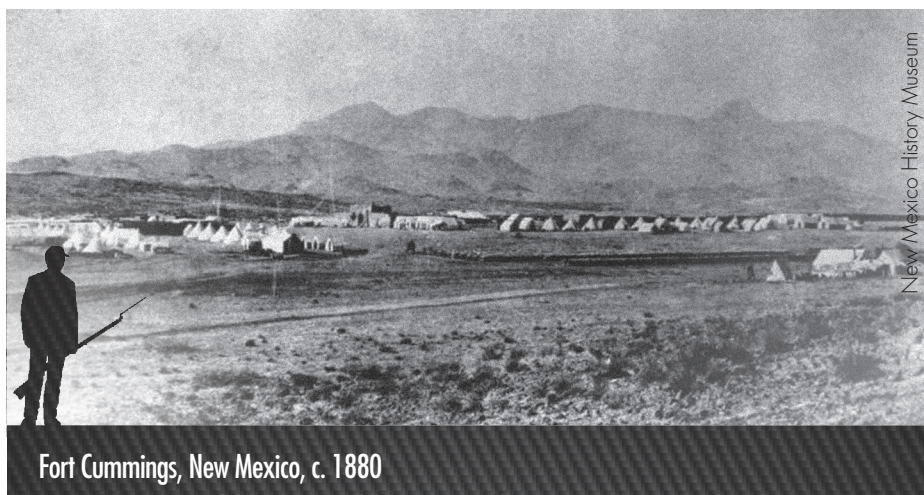


New Mexico History Museum

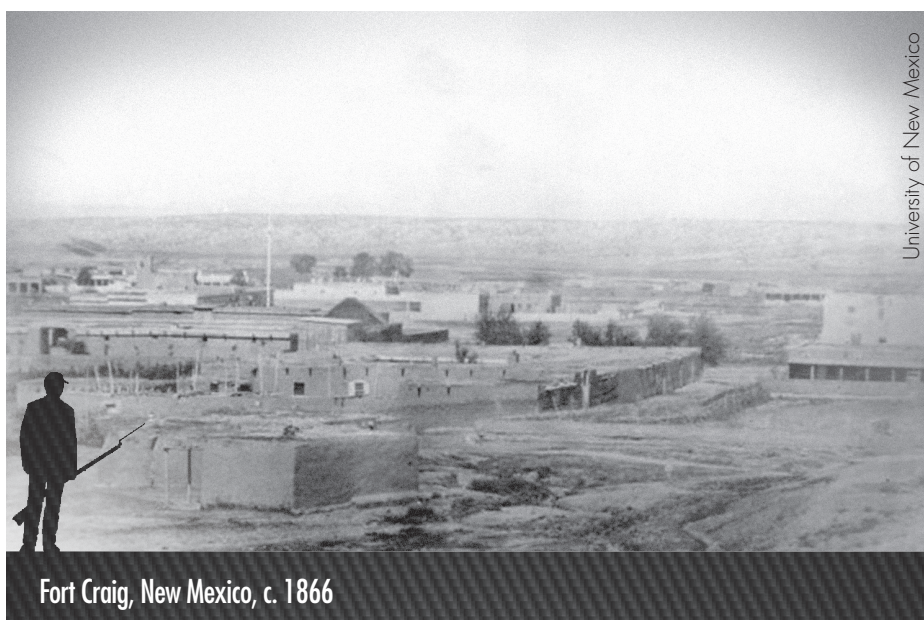
expedition, Indians killed Pvt. Charles Dunn while he was herding livestock near Fort McRae. The casualty report called him “a good soldier and a brave man.” The raiders made off with eleven horses and eight mules. The post commander attempted to recapture the animals but failed. In retaliation, he planned an attack on nearby Indian camps; the results are unknown. In October, Pvt. Samuel Taylor was killed while on duty near Fort Cummings by the accidental discharge of his own weapon.¹³

As has traditionally been the case in the Army, soldiers of the 125th spent much of their time in garrison on post construction and maintenance activities. Fort Bayard was built from the ground up beginning in August 1866. Among other projects, they built enlisted barracks and an administration building at Fort Selden, a corral and a warehouse at Fort McRae, and a corral for cavalry horses at Fort Bascom. The men were not always happy with such work. At Fort Craig in May 1867, Pvt. Harry Soaper was court-martialed for refusing an order to make adobe, telling the corporal in charge of the work detail, “By God, I will not do it.” Soaper appears to have been an indifferent soldier, having already been penalized for losing his rifled musket, a haversack, and a canteen. His final pay statement showed that he owed the government \$106.67 for clothing and equipment, which was withheld from the \$200 enlistment bounty still due him.¹⁴

An unusual duty that fell to Lieutenant Storey was the escort of five citizen prisoners, one of them wounded, from Fort Selden to Santa Fe for civil trial in February 1867. Besides the lieutenant, the detail consisted of one NCO and ten enlisted soldiers of the 3d U.S. Cavalry. The prisoners were charged with stealing horses and robbery and were kept in irons except for the wounded man. Storey was instructed to stop at Fort McRae on his way to pick up any witnesses that might be important to the trial and to prevent communication between his prisoners and unauthorized persons while traveling. The background of these men’s crimes and the disposition of their case is unknown.¹⁵



New Mexico History Museum

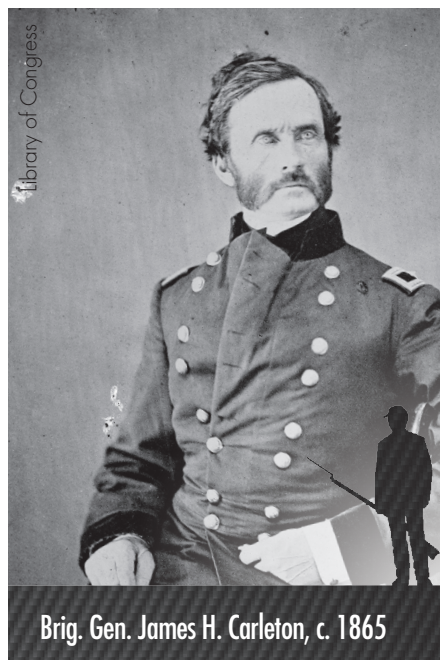


University of New Mexico

Mining occupied the minds of officers and the hands of enlisted soldiers as well. When it was discovered that soldiers of the 125th, who had been assigned to guard the copper mines near Pinos Altos, were actually hiring themselves out as laborers there, an investigation showed that they had done so with the full knowledge of their company commander and Colonel Duncan. Further investigation revealed that Duncan had used soldiers of the regiment and government property for a personal prospecting trip west of the Gila River. "He staked out a large claim for himself, organized a mining company, built a monument to establish his claim and enacted mining laws." These revelations did nothing to burnish Duncan's military reputation, but even Bvt. Maj. Gen. James H. Carleton, the District of New Mexico commander, joined prospectors in locating gold and silver claims in the San Andreas Mountains.¹⁶

Besides mining expeditions, the officers could entertain themselves with hunting or sightseeing. Captain Seran wrote about Fort Bliss: "There was plenty of shooting around or near the Fort, quail, duck and rabbits, . . . black-tailed deer, antelope, and mountain sheep." He told a tale about himself shooting at and missing a large ram. "I am not built for a hunter of big game and for about a month I didn't want to meet any of my companions" for fear of being laughed at. Seran also found a spring about sixty miles east of the fort that was so beautiful he was tempted to settle there after leaving the service. The officers at Bliss went to dances and visited families in Franklin, on the U.S. side of the Rio Grande River, and El Paso, at that time a community on the Mexican side. After one such foray, Captain Knapp wrote, we "wended our way home filled with spirits, mostly distilled and fermented."¹⁷

One officer told of an exploring expedition across the Rio Grande from Fort Selden that turned into a near encounter with Indians. A party of cattle-rustling Apaches came between the officers and the post, thirty miles away, forcing the military group to go upstream to find another place to ford, all the while under the watchful eyes of the hostiles. Only the intervention of a



force of infantry from the post allowed the group to return unmolested.¹⁸

The enlisted soldiers were more likely to turn to the local community than to nature for amusement, and sometimes with fatal consequences. Leasburg was a ramshackle straggle of buildings that had sprung up near Fort Selden. Like many such settlements, it catered to the wants of soldiers, offering women, dancing, gambling, and alcohol. In letters to his girlfriend back east, Lieutenant Storey noted on one occasion that the soldiers went "on a spree day before yesterday and had not recovered from the effects today," and again "some of the fellows . . . are bound to have a time tonight." Many fights broke out between soldiers and civilians and among the uniformed men themselves. Wrote Storey, "Three men have been shot in two days; we buried two yesterday." In November 1866, Colonel Duncan, post commander at Selden, reported that seven or eight men from the fort had been killed in Leasburg. Following a trip to Selden from Fort Bliss, Captain Seran told Captain Knapp "how whiskey controlled ideas and opinions up there, that [is,] what few ideas it leaves in them."¹⁹

Black soldiers in New Mexico faced the same racial discrimination as their brethren elsewhere in the Army. Poor equipment, poor living accommodations, and even lesser quality food

than their white counterparts were their lot. Sometimes their officers stood up for them. In February 1867, when bad beef was issued to soldiers of the 125th USCI at Fort Bascom, Capt. Joseph A. Corbett threatened to annul the beef contract. Later in the year, he complained to the district subsistence officer that supplies of supposedly fresh vegetables delivered to Fort Cummings had spoiled soon after receipt and that thousands of pounds of bacon and ham were unfit for human consumption. Whether or not any of these complaints had the desired effect is unknown, but it showed the captain's concern for his men. Captain Knapp conducted a school for his NCOs at Fort Bliss and commented, "The men learn rapidly."

The men responded well to good treatment. In a letter to a friend back east, Knapp wrote, "The troops are perfectly disciplined and completely in hand, and no disturbances ever occur. They are all too much interested in the garrison school to find time for mischief," and "They are more free from vices and their general intelligence is quite equal to any company in the Regular service." Two years earlier, while serving with the 87th USCI in Texas, Lieutenant Storey had observed, "I am agreeably disappointed in the [troops]. I expected to find the men stupid, unwilling to do anything & with no ambition, but I am happy to say it is quite the reverse. They learn very fast and make good soldiers."²⁰

Despite discrimination, only 4 percent of black soldiers in the West in 1867 deserted, compared with a rate of 25 percent for whites, but there were problems with discipline. A number of men were court-martialed; their offenses ranged from the mundane (sleeping on post or absence without leave) to the outrageous (sexual assault and murder). First Sgt. Jacob Wooten of Company B was charged with murdering a soldier of the 3d Cavalry at Fort Craig, probably off post, in March 1867. He was tried in a civilian court and acquitted. Later he was found guilty of absence without leave and was reduced in rank, whereupon he went on a drinking spree and was charged with being absent and drunk.



Company quarters at Fort Craig, New Mexico, c. 1870

Pvt. Dan Johnson of Company C was tried and convicted at Fort Craig for breaking into the quarters of his company commander, Lt. James M. Kerr, in June 1867; refusing to surrender his pistol when ordered to do so; and attempting to draw the pistol on Kerr. Johnson was convicted of the charges and sentenced to forfeit all pay and allowances except an amount necessary to pay his creditors.

One officer also underwent trial for an offense. Lt. James Krossen was accused of falsifying records to show that a government-owned horse had died, and then he misappropriated the animal for his own use. He was found guilty by a court and sentenced to be reprimanded by the department commander. That officer, Maj. Gen. Winfield S. Hancock, found the sentence to be disproportionate to the offense and declined to issue the reprimand. Krossen was returned to duty.

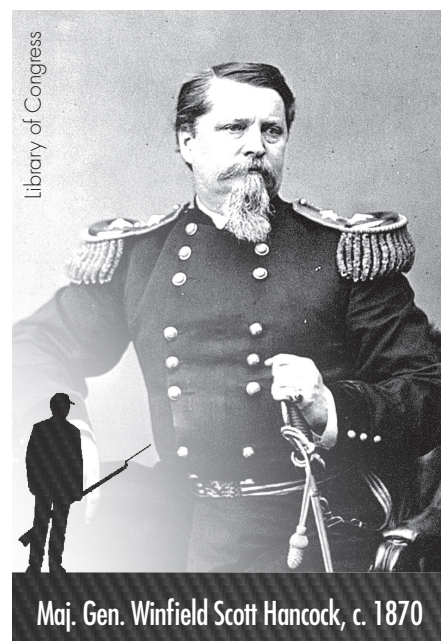
The most heinous case may have been that of Sgt. James Armstrong of Company B. When he was transferred to Fort Bayard in October 1866, he induced a woman named Harriet, possibly Harriet Talley, a laundress, to go with him, promising he would marry her. Later he beat her, hitting her with his gun, and then deserted her. He was also accused of sexually assaulting the wife of another NCO at Fort Craig while her husband was away from the post. For all of these offenses, he was reduced to the rank of private but apparently suffered no other penalty.²¹

Other soldiers found less violent means to satisfy their interest in female companionship. Toward the end of his

tenure at Fort Bliss, Captain Knapp noted in his diary, "Put J. Howard, Co. H, into the guard house for getting married when he has a wife in the States. I must stop this marrying business among the men just now for the women can't go with us and so it only makes [the men] look lightly on the marriage tie." The service record of John H. Howard, commissary sergeant for Company H, shows that he was reduced to private from 1 May 1867, possibly in conjunction with this incident.²²

In regard to the fifteen mutineers who had been brought from Fort Leavenworth in irons, Colonel Duncan showed his changeable nature once again in September 1866. Writing to District of New Mexico headquarters, he asked for a withdrawal of the charges and specifications against them, saying, "These men have all been in arrest since May 1, 1866, and a portion of the time in irons. Since arriving at this post they have been kept at work daily. They have all been very obedient and worked well. I attribute the cause of their misconduct to their ignorance and being urged on by white men. If they are released, we will gain the service of fifteen soldiers, and as their punishment has already been great, I make this request in their favor." The affirmative answer was forthcoming and two weeks later Duncan wrote again, reporting that the men had been released and restored to duty.²³

One of the most sobering events to occur during the regiment's tenure in New Mexico, what Captain Seran called "the tragedy of our Regt.," was



Maj. Gen. Winfield Scott Hancock, c. 1870

the result of human passion. Lt. John F. Warner had brought his wife Julia and child to New Mexico with him, and they were assigned at Fort Selden. For whatever reason, Mrs. Warner became involved with another officer on post, Lt. Frederick Hazlehurst. As Lieutenant Storey told the tale, Warner discovered his wife's infidelity, sent her home to Kentucky, and filed for divorce. Somehow, Warner retrieved from the outgoing mail three letters that Hazlehurst had written to Julia in which he professed his love and promised to join her after his discharge. Warner went to confront Hazlehurst on the parade ground and shot him through the body. The mortally wounded man snatched the pistol from his assailant and shot him in turn, killing him instantly. Hazlehurst died the next morning. They were buried together in the post cemetery. The entire regiment blamed the death of two good officers on a perfidious woman.²⁴

Not all altercations ended so violently. Lt. Adolph Ebermayer, the regimental quartermaster, Bavarian-born and a resident of New York City before the Civil War, and Dr. William T. Day, the regimental surgeon, found each other's company at Fort Selden so disagreeable as to come to words, if not to blows. Finally the doctor declared that one of them must leave the service. Major Gerhart dispatched

Captain Seran from Fort Bliss as conciliator but his efforts proved in vain. When Day preferred charges against Ebermayer for misconduct in his capacity as quartermaster during the march from Fort Leavenworth, the latter submitted his resignation, citing the ill effects of the desert climate on his wife and children as his reason. "He had no desire to face charges that the Dr. would prefer," wrote Seran. Cpl. David Smith of Captain Knapp's Company G was able to read and write and was bright enough to be named acting regimental quartermaster sergeant. But when Ebermayer, as quartermaster officer, asked that Smith be relieved because he was "not competent," it was perhaps because the officer did not want an assistant sharp enough to uncover his peculations. Ebermayer moved to California and became a music teacher. Twenty years later he published a romanticized account of his time in New Mexico.²⁵

At Fort Bliss, routine duty could be interrupted by incidents with an international flavor. Captain Seran told of an apocryphal event in which a detachment of Benito Juarez's Mexican republican army crossed into Texas to kidnap a refugee French doctor who had served with the forces of Emperor Maximilian. The doctor appealed to

Seran for help and the latter, having learned the date and time of the attempt, laid an ambush of twenty of his soldiers for the Mexicans. When the kidnappers arrived across the Rio Grande on U.S. soil, they were arrested and returned to the south bank. Seran remembered, "I did not report the matter to my superiors."²⁶

The question of permanent command of the regiment had been pending since Colonel Armstrong's resignation in April 1866. Aside from his failures as a leader, Colonel Duncan may have been in the bad graces of the Army's high command for an incident of poor judgment. While colonel of the 72d USCI before coming to the 125th, he had committed a violation of regulations and a breach of military etiquette by borrowing money from enlisted soldiers under his command. His lack of good sense was compounded by his further action in repaying only part of the loans. The case came to light when one of the soldiers made a formal complaint for payment through Army channels. His petition rose all the way to the commanding general of the Department of the Ohio, Maj. Gen. Edward O. C. Ord, who in February 1866 directed that Duncan make immediate and full payment and "make a statement at once of his action in the matter." Perhaps this was the reason Duncan was passed over when it came time to fill Armstrong's vacancy.²⁷

Upon the regiment's arrival at Fort Union, New Mexico, on 1 July 1866, Major Gerhart and Captain Knapp found War Department orders waiting for them dated 12 April 1866, promoting them to colonel and major of the regiment, respectively, although the muster into their new ranks was delayed until later dates. Years later, Gerhart's obituary said that he had been personally recommended for promotion by Maj. Gen. William T. Sherman. Gerhart was officially elevated to his new rank in September 1866, "by order of Bvt. Brig. Gen. Carleton," and Knapp was increased in rank the following March, both to date from 20 April 1866. The reason for the delays in advancement has not been discovered.

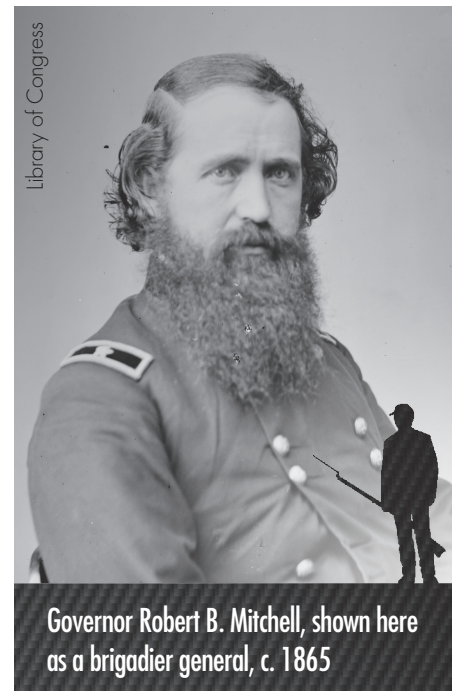
In September 1867, they were remustered into their new ranks by order of Maj. Gen. Winfield S. Hancock, the department commander. Again, no explanation for the remuster has been found. On the second occasion, Knapp asked for and Gerhart issued him a document certifying the muster and the date of rank.²⁸

The prospective promotion of these two men may have been the reason Colonel Duncan made an application for a commission as field officer in one of the new Regular Army colored regiments, the approval for which was pending in Congress at the time. Duncan's letter to the adjutant general of the Army was dated 20 July 1866, barely three weeks after his arrival in New Mexico. It carried with it the favorable endorsements of territorial governor Robert B. Mitchell, the territorial secretary, the territorial chief justice, and the district commander, Bvt. Brig. Gen. James H. Carleton. That any of these officials could have formed a positive judgment of Duncan's fitness for command in twenty days is unfathomable.²⁹

Gerhart, as next senior officer to Duncan, was a natural choice for colonel, and he had other qualifications. A native of Gettysburg, Pennsylvania, he was an 1863 graduate of Franklin and



Benito Juarez, c. 1868



Governor Robert B. Mitchell, shown here as a brigadier general, c. 1865

Marshall College, class of 1863, where his father, Rev. Emil V. Gerhart, was president. In addition to his service during the Antietam and Gettysburg campaigns, in July 1865 he was mustered in as major in the 121st USCI, and in October that year he transferred into the 125th USCI. Gerhart's first duty in the desert was as commander at Fort Bliss in August 1866 with two companies of the 125th. As a result of his promotion in September, Gerhart moved to Fort Craig and established regimental headquarters there.³⁰

Command of Fort Bliss passed to Captain Knapp, a native of Connecticut, a former volunteer soldier from that state, and a former Regular Army hospital steward. He was not the senior captain in the regiment but, like Gerhart, he had superior educational attainments, having been a medical student at Yale. His selection for promotion was the cause of some envy among his peers. As he wrote in his diary, "Disappointed candidates for the Majority . . . are looking for some flaw or wrongdoing in what I do." Knapp remained at Bliss until his two-company battalion was relieved in August 1867. His opinions of his black troops, with whom he appeared to be sympathetic, have already been mentioned. However, in a letter to his mother near the end of his tenure in the desert, he damned his military peers with faint praise, "I am tired of living among such reprobates as U.S.A. Officers are and being compelled to associate with them on terms of equality, when one only learns to acquire coarse language & disgusting manners and yet the army officers are by far the best class in this territory."³¹

General Carleton, described by historian Robert M. Utley as "contentious, arbitrary [and] domineering," commanded the District of New Mexico for much of the regiment's tenure there. Chief among Carleton's subordinates was Bvt. Brig. Gen. Christopher "Kit" Carson, the renowned frontiersman, who was commander of the New Mexico volunteers. In April 1867, Major Knapp was summoned from Fort Bliss to Albuquerque to be a member of a court-martial of which Carson was president. Knapp was

thrilled at the opportunity to meet the great man, "the hero of Fremont's stories of hardships endured and dangers successfully encountered," and filled several pages in his diary and letters with descriptive phrases about the general's charm, modesty, easy manner, and story-telling prowess.³²

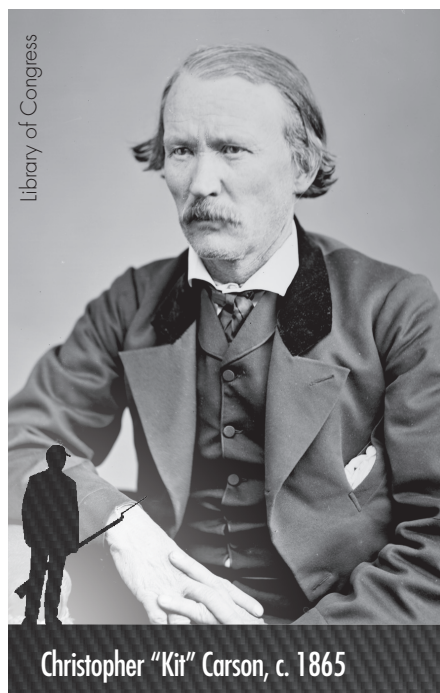
Knapp returned to Fort Bliss late on 18 May 1867, coincidentally with a flood of the Rio Grande that washed away much of the post. As the post report for May described it, "The Rio Grande del Norte, upon the banks of which the post is situated, has during a freshet this month washed away all the store rooms at the post and a part of the officers quarters. Company quarters are now being used as store rooms, a portion of the garrison being camped in tents." The move of the troops to tents occurred on 25 May. Over the two weeks following his return, Knapp's diary and letters to his mother recounted the retreat of the military post in the face of the river's advances, but by 2 June he was able to report that the water was receding.

In October 1867, after the 125th had left Texas and New Mexico, higher headquarters directed that the flooded site be abandoned and that the troops and stores be removed to leased land at Concordia, Texas, three miles away. This was accomplished by 1 March

1868. "Camp Concordia" became the site of the new Fort Bliss in April 1869.³³

With the arrival of new regiments of regulars in the Southwest in the summer of 1867, the volunteers remaining on duty in the desert territories began to return to their homes. The last white troops, a battalion of New Mexico volunteers, were mustered out in November 1867. During the spring, the 125th USCI had received orders to march to Fort Riley, Kansas, to be mustered out. Two companies of the regiment left Fort Craig on 22 October. From distant Fort Bliss and all the other posts, the companies of the regiment began to move toward Fort Union in northern New Mexico for the long trek back up the Santa Fe Trail. Captain Seran's wife Amanda was pregnant with her third child; Major Knapp's column left the Serans behind so that she could give birth at Fort Union. Six days after the birth, by Seran's recollection, they set out by wagon with 46-year-old Pvt. Solomon Brooks (an "elderly negro" to Seran) as driver; Frances, a nurse; and an escort led by Seran's first sergeant, Benjamin Fields. Knapp wrote that he left the Serans behind on 16 September, and they caught up "rather to my surprise" on 19 September. He was happy to have them back with his command.³⁴

After typical Plains-crossing adventures, the detachments of the regiment arrived at Fort Riley and were ordered immediately to Jefferson Barracks near St. Louis for final muster. There, some of the men and dependents contracted cholera, which had been pandemic on the Plains that summer, and they were further ordered to Louisville, Kentucky, to be discharged nearer their homes. In 1884, "Ex-Second Lieutenant" James H. Storey wrote a letter to the editor of the *New York Times* commenting that eight companies of the 125th USCI had been mustered out at Fort Leavenworth on 20 December 1867 and "finally discharged and paid to include Dec. 27, 1867, at Louisville, Ky." The Louisville post return shows that ultimately, "The 125th USCI, consisting of 19 commissioned officers and 450 enlisted men, arrived at the post [Louisville] on the 25th day of December for final payment preparatory to disbanding and



remained until the 31st of the month on which day they were paid and disbanded." As Seran remarked, "the enlisted men [are] no longer slaves."³⁵

Not all the soldiers of the 125th USCI left the Army in December 1867. The records are not always clear as to identity, but at least three men enlisted in regular black cavalry regiments before the units left New Mexico, and two more may have done so after being mustered out in Kentucky. One veteran, Sgt. Henry Moore, a native of Adair County, Kentucky, made a career of the Army. He reenlisted for the last time while a member of the 9th Cavalry demonstration troop at Fort Myer, Virginia, in 1892 and retired in March 1895, about age fifty. He is probably the same Henry Moore who died in Washington, D.C., in November 1918 and is buried in Arlington National Cemetery. Lt. Frank Upham Robinson, a native of Livingston County, New York, and a veteran of fighting at Petersburg, Virginia, in 1864–1865, before joining the 125th, integrated into the Regular

Army cavalry in 1868. He rose through the ranks, received a "tombstone promotion" to brigadier general in April 1905, and retired the next day. He died in Phoenix, Arizona, in December 1927 and was buried in Arlington National Cemetery.³⁶

Col. William R. Gerhart read law after being mustered out of service and became a patent attorney and a civil engineer in Lancaster, Pennsylvania. Gerhart married late; he died in 1906, having outlived his wife, and is buried in Lancaster's Greenwood Cemetery. The unmilitary Lt. Col. Alexander Duncan divorced his wife in Ohio, remarried, moved to San Francisco, and became a bookkeeper. He died in 1890 and was buried in Mountain View Cemetery in Oakland, California.³⁷

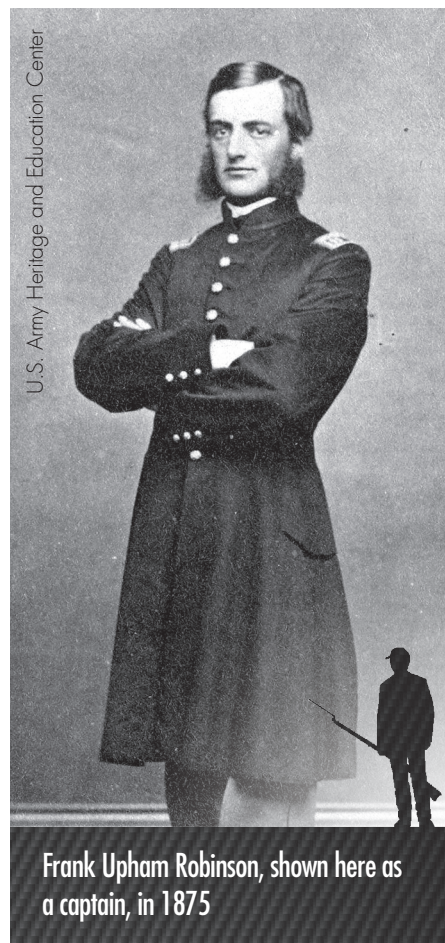
Maj. Obadiah Knapp often wrote of his plans to marry his sweetheart, Gertrude Palmer, and return to medical school. He did marry Gertrude immediately after returning from New Mexico, and his former lieutenant, Amos Kepner, married her younger sister, Mary. The bond between the two men formed in the Army kept them together for the rest of their lives. Knapp never resumed his medical career; instead, he and Kepner were retail grocers in Philadelphia in the 1870s. By 1880, Knapp was farming in Westchester County, New York, and, by 1910, he was in his native Connecticut. He died there in 1921 and was buried in the North Greenwich Congregational Church Cemetery with his wife, her sister, and Amos Kepner.³⁸

Lt. Harry Storey toyed with the idea of completing his military education at West Point and entering the Regular Army. He did neither. Storey went back to his home in Brooklyn, married Annie Cheshire, the recipient of many of his letters, and began a career in the U.S. Customs Service. Before his retirement, Storey became collector of customs for the Port of Brooklyn. Storey also served as an officer in the New York National Guard for many years. He died in 1927 and is buried with Annie in Greenwood Cemetery in Brooklyn.³⁹

Perhaps the last survivor of the 125th USCI was Capt. William Seran. Born in New Jersey in February 1837, after his Army service he farmed in Kansas and

Oklahoma before moving to California. He died in Los Angeles in January 1936, 98 years and 11 months old. At the time of his death he was living in the Soldiers Home there; he was buried in the Los Angeles National Cemetery.⁴⁰

One of the more surprising success stories among the veterans was that of Robert Ball Anderson. He was born a slave in Kentucky in 1843 and was mustered into the 125th USCI in April 1865 as Pvt. Robert Ball, the family name of his mother's owner. Ball served without incident in Captain Seran's Company G for more than two years. After the Army, he took his father's name (Anderson), wandered around the South for a time, and then settled in Nebraska, where he purchased land and took up farming. By 1910, he was the richest black man in the state. In 1930, at age eighty-seven, Anderson died in a car wreck, a mode of transportation unknown to the slaves of Kentucky in 1843 or the soldiers in New Mexico in 1867.⁴¹



A postscript to Anderson's story was written in 1997, when his much younger widow Daisy, by then ninety-six years old, was invited to represent the Union side at the interment of an unknown soldier in the National Cemetery at Gettysburg Military Park. A Confederate widow was present also. They were thought to be two of only three surviving widows of Civil War soldiers, though none of the three women had even been born in the nineteenth century. Daisy's relationship with her husband, as well as his early life as a slave and his military service, was described in the newspapers. Daisy's death a year later also made it into the national news.⁴²

A more macabre epilogue was added to the 125th USCI story in 2008 with the discovery of disinterred human remains in the New Mexico desert. Pvt. Thomas Smith was from New Market, Kentucky. He enlisted in the Army in November 1864 and was assigned to Company A, 125th USCI, in January 1865. He must have been a good soldier because he was often on duty as an orderly at regimental or post headquarters. In November 1866, at age twenty-three, Smith died at Fort Craig, New Mexico, of complications from either typhoid fever or cholera and was buried there. His medical record showed that he had an enlarged



Mrs. Daisy Anderson (right), widow of Pvt. Robert Ball Anderson, attends a burial service at the National Cemetery in Gettysburg, Pennsylvania, nearly 130 years after her husband was mustered out of service in 1867.

kidney and that the immediate cause of death was inflammation of the bowels. When Fort Craig was abandoned as a military installation in the 1880s, many burials from the post cemetery were exhumed and reburied elsewhere. In 2008, it came to light that some twenty bodies that had not been reinterred had been looted from the old Fort Craig cemetery and one mummified set of re-

mains was on display in a private home. An investigation led to the recovery of Smith's skull in a brown paper bag and some other remains; in addition, approximately sixty more bodies were exhumed from Fort Craig to prevent further looting. Research by forensic scientists resulted in the identification of three of the remains, Private Smith's among them. The research also led to the discovery of the rest of Smith's body.

In June 2009, some sixty sets of unidentified remains were reinterred at Santa Fe National Cemetery at a site marked by a 1,200-pound granite and bronze memorial. On 28 July 2009, Smith's remains and those of two other African American soldiers of the post-Civil War era were reburied with the others at the Santa Fe cemetery. The Arizona Buffalo Soldiers Association and the New Mexico Army National Guard conducted the elaborate ceremony with full military honors; officials of the Departments of the Interior and Veterans Affairs and prominent retired African American military personnel attended. Congress and the president designated 28 July as National Buffalo Soldiers Day in 1992.⁴³



Members of the Arizona Buffalo Soldiers Association carry soldiers' remains during the reinterment ceremony at Santa Fe National Cemetery, 28 July 2009.

NOTES

1. William A. Dobak, *Freedom by the Sword: The U.S. Colored Troops, 1862–1867* (Washington, D.C.: U.S. Army Center of Military History, 2011), pp. 491, 496; U.S. War Department, *The War of the Rebellion, Official Records of the Union and Confederate Armies (OR)*, 130 vols. (Washington, D.C.: Government Printing Office, 1880–1901), ser. 3, vol. 5, p. 1047.

2. Dobak, *Freedom by the Sword*, pp. 381–84. The National Archives and Records Administration (NARA) microfilmed the compiled service records (CSRs) for the 125th U.S. Colored Infantry (USCI) as this article was in progress, and the documents were accessed online at <http://www.fold3.com> beginning in May 2013. There is no NARA publication film number. For a discussion of black recruitment in Kentucky, white resistance, and compensation to slave owners, see Earl J. Hess, *The Civil War in the West* (Chapel Hill: University of North Carolina Press, 2012), p. 243. For an example of a slave who enlisted without his owner's consent and the former owner's claim for compensation, see the CSR of James Claybrook.

3. CSRs, 125th USCI, for the individuals named. Ages are as of the date of enrollment. Many of the officers and men of the 125th showed their other organizational affiliations in their pension applications years after the war. See Microfilm Publication T289, Organization Index to Pension Files of Veterans Who Served Between 1861 and 1900, Roll 570, 125th USCI, NARA.

4. 125th USCI, in Microfilm Publication M594, Compiled Records Showing Service of Military Units in Volunteer Union Organizations, Roll 217; and Cairo, Ill., April 1866, in Microfilm Publication M617, Returns from United States Military Posts, 1800–1916, Roll 167. Both in NARA. *Official Register of the Volunteer Force of the United States Army for the Years 1861–1865 (ORVF)*, pt. 8, *United States Colored Troops* (Washington, D.C.: Adjutant General's Office, 1865), p. 306; Ltr, Armstrong to Adj Gen, 25 Mar 1866, Regimental Consolidated Morning Rpt, Letter, & Endorsement Book, vol. 3, 125th USCI Regimental Books, Records of the Adjutant General's Office, Record Group (RG) 94, NARA; CSR of Charles D. Armstrong. The National Park Service (NPS) Civil War Soldiers and Sailors System (CWSSS), online at <http://www.itd.nps.gov/cwss/regiments.cfm>, shows the 125th USCI spent its entire thirty months of service in Kentucky. This is an error copied from Frederick H. Dyer, *A Compendium of the War of the Rebellion*, 3 vols. (1908; repr., New York: Thomas Yoseloff, 1959), 3:1740.

5. Robert M. Utley, *Frontier Regulars: The United States Army and the Indian, 1866–1890* (New York: Macmillan, 1973), p. 170; Charges and Specifications, CSR of Henry Belay; William Langley Seran, Civil War Record of Service, 1919, unpublished memoir, courtesy of

Sue Locke, Santa Rosa, Calif., copy in author's files; Knapp Diary, 26 Apr 1866, Obadiah M. Knapp Papers, 1860–1867, Briscoe Center for American History, University of Texas at Austin; Regimental Descriptive Book, vol. 1, 125th USCI Regimental Books.

6. 125th USCI, in Microfilm Publication M594, Compiled Records Showing Service of Military Units in Volunteer Union Organizations, Roll 217, NARA; Seran, Civil War Record of Service; Ltrs, Storey to father, 7 May 1866, and to Dear Annie, 7 Jun 1866, both in James H. Storey Letters, Fort Selden State Monument, N.M., copies in author's files; Knapp Diary, 21 and 24 Apr 1866, Knapp Papers.

7. Names of deserters for May 1866, Regimental Descriptive Book, vol. 1, 125th USCI Regimental Books; Knapp Diary, 27 Apr 1866, Knapp Papers.

8. Ltrs, Gerhart to Day, 28 Mar 1866; Gerhart to Asst Adj Gen P. Ord, 29 Mar 1866, Regimental Consolidated Morning Rpt, Letter, & Endorsement Book, vol. 3, 125th USCI Regimental Books; ORVF, pt. 8, p. 306; Knapp Diary, 28 Apr 1866, Knapp Papers.

9. Ltr, Storey to father, 7 Jun 1866, Storey Letters; Special Orders 49, 50, 51, 53, dated 29, 30, 31 May and 4 Jun 1866, respectively, HQ, 125th USCI, Regimental Order Book, vol. 4, 125th USCI Regimental Books; Ltr, Duncan "to whom it may concern," 3 Oct 1866, in Microfilm Publication M1064, Letters Received by Commission Branch, AGO, 1863–1870, file S–1817, 1866 series, NARA.

10. Monroe Lee Billington, *New Mexico's Buffalo Soldiers, 1866–1900* (Boulder: University Press of Colorado, 1991), p. 208n4, lists the New Mexico posts where the 125th was stationed. For the returns for the regiment, see Microfilm Publication M617, Returns from United States Military Posts. See also NPS, Division of History, Southwest Cultural Resources Center, Leo E. Oliva, *Fort Union and the Frontier Army in the Southwest: A Historic Resource Study* (Fort Union National Monument, Fort Union, N.M., 1993), p. 77 and note 22, accessed 30 Nov 2012, at http://www.nps.gov/history/history/online_books/foun/index.htm; David Kammer, "Establishment of Fort Bayard Army Post," Office of the State Historian, accessed 30 Nov 2012, at <http://www.newmexicohistory.org/filedetails.php?fileID=9953>; Seran, Civil War Record of Service; Ltr, Knapp to mother, 19 May 1867, Knapp Papers.

11. Fort Selden State Monument, N.M., General Management Plan [2004] (hereafter cited as FSGMP), p. 119, accessed 29 Nov 2012, at <http://www.nmmonuments.org>; Oliva, *Fort Union*, ch. 6, note 77, and ch. 8, notes 22, 23.

12. Ltr, Storey to Bvt Maj C. H. De Forrest, HQ, District of New Mexico, 18 Sep 1866, Storey Letters, reproduced as "Notes from a Reconnaissance Led by J. Henry Storey," *El Palacio* (New Mexico's Magazine of Art, History, and Culture of the Southwest) 113, no. 4 (Winter 2008), accessed 27 Nov 2012, at <http://www.elpalacio.org/winter08.php>.

13. Billington, *New Mexico's Buffalo Soldiers*, p. 7; CSRs of Charles Dunn and Samuel Taylor. Billington devotes two chapters to

the activities of black troops in New Mexico, 1866–1869.

14. Billington, *New Mexico's Buffalo Soldiers*, pp. 26–28; CSR of Harry Soaper.

15. Special Order 30, HQ, Fort Selden, 27 Feb 1867, copy in the Storey Letters; Fort Selden, N.M., Feb 1867, in Microfilm Publication M617, Returns from United States Military Posts, Roll 1145, NARA.

16. Billington, *New Mexico's Buffalo Soldiers*, pp. 13, 30–31; FSGMP, p. 70.

17. Seran, Civil War Record of Service; Knapp Diary, 27 Sep 1866, Knapp Papers. Fort Bliss was originally known as The Post Opposite El Paso. See also Leon C. Metz, *Desert Army: Fort Bliss on the Mexican Border*, rev. ed. (El Paso, Tex.: Mangan Books, 1988), p. 28.

18. A. Ebermayer, "Frontier Life in the Army," *Overland Monthly* 13 (January–June 1889): 280–81, accessed 23 Nov 2009, at http://www.archive.org/stream/overland-monthly213sanfrich/overlandmonthly213sanfrich_djvu.txt.

19. Billington, *New Mexico's Buffalo Soldiers*, p. 35; Ltr, Storey to Annie, 3, 18 Oct 1866, Storey Letters, reproduced in Shelley Thompson, ed., "Dearest Annie: Letters from Fort Selden," *El Palacio* 13, no. 4 (Winter 2008): 31; Knapp Diary, 18 Sep 1866, Knapp Papers.

20. Billington, *New Mexico's Buffalo Soldiers*, p. 185; Knapp Diary, 19 Sep 1866, Knapp Papers; Ltrs, Knapp to William Mead, 1 Oct 1867, Knapp Papers; and Storey to father, 21 Jan 1864. Billington wrote a full chapter on prejudice and discrimination. For more on race relations in the Western army, see William H. Leckie, *The Buffalo Soldiers: A Narrative of the Black Cavalry in the West* (1967; rev. ed., Norman: University of Oklahoma Press, 2003), and Bruce A. Glasrud and Michael N. Searles, eds., *Buffalo Soldiers in the West: A Black Soldiers Anthology* (College Station: Texas A&M University Press, 2007).

21. CSRs of James Armstrong, Dan Johnson, James Krossen, and Jacob Wooten.

22. Knapp Diary, 18 Jul 1867, Knapp Papers; CSR of John H. Howard.

23. Ltrs, Duncan to De Forrest, 10 and 24 Sep 1866, Regimental Consolidated Morning Rpt, Letter, & Endorsement Book, vol. 3, 125th USCI Regimental Books; and De Forrest to Duncan, 15 Sep 1866, in CSR of Henry Belay.

24. Seran, Civil War Record of Service; Ltr, Storey to Darling Little Wife [Annie], 23 Oct 1866, Storey Letters, reproduced in Thompson, "Dearest Annie: Letters from Fort Selden," pp. 31–32. Seran's version was that Warner intercepted an incoming letter that his wife had written to "Dear Freddie."

25. Seran, Civil War Record of Service; CSRs of Adolph Ebermayer and David Smith; Censuses, 1860 and 1880; ORVF, pt. 8, p. 306; Ebermayer, "Frontier Life in the Army," pp. 277–82.

26. Seran, Civil War Record of Service.

27. CSR of Alexander Duncan.

28. CSRs of William R. Gerhart and Obadiah M. Knapp. Knapp Diary, 1 Jul 1866; Ltr, Knapp to Mead, 7 Oct 1866; and Certificate of Muster, 14 Sep 1867. Last three in Knapp Papers. Gerhart obituary, in *Franklin and Marshall College*

Obituary Record, nos. 12–13, vol. 2, pts. 8–9 (June 1908–1909), pp. 269–71.

29. Ltr, Duncan to the AG, 20 Jul 1866, in Microfilm Publication M1064, Letters Received by Commission Branch, AGO, 1863–1870, file D–836, 1866 series, NARA.

30. Gerhart obituary; *ORVF*, pt. 8, p. 306; Fort Bliss and Fort Craig, both for Sep 1866, in Microfilm Publication M617, Returns from United States Military Posts, Roll 116 and Roll 261, respectively, NARA.

31. CSR of Knapp; Knapp Service Index Card, Connecticut Troops, Union Service Records, RG 94, NARA; *Directory of the Living Non-Graduates of Yale University: Issue of 1914* (New Haven, Conn.: Yale University, 1914), p. 4, accessed at <http://www.books.google.com>; Acceptance from Yale Medical School, and Ltr, Knapp to mother, 1 Sep 1867, both in Knapp Papers. Enlistment of Obadiah M. Knapp, 30 Oct 1863, in Microfilm Publication M233, Register of Enlistments in the United States Army, 1798–1914, Roll 27, accessed at <http://www.ancestry.com>; Knapp Diary, 6 Jul 1866, Knapp Papers.

32. Utley, *Frontier Regulars*, p. 168. Knapp Diary, 2, 10 Apr 1867; and Ltr, Knapp to mother, 14 Apr 1867. All in Knapp Papers. The trial of Lt. James Krossen, described herein, was one case heard by this court.

33. Fort Bliss, May 1867, Nov 1867, Mar 1868, Apr 1869, in Microfilm Publication M617, Returns from United States Military Posts, Roll 116, NARA. Knapp Diary, 25 May 1867; and Ltr, Knapp to mother, 2 Jun 1867. Both in Knapp Papers. Metz, *Desert Army*, pp. 53–54, 56. Metz's book contains several factual errors about the 125th USCI and omits Knapp's name from the list of post commanders.

34. OR, ser. 3, vol. 5, p. 1047; Fort Bliss, Jul 1867, and Fort Craig, Nov 1867, in Micro-

film Publication M617, Returns from United States Military Posts, Roll 116 and Roll 261, respectively, NARA; Seran, Civil War Record of Service; CSR of Solomon Brooks; Knapp Diary, 16, 19 Sep 1867, Knapp Papers.

35. Fort Riley, Dec 1867, and Louisville, Ky., Dec 1867, in Microfilm Publication M617, Returns from United States Military Posts, Roll 1011 and Roll 651, respectively, NARA; *New York Times*, 4 Aug 1884; Seran, Civil War Record of Service; Utley, *Frontier Regulars*, pp. 120, 128n32. Although most records show the 125th was mustered out on 20 December, the return for the post of Louisville is rendered here as in the original. Knapp's and Seran's CSRs both show they were mustered out at St. Louis on 31 October 1867.

36. Henry Moore, in Microfilm Publication M233, Register of Enlistments, Roll 33, p. 196; Roll 39, pp. 36, 129; Roll 42, p. 75; Roll 45, p. 99; and Roll 46, p. 59, NARA; 125th USCI, in Microfilm Publication T289, Organization Index to Pension Files, NARA; Buffalo Soldiers at Fort Myer, at <http://www.buffalosoldiersresearchmuseum.org/third/myersoldiers.htm>; <http://www.findagrave.com>, both accessed 28 Nov 2012; William B. Heitman, *Historical Register and Dictionary of the United States Army, 1789–1903*, 2 vols. (Washington, D.C.: Government Printing Office, 1903), 1:838; *ORVF*, pt. 8, p. 214; *The Army Almanac* (Washington, D.C.: Government Printing Office, 1950), p. 347; *New York Times*, 15 Dec 1927.

37. Gerhart obituary; Duncan, Census, 1880 for San Francisco, and Veterans Census, 1890 for Ohio, in Microfilm Publication M1845, Card Records of Headstones Provided for Deceased Union Civil War Veterans, all accessed at <http://www.ancestry.com>. The sequence of these events in Duncan's life is unknown.

38. Censuses, 1870, 1880, 1910; Charles R. Hale Collection of Connecticut Cemetery Inscriptions (1932–1935), Fairfield County, online at <http://www.hale-collection.com>.

39. Thompson, ed., "Dearest Annie: Letters from Fort Selden," note p. 40; *New York Times*, 30 Apr 1927; <http://www.findagrave.com>.

40. Seran, Civil War Record of Service; <http://www.findagrave.com>, accessed 28 Nov 2012.

41. Darold D Wax, "Robert Ball Anderson, Ex-Slave, A Pioneer in Western Nebraska, 1884–1930," *Nebraska History* 64 (1983): 163–92.

42. Robert Holt, "Battlefield Burial: Union, Confederate Widows Take Part in Ceremony," and "Union, Confederate Widows Finally Meet," *Gettysburg (Pa.) Times*, 2 Jul 1997 (with photographs); Robert McG. Thomas Jr., "Daisy Anderson, 97, Widow of Former Slave and Union Soldier," *New York Times*, 26 Sep 1998. For a discussion of the irony of the participation of the Civil War widows in the Gettysburg ceremony, see Robert E. Weir, "The Graying of Gettysburg National Military Park: Race, Erasure, Ideology and Iconography," in *The Civil War in Popular Culture: Memory and Meaning*, ed. Lawrence A. Kreiser Jr. and Randal Allred (Lexington: University Press of Kentucky, 2014), p. 71.

43. CSR of Thomas Smith of Co. A; Thomas Smith Carded Medical File, Entry 534, RG 94, NARA; U.S. Department of the Interior, Bureau of Reclamation, Press Release, 28 Jul 2009, accessed 30 Jul 2009, at <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=29142>; Melanie Dabovich, Associated Press, "Remains of 3 Buffalo Soldiers Reburied," *Arizona Daily Star*, 29 Jul 2009, accessed 30 Jul 2009, at <http://www.azstarnet.com/sn/metro/302767.php>.

ARMY HISTORY OnLine

The Center of Military History makes all issues of *Army History* available to the public on its Web site. Each new publication will appear shortly after the issue is printed. Issues may be viewed or downloaded at no cost in Adobe® PDF format. An index page of the issues may be found at www.history.army.mil/armyhistory.

Continued from page 3

events and decisions from 2001 to 2014. Although primarily narrative, the study will include maps, data (tables and charts), and illustrations.

Although there is still a long way to go, today we are building the foundation for what will become the official record of our Global War on Terrorism combat operations. Our hope is that the collection efforts, coupled with this first

serious study, will help organize the ENDURING FREEDOM, IRAQI FREEDOM, and NEW DAWN files, which in turn will support longer-term scholarship and the writing of official histories that will follow.

Thanks for all you do to support Army History!



ARMYHISTORY

CALL FOR SUBMISSIONS

Armey History welcomes articles, essays, and commentaries of between 2,000 and 12,000 words on any topic relating to the history of the U.S. Army or to wars and conflicts in which the U.S. Army participated or by which it was substantially influenced. The Army's history extends to the present day, and Army History seeks accounts of the Army's actions in ongoing conflicts as well as those of earlier years. The bulletin particularly seeks writing that presents new approaches to historical issues. It encourages readers to submit responses to essays or commentaries that have appeared in its pages and to present cogent arguments on any question (controversial or otherwise) relating to the history of the Army. Such contributions need not be lengthy. Essays and commentaries should be annotated with endnotes, preferably embedded, to indicate the sources relied on to support factual assertions. Preferably, a manuscript should be submitted as an attachment to an e-mail sent to the managing editor at usarmy.mcnair.cmh.mbx.army-history@mail.mil.

Army History encourages authors to recommend or provide illustrations to accompany submissions. If authors wish to supply photographs, they may provide them in a digital format with a minimum resolution of 300 dots per inch or as photo prints sent by mail. Authors should provide captions and credits with all images. When furnishing photographs that they did not take or any photos of art, authors must identify the owners of the photographs and artworks to enable Army History to obtain permission to reproduce the images.

Although contributions by e-mail are preferred, authors may submit articles, essays, commentaries, and images by mail to Bryan Hockensmith, Managing Editor, Army History, U.S. Army Center of Military History, 102 Fourth Avenue, Fort Lesley J. McNair, D.C. 20319-5060.

U.S. ARMY ARTIFACT SPOTLIGHT

PARATROOPERS OF OVERLORD: Col. Howard “Jumpy” Johnson’s M1911 Pistol

By Dieter Stenger

On 6 June 1944, the U.S. Army executed one of the greatest air and seaborne operations in history against an enemy-held and heavily fortified Normandy coastline, also known as the Atlantic Wall. Code-named Operation OVERLORD, it included the largest armada ever assembled, bringing more than a hundred thousand Allied fighting men ashore at UTAH, OMAHA, GOLD, JUNO, and SWORD Beaches to confront the enemy’s power on the ground and liberate northwestern Europe. “On the night before the invasion, the U.S. 82d and 101st Airborne Divisions would land by parachute and glider near the town of Ste. Mere-Eglise, securing the roads that led from the shoreline and obstructing enemy efforts to reinforce beach defenses.”¹

The 101st Airborne Division, nicknamed the “Screaming Eagles,” was assigned three drop zones (DZ) designated Able, Charlie, and Dog. The 501st Parachute Infantry Regiment (less the 3d Battalion) was commanded by Col. Howard R. “Jumpy” Johnson. It landed in DZ Dog to the northeast of Carentan, France. Its tasks were to destroy bridges over the Douve River and seize the canal locks at La Barquette.² Despite significant low cloud cover over the DZ, poor nighttime visibility, enemy anti-aircraft fire, and scattered drops that widely dispersed the paratroopers across the battlefield, the 501st accomplished its multiple missions. Credit for the successes is attributed to the initiative, stamina, and daring of many individual parachutists. However, these achievements were not without cost as the regiment took heavy casualties, with 898 men killed, wounded, missing, or captured.

The depicted U.S. Army .45-caliber Model 1911 semiautomatic pistol was carried by Colonel Johnson during Operation OVERLORD. He was born in the District of Columbia on 18 June 1903. Author Gerard Devlin considered Johnson to be the U.S. Army’s “most flamboyant parachute officer.” Devlin went on to write that “Johnson had no patience for weakness of any kind among his subordinates, and he seemed to have an insatiable desire to prove how tough and brave he was.”³ Johnson personally made three to five parachute jumps a day, which is how he earned the nickname Jumpy. Fearless in battle, Johnson was killed by German artillery in Holland on 8 October 1944. He is buried in Arlington National Cemetery. This pistol is on display at the Don F. Pratt Museum at Fort Campbell, Kentucky.⁴



Dieter Stenger is currently serving at the Museum Support Center, at Fort Belvoir, Virginia, as the curator of firearms and edged weapons.

Notes

1. William M. Hammond, *Normandy*, The U.S. Army Campaigns of World War II (Washington, D.C.: U.S. Army Center of Military History, 2006), p. 12.
2. Regimental Unit Study 2, The Fight at the Lock, European Theater of Operations, 8–3.1 BB 2, Historical Manuscript Collection, U.S. Army Center of Military History Archives.
3. Gerard M. Devlin, *Paratrooper!* (New York: St. Martin’s Press, 1979), p. 363.
4. Historical Property Shelf Rpt 2609, Central Control No: 392023 Reg No: W84.50 Cat No: BEN 0000/12326, Don F. Pratt Museum, Fort Campbell, Ky.

1 U.S. Twelfth Army situation map for 2400 hours, 6 June 1944. /U.S. Army

2 General Dwight D. Eisenhower speaks to paratroopers of Company E, 502d Parachute Infantry Regiment, 101st Airborne Division, on the eve of the D-Day invasion. /National Archives

3 Col. Howard R. "Jumpy" Johnson /(left, Courtesy of Mark Bando, <http://www.101airbornev2.com>) (right, National Archives)



1



2



3



3



ABOUT THE AUTHOR

Dr. Sanders

Marble is the senior historian in the Army Medical Department's Office of Medical History.

He received his bachelor's degree from the College of William and Mary and his graduate degrees at King's College, University of London. He has worked for the Smithsonian and has been a historian for the

Army Medical Department since 2003, including a period as command historian at Walter Reed Army Medical Center. He has written, co-authored, or edited seven books and numerous articles and chapters.

He received the History of Military Medicine Essay Award in 2012 from the Association of Military Surgeons of the United States.

His most recent book is *Skilled and Resolute: A History of the 12th Evacuation Hospital and the 212th MASH, 1917–2006* (Fort Sam Houston, Tex., 2013). This article was developed from aspects of that research.



Members of the 8209th Mobile Army Surgical Hospital (MASH) operate on a wounded soldier in Korea, 11 September 1952.



National Archives

THE EVOLUTION + DEMISE OF THE MASH, 1946–2006

ORGANIZING TO PERFORM FORWARD SURGERY AS MEDICINE AND THE MILITARY CHANGE

BY SANDERS MARBLE

In World War I, surgery proved to be better than conservative treatment for abdominal and thoracic wounds.¹ Prompt surgery, which meant surgery close enough to the front lines to be in danger of artillery fire, also helped orthopedic and neurosurgical patients. Surgical intervention reduced mortality, which was good for patients, and decreased morbidity, which was good for both patients and the military and returned soldiers to duty sooner. The United States learned from French and British experiences and organized units to perform forward surgery. After World War I, these units were retained but modified despite a debate about their cost effectiveness, which was cast in terms of how much effort the Army should make to help a small percentage of patients. The interwar units proved to be poorly organized and equipped for the mobile campaigns of World War II, and the Army tried different

approaches to provide forward surgery and postoperative hospitalization in the Pacific and European theaters. Senior leaders identified these as expedients and studied the problem, and in August 1945 a new method for forward surgery and hospitalization was promulgated, the Mobile Army Surgical Hospital, or MASH.

The MASH would survive until 2006 but was revised dramatically over time. The changes were driven by rising standards in medicine, and the Army had to adapt to those. However, attitudes and adjustments in the Army contributed to the MASH's survival. Ultimately, medical science became too cumbersome for battlefield hospitalization, but the Army found a way to provide forward surgery.

THE KOREAN WAR

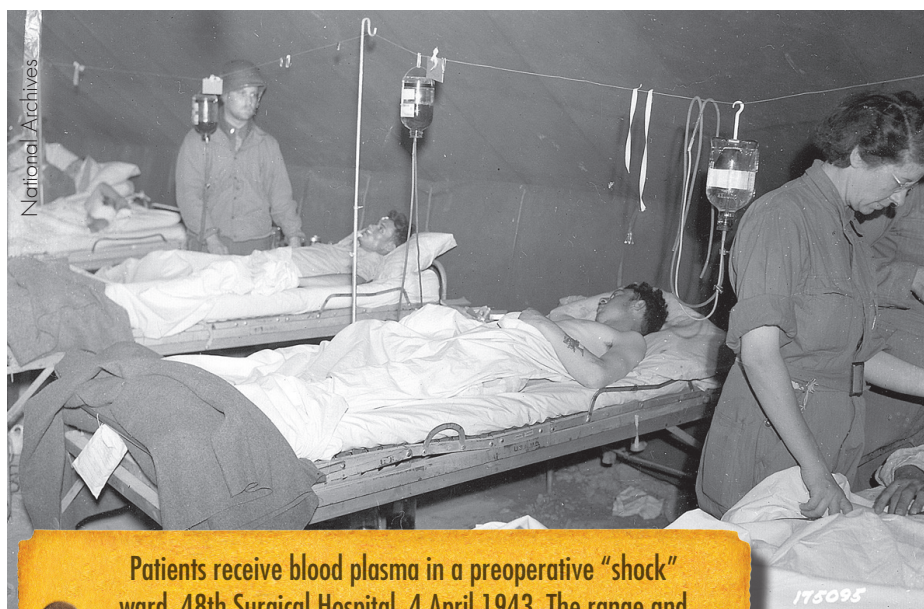
The Army formed five MASHs through 1949, but the units did little

before the Korean War except provide routine medical care.² The 4th and 5th MASHs in Germany were below strength and operated outpatient clinics; should a war erupt they were supposed to be brought up to strength from station hospital personnel.³ The 2d MASH was newly re-formed and was well understrength and spent the year organizing and training.⁴ At least it had equipment; the 1st MASH at Fort Lewis, Washington, had to use training aids and simulated equipment until after the Korean War broke out.⁵ A group of four officers and twenty-two enlisted men, optimistically called the 3d MASH, was on Eniwetok Atoll to provide low-acuity care for the nuclear tests, presumably because it was a small unit, easy to move, and caused little disruption to Army health care.⁶ Already MASHs were proving hard to manage in a peacetime force structure, being too specialized for routine health care.



National Archives

An Army doctor operates on a U.S. soldier wounded by a Japanese sniper, 13 December 1943.



National Archives

Patients receive blood plasma in a preoperative "shock" ward, 48th Surgical Hospital, 4 April 1943. The range and intensity of interventions were limited and did not change significantly between 1944 and 1950.

overtaken by necessity and practicality. First, the Army had a severe shortage of physicians, somewhat ameliorated by a special draft of doctors after October 1950. There were not enough doctors to staff the doctrinal number of combat-zone medical units. However, Japan was very close to Korea, and air evacuation made transporting patients to hospitals there easy, thus reducing the number of Echelon 4 hospitals needed in Korea. Second, Korea's rugged terrain and narrow mountain valleys made it hard to find space for large hospitals. Furthermore, the war-damaged railways and bad roads delayed evacuation for all patients.

MOBILE OPERATIONS, 1950–1951

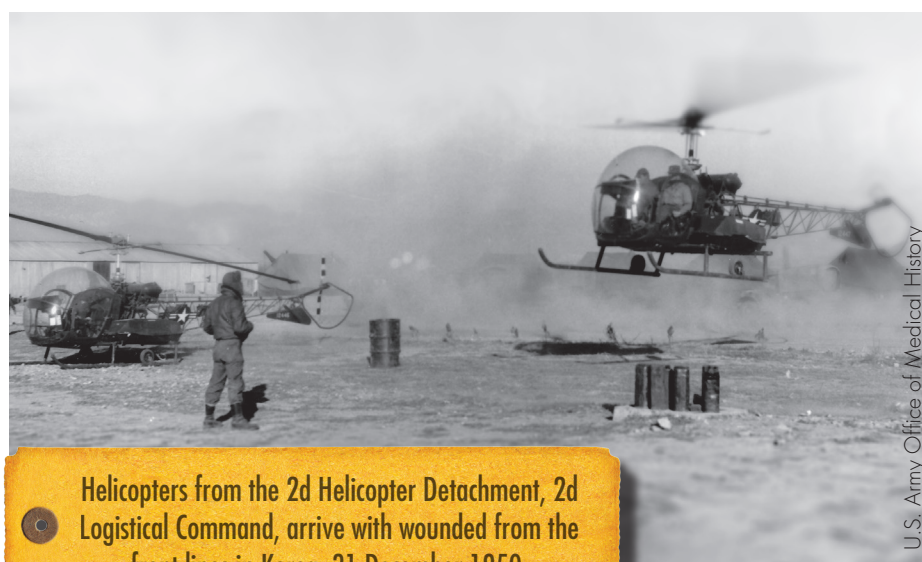
The first priority was to get hospitals to Korea to support the troops in action. In July 1950, Eighth Army activated three provisional MASHs from personnel in other medical units in Japan. The front rapidly moved hundreds of miles, from the middle of the peninsula to the far south, then the north, and back to the middle, all in eight months. The MASH proved highly mobile—some units averaged one move per week—able to handle extraordinary numbers of patients (608 in one day for the 8076th MASH, or 244 operations in a single day), and flexible enough to take medical and surgical patients.⁸ But because they were designed as surgical hospitals rather than multipurpose hospitals, both laboratories and pharmacy stocks were optimized for surgical patients rather than medical ones.⁹ Few evacuation hospitals were available and they were not sufficiently mobile, ultimately operating as rear-area hospitals.¹⁰ Thus Eighth Army had to improvise; MASHs were expanded, with up to two hundred beds and extra personnel and equipment, and apparently extra transport was also assigned.

Generally, there was still one such MASH per division, meaning 200 beds per division instead of the doctrinal 460 (400 from an evacuation hospital and 60 from a MASH), and fewer beds dictated that prompt evacuation from the forward hospital was more important because empty beds were always needed in case of a surge in patients. Patients might be held only two days,

Doctrine had one MASH per division in combat, working adjacent to the clearing station to treat "nontransportable" wounded rather than those who could tolerate an ambulance ride of perhaps fifteen miles to an evacuation hospital.⁷ Both types of hospitals were

considered Echelon 3 (the next step in care after the medic and the battalion aid station) but prior to 4 (general hospitals in the combat theater) and 5 (general hospitals in the United States). But doctrine is only a guideline, and during the Korean War it was largely

partly due to MASHs receiving medical and minor surgical patients who could easily be moved and partly due to greater use of air evacuation. The Air Force had had excellent evacuation results from 1945–1949, with only one patient dying of sixteen thousand transported, but that was largely attributable to patients being flown only after they were fully stable.¹¹ With a war on, many patients were being moved back to Japan much sooner, but very likely they were being flown at relatively low altitudes, reducing risks. A new factor in prompt medical evacuation was the frequent employment of helicopters as transport, not just from combat areas to hospitals but from forward to rear hospitals. The first substantial use of helicopters for both purposes was in August 1950, and it became routine when enough helicopters were available.¹² Helicopters were faster and smoother than ground ambulances, both of which were better for patients. The 1st MASH noted that without helicopters serious patients



Helicopters from the 2d Helicopter Detachment, 2d Logistical Command, arrive with wounded from the front lines in Korea, 31 December 1950.

U.S. Army Office of Medical History

would have needed three weeks of postoperative care to enable them to tolerate the 72-mile trip over rough roads (*Table 1*).

MASHs developed a high profile despite having spent relatively little

time as mobile surgical hospitals. The Army recognized that “it is doubtful if any other medical unit has ever caught the imagination of the public and the American fighting man as completely as the [Mobile Army] Surgical Hospi-

TABLE 1—DAYS OF POSTOPERATIVE FORWARD HOSPITALIZATION BY TYPE OF WOUND

Wound Type	World War II ¹	Korean War	1958 ²	Vietnam War ³	1975 ⁴	1988 ⁵	2004 ⁶
ABDOMINAL	8-10	8-10 ⁷	Abdomen 7-10; Soft tissue c. 24 hrs; Chest 3-5	Less than 7	7	4-10 without specifying wound types	No days specified, instead physiological criteria such as: 8 hours of stable blood pressure, no bleeding, safe airway, not in shock
BRAIN	Only stabilized forward	Others: 3-8 (no specifics) ⁸ 2-3 (gastric suction and vascular injuries held longer) ⁹			Not stated		
JOINTS/COMPOUND FRACTURES	2-3 (with circulatory problems, 4-5)						
CHEST	7-9						

1 Second Auxiliary Surgical Group, *Forward Surgery of the Severely Wounded: A History of the Activities of the 2nd Auxiliary Surgical Group* (Washington, D.C.: self-published, 1945), p. 82.

2 Department of Defense, *Emergency War Surgery* (Washington, D.C.: Government Printing Office, 1958), pp. 217, 331, 351.

3 Jones, Peters, and Gasior, “Early Management of Battle Casualties in Vietnam.”

4 Department of Defense, *Emergency War Surgery* (Washington, D.C.: Government Printing Office, 1975), pp. 161–62, 207, 314, 339.

5 Department of Defense, *Emergency War Surgery* (Washington, D.C.: Government Printing Office, 1988), pp. x–xi.

6 Department of Defense, *Emergency War Surgery* (Washington, D.C.: Government Printing Office, 2004), pp. 4.2–4.3.

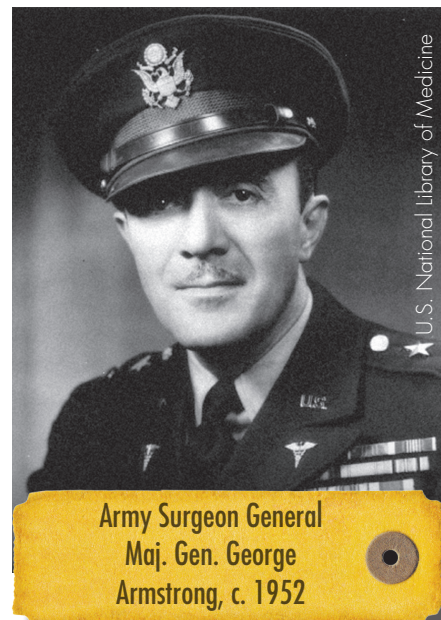
7 Technical Bull Medical 147, Management of Battle Casualties, 22 Jun 1951, ACHH files.

8 Annual Rpt, 1950, 1st MASH.

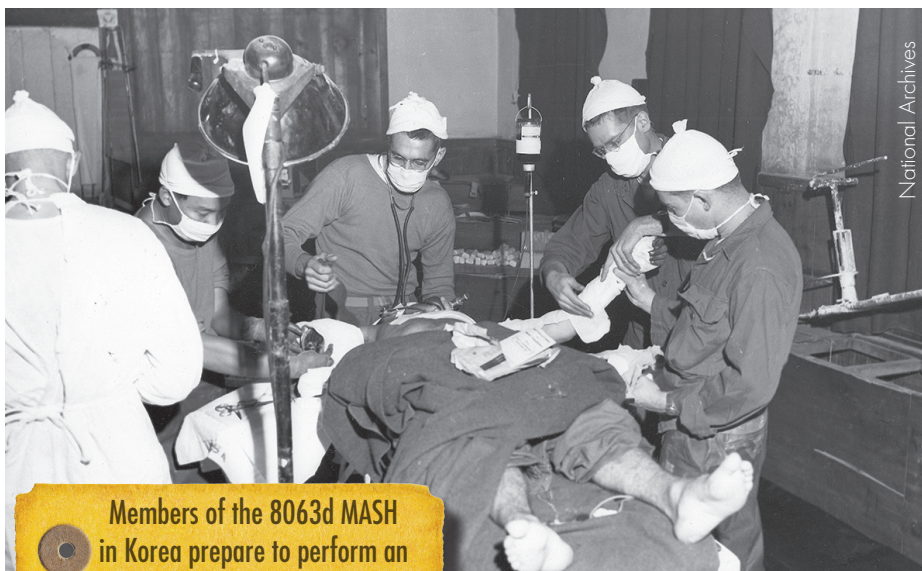
9 Annual Rpt, 1950, 8055th MASH.



The Korean Civilian Hospital in Inch'on operated by the 1st MASH, 3 October 1950



Army Surgeon General
Maj. Gen. George
Armstrong, c. 1952



Members of the 8063d MASH in Korea prepare to perform an amputation, 4 November 1950.

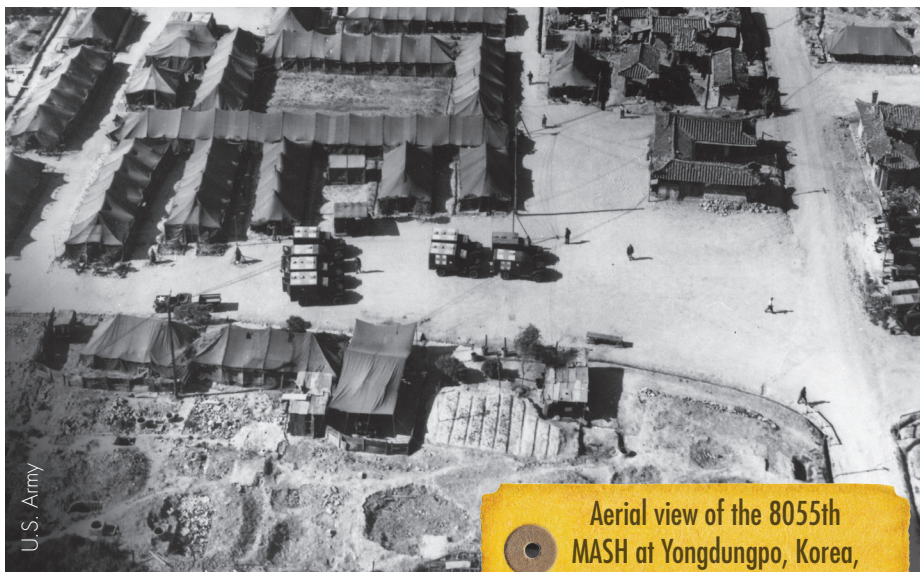
tal.”¹³ MASHs were the only hospitals in operation early in the war and were the main hospitals for much longer; thus a great many patients had passed through a MASH. MASHs received substantial media attention, again because they were the most active hospitals and the ones with the dramatic stories of life and death and the still-remarkable helicopters.¹⁴ Metro-Goldwyn-Mayer chose a MASH as the set of a movie (*Battle Circus*, with Humphrey Bogart and June Allyson), and one reviewer gushed about the “hairbreadth, makeshift operations

of one of these heroic units, channeling its precious cargo to safety under constant exposure to the enemy.”¹⁵ Senior leaders at a staff meeting, including Army Surgeon General Maj. Gen. George Armstrong, decided to continue MASHs indefinitely, “as they have a remarkable psychological effect on the public.”¹⁶

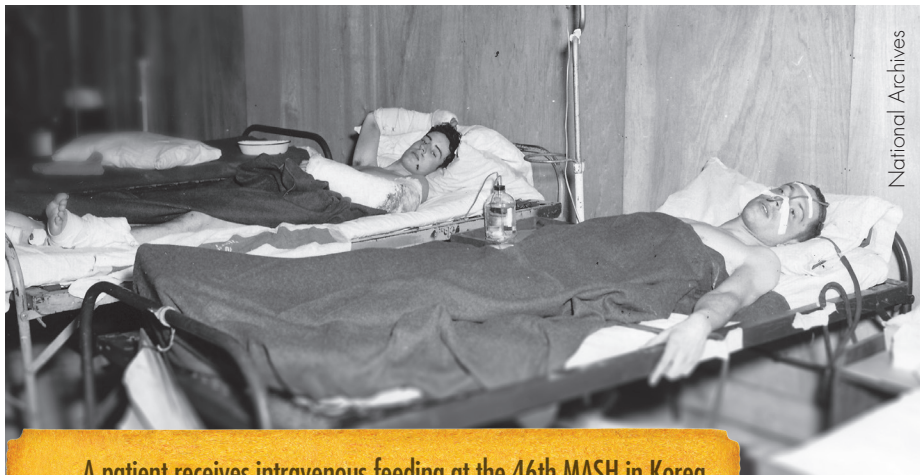
THE STATIC FRONT, 1951–1953

By mid-1951, the front lines had become essentially static, and the mobile part of the MASH was no longer vital.

In general, the front was quiet, and a MASH might get fewer patients in a month than on a busy day in 1950. However, it was still more compact than an evacuation hospital, which might be thirty to fifty miles to the rear. When fighting flared and casualties swamped a MASH, teams were sent from other hospitals to help. MASHs also benefited from the static front by gathering needed but unauthorized equipment and by building better facilities, such as Quonset huts rather than tents. Even with a draft of doctors, there was no great buildup of medical units. In part, the American Medical Association had enough political clout to make the military minimize draft calls. Furthermore, the low level of fighting did not require more hospitals. In fact, by 1952 casualties had declined to a point that the Eighth Army command surgeon cut MASHs back to sixty beds, using the divisional clearing company for triage and minor patients. As a sign that the Army was not going to invest more personnel in Korea, when Korean hemorrhagic fever became a concern, a MASH (minus surgical personnel, but with a laboratory for animal experiments) was used as the hemorrhagic fever hospital in the spring and summer, and the same unit doubled as the frostbite and trench foot hospital in winter. While severe frostbite can require amputations, the condition is not primarily surgical, but with only a surgical hospital available it was used.



Aerial view of the 8055th MASH at Yongdungpo, Korea, 26 June 1951



A patient receives intravenous feeding at the 46th MASH in Korea, 26 January 1953. Beds and equipment in Korean War—era MASHs were able to meet the contemporary standard of care but were still simple and light.

There were no major changes in doctrine or equipment as a result of the Korean War; the divisional clearing station would triage patients and a nearby MASH would perform urgent surgery, with an evacuation hospital farther to the rear.¹⁷ In a linear war, helicopter evacuation was simply a faster ambulance, both from the frontline areas to forward hospitals and from forward hospitals to rear ones. The Army also had to consider nonlinear warfare, and the MASH was adapted for that as well. In April 1951, the Army Airborne Center decided

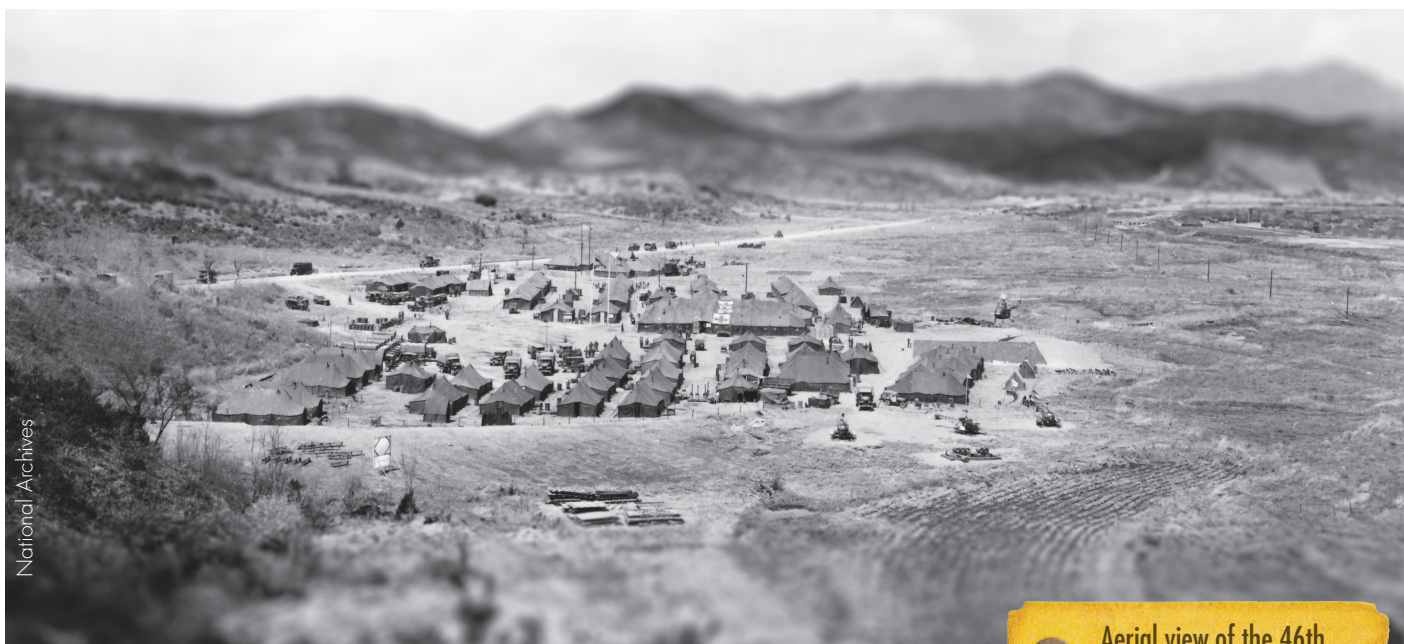
that airborne divisions would also need support from a MASH for some parachute operations.¹⁸ Paratroopers would need forward surgery, and the MASH was the way the Army was performing it. The Army Airborne Center addressed the problems of deploying hospitals by air (largely the competition for limited aircraft space, but also the impossibility of dropping hospital equipment in parachute containers) through a two-stage solution: surgical teams would parachute in early with limited supplies and equipment while the rest of the hospital, both personnel

and equipment, could be air landed or advance overland. Interestingly, female nurses would not be parachuted in; airborne units were still a wholly male preserve.

A PEACEFUL INTERLUDE

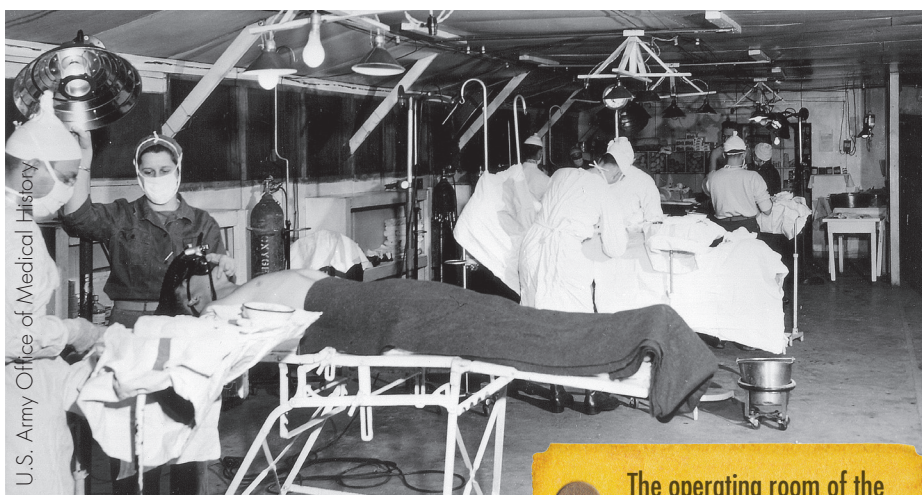
After Korea, the Army again had to use MASHs in peacetime. At least one MASH operated as a station hospital, taking routine medical and surgical patients.¹⁹ To maintain their skills, physicians, nurses, and medics alike had to practice medicine, so some of their routine peacetime medical work was training for wartime. However, patients' medical problems could not be scheduled to go away when the unit wanted to hold a field exercise, and a full-time program of delivering health care meant little opportunity for training on field equipment.²⁰ Also MASH equipment sets were not adequate for routine hospital operations, so extra items were provided but had to be removable in case of war. Meanwhile, the Army was content with the basic structure of the MASH. The 1955 Table of Organization and Equipment was essentially unchanged for vehicles and personnel, implying the unit was mission capable.²¹

Although the MASH was not changing, the Army was transforming around it. The late 1950s brought an increased focus on fighting with tactical nuclear weapons and on continued ground combat during tactical nuclear warfare, and the Army reorganized combat forces into "Pentomic" divisions. Regiments and battalions were merged into battle groups, which were intermediate in size and meant to operate semi-independently within a given area. To this end, many divisional support elements were split up and their pieces assigned to the battle groups. Thus, the divisional clearing company became a platoon, with each battle group also getting a clearing platoon. There was still one MASH per division, which worked at the central clearing platoon. With the division operating over an area of two hundred square miles or more, increasingly patients would be moved by helicopters, and the chain of evacuation would become



National Archives

Aerial view of the 46th MASH, 20 April 1953



U.S. Army Office of Medical History

The operating room of the 44th MASH, June 1954

diffused. Rather than patients traveling along a (conceptually) linear evacuation chain to a centralized triage point and then being taken to the appropriate hospital (MASH or evacuation), they could be taken straight to the appropriate hospital.²² The M in MASH would seem to fit well with Pentomic ideas, but once a patient occupied a bed the unit might be immobilized for a week. So, with a division's operating area expanding rapidly and hospitals unable to move tactically, hospitals were pushed away from the front lines. One field training exercise had the MASH sixty miles from the front,

and the evacuation hospital another forty-nine miles farther away.²³

Around the same time, the Army Medical Department (AMEDD) was contemplating an overhaul of combat-zone hospitals, trying to simplify matters by having a "base" hospital to which elements could be added as needed.²⁴ In 1957, the field hospital was proposed for this role, and, while the concept was approved, implementation was denied because it would need more manpower. But by the mid-1960s there was serious discussion about eliminating the MASH from the next generation of hospitals, which was anticipated around 1970.

[I]t was concluded that with the advent of the helicopter it will no longer be necessary to assign a mobile army surgical hospital to provide the early resuscitative surgery required by the "non-transportable" patient. The current evacuation hospital is fully capable of performing this function, and the speed of the helicopter, with its reduced traumatic effects on the patient, more than compensates for the increased distance involved. An increased surgical capability should be provided the division medical battalion to provide increased "stop gap" surgery to enhance lifesaving, yet preserve mobility.²⁵

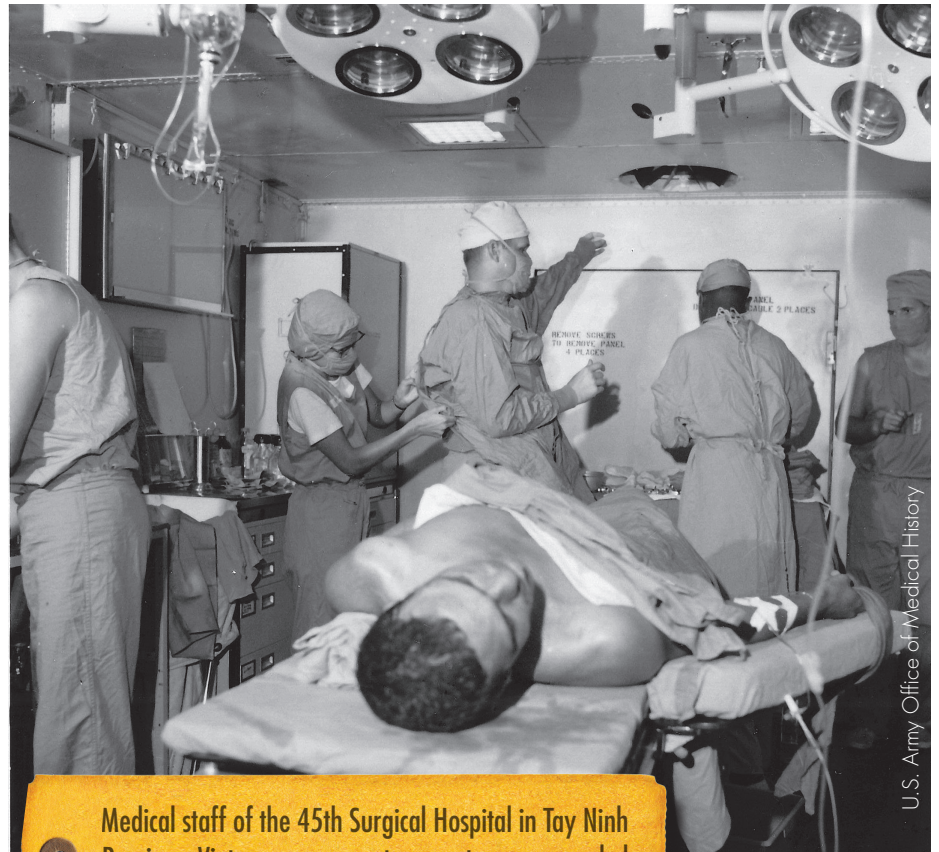
This recognized that early surgery was important for some patients, but surgery within six to eight hours was the acceptable standard at the time.²⁶ This study recognized that, with sufficiently fast and smooth transportation, the tasks of resuscitative surgery and hospitalization could be physically separated. However, there was significant opposition both from the Army Medical Department and from the infantry, which centered great reliance on helicopters: without them this system would fall apart and that risk

was large. That could not be gainsaid, although the original study was looking ahead almost a decade and expecting somewhat better helicopters.

Yet the evacuation hospital did not answer all needs, especially for forces smaller than a division, something the Army was now thinking more about. The Army had soon decided the Pentomic division was a mistake and reorganized again to increase firepower and provide flexibility (termed the Reorganization Objective Army Division series of divisions), with brigades for combat and supporting elements that could operate independently split among the brigades.²⁷ In addition, the Army had nondivisional brigades that could be used separately. Brigades were too small to justify a 400-bed evacuation hospital but too large for the MASH and as a purely surgical hospital the MASH would also be too specialized. The combat support hospital (CSH) was apparently the result of not getting the field hospital approved as a universal hospital base. It would have 200 beds (perhaps a reflection of 200-bed MASHs in Korea) and both a medical and surgical capability, essentially being a smaller evacuation hospital. The CSH was also a reasonable size to support a task force smaller than a division. CSHs were to be fully mobile and potentially would replace the MASH and evacuation hospitals, but full field tests were not scheduled until early 1973, over a decade after the initial plans for a CSH had started in February 1962. Meanwhile, the MASH organization was slightly increased in 1964, with a few more enlisted men and a bit more transportation; several would be deployed to Vietnam.²⁸

THE VIETNAM WAR

The Vietnam War did not fit the Army and Medical Department's doctrine.²⁹ It was a nonlinear war with semipermanent bases rather than a rear area, so the front might be a few yards to many miles away. Doctrine envisioned MASHs and evacuation hospitals being assigned to divisions at the front, but now all hospitals provided area support, that is they received patients from all units operating in an area. To maintain increased



Medical staff of the 45th Surgical Hospital in Tay Ninh Province, Vietnam, prepares to operate on a wounded soldier, 26 November 1966.

U.S. Army Office of Medical History

operations in an area, the hospital would typically be expanded rather than another hospital arriving, and MASHs, on paper a 60-bed hospital, could be operating 40 to 170 beds.³⁰ As a result, by late 1968 MASHs moved so little that the command surgeon in Vietnam had two MASHs retrain to be mobile in case that became necessary. Helicopter ambulances made it possible for a hospital's district to be large but evacuation times short. They also facilitated spreading out a surge of patients from heavy fighting across multiple hospitals or moving a patient to subspecialty care at a hospital other than the nearest one. The combination of area support and helicopter ambulances also ended divisional triage. Instead, "medical regulating"—matching patients with a medical treatment facility that has the necessary capabilities and available bed space, rather than moving a patient along a set line of evacuation—developed, which, in turn, meant medical units needed newer radios with more range.³¹

Area support also meant that MASHs were handling all sorts of patients (medical, surgical, and psychiatric) and thus their authorized equipment and supplies were inadequate, prompting multiple criticisms from units and even from their higher headquarters.³² The 18th MASH complained that their equipment was "antiquated," and the 7th MASH protested that augmentation "nearly brought us up to minimum standards acceptable in the United States, but nowhere near the capabilities of our affluent society."³³ There were several reasons for this state of affairs. First, medicine was advancing rapidly, with development of equipment like defibrillators and respirators (now known as ventilators) and intensive-care units. These items might well be standard at civilian hospitals but a rugged field version was not yet available for military use, nor would units be staffed for evolving procedures. (Table 2 uses the ratio of nurses to beds as shorthand to show the trend toward

TABLE 2—REGISTERED NURSES AND BEDS IN MASHS, SELECTED PERIODS¹

Date	Beds	Registered Nurses (wards, administrative, and OR)
1945	60	12
1955	60	12
1968	60	15
1977	60	14
1979	60	41
1987	60	41
1997	30	27
2003	36	29

¹ Sources are the TOEs for the relevant dates.

intensive care.) Second, the MASH was designed for urgent surgery but was being used as a broad-spectrum hospital. Local circumstances might have a MASH with tiled operating rooms on concrete foundations, but its doctrinal purpose dictated authorized equipment, and the unit would not be equipped with everything that could be found in a civilian hospital. The MASH TOEs were reviewed in 1966 and 1968, and the Army did its best to align personnel, equipment, and mission. The MASH's capability improved through new equipment, the Medical Unit, Self-contained, Transportable (MUST) sets, but there was little change in personnel or authorized vehicles.³⁴ MUST used jet turbines to provide inflated (indeed, overpressure) tents that were climate-controlled, with some elements (such as operating rooms [ORs]) in expandable shelters that were essentially modified cargo containers. Presumably developed for use on the atomic battlefield, MUST first saw action in 1966. Air-conditioning helped patients recover, while the containerized ORs could be kept cleaner.

Helicopters were a third factor: now hospitals were getting patients within an hour of wounding. In Korea, casualties had usually been litter-carried back to a battalion aid station and flown from there. In Vietnam, they were often flown from point-of-wounding, and now soldiers were

arriving at hospitals who previously would have died on the battlefield or in transit.³⁵ Military hospitals needed new equipment to give those grievously wounded a fighting chance. Indeed, the high expectation of rapid evacuation and surgery generated calls to attach surgical teams to brigade clearing companies when a brigade was "quite distant" from the area's hospital.³⁶

As in Korea, helicopters also reduced the length of time patients stayed in a MASH. More wounded survived the trip to the hospital, better-trained surgeons and better equipment saved more patients, and they could also tolerate the move to a better-equipped hospital out of Vietnam earlier because it was a smoother flight. Complete statistics are not available, but patients were flown from Vietnam to Japan, the Philippines, or the United States around two weeks after wounding, which, together with what data are available, suggests that patients spent seven days or less at MASHs.³⁷ (See Table 1.)

THE 1970s AND 1980s

In Vietnam, disconnects between doctrine and reality probably strengthened the plan to switch from MASHs to CSHs. MASHs were functioning as CSHs and taking all sorts of patients

Same as in Korea, the use of helicopters in Vietnam to evacuate the wounded from the battlefield greatly increased the chances of survival.

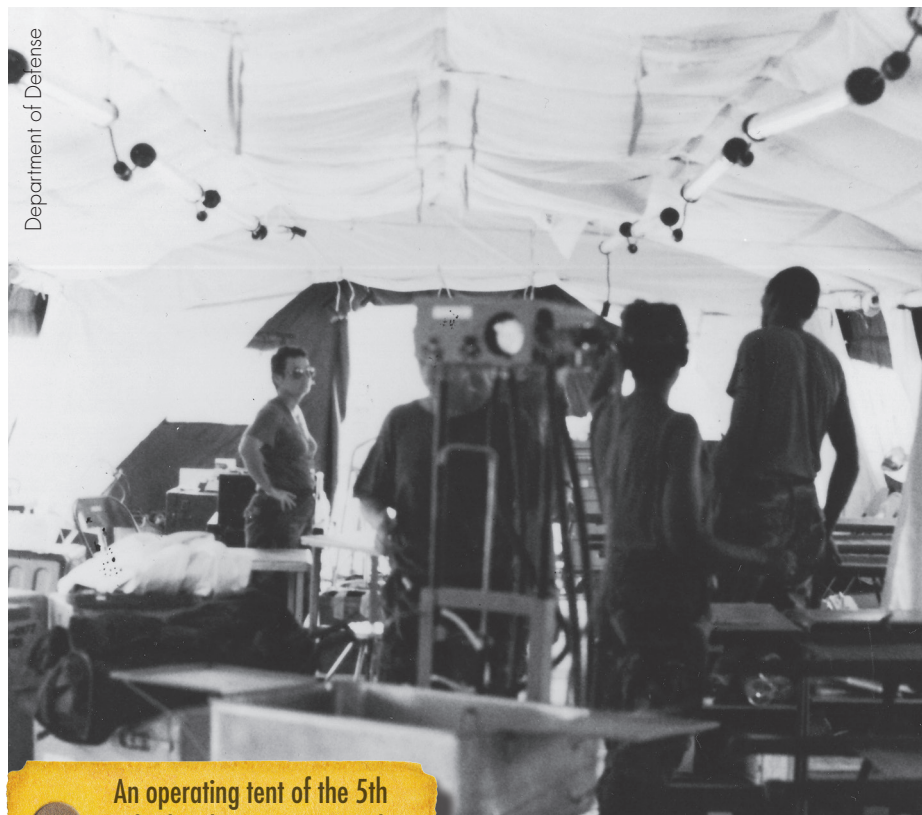


from a task force. So why not change? The Army's 1969 vision for the mid-1970s called for CSHs to replace all the MASHs and even half of the evacuation hospitals.³⁸ Yet the 1970 edition of the relevant field manual had no changes to the MASH's mission or the number that would be assigned.³⁹ The MASH concept may have survived because of problems with other ideas and the difficulties with coordinating plans around the Army.

While the CSH had its origins in 1959 and a TOE had been published in 1963, the first field test (and a partial one at that) was not until 1971.⁴⁰ The results were mixed, but questionable enough that the CSH was trimmed from 200 beds to 160, with concomitant internal changes, and even that format was rated at only 70 percent mobile. The next trials were in 1977 and proved a significant failure.

The Surgeon General determined that the CSH... did not adequately meet the requirements for mobile medical support on the modern battlefield. Specific problems involving logistical demand, lack of mobility, technical over-sophistication, and tactical considerations such as heat signature, noise, and camouflage were noted.⁴¹

There was a twofold response. First, the CSH was further cut, reducing the number of beds to only 120, which downgraded its mobility to 35 percent; halving the number of operating rooms from four to two; and shifting to lighter canvas ward tents. Second, there was also an emergency overhaul of the MASH since its planned successor had failed. Indeed, during 1983–1985, twenty-five CSHs were converted to MASHs or evacuation hospitals. However, the MASH grew from 185 personnel to 224 and to 32 trucks and 31 trailers, including the new generation of five-ton trucks for hauling containers, so the total weight of equipment went up sharply, reducing mobility to only 65 percent.⁴² In contrast, the CSH had 185 personnel and 13 trucks, partly because it handled lower-acuity patients and partly because the Army accepted 35 percent mobility, while claiming “this



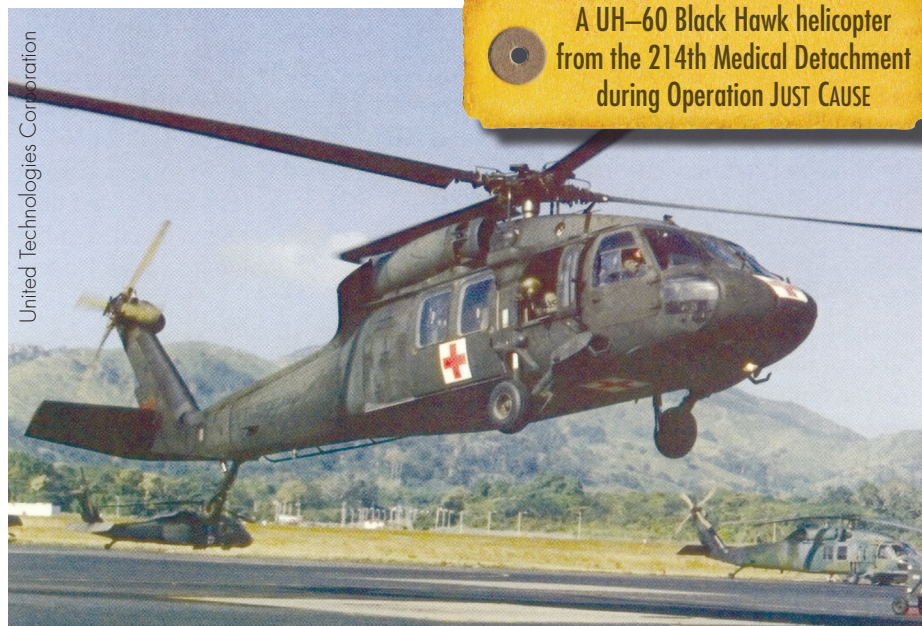
Department of Defense

An operating tent of the 5th Medical Task Force in Grenada, November 1983

trade-off sacrifices supposed equipment sophistication for the greater capability of increased mobility.”⁴³

With the MASH overhauled, Army Surgeon General Charles Pixley called

for a review of all forward hospitals. Instead of two 200-bed CSHs and a 400-bed evacuation hospital per division, two 60-bed MASHs, an evacuation hospital, and a 120-bed CSH



United Technologies Corporation

A UH-60 Black Hawk helicopter from the 214th Medical Detachment during Operation JUST CAUSE

per division was suggested. Even with fewer beds, there would be more operating tables and more surgical personnel, and the mobility of the hospitals meant they would be operational more of the time so they could accomplish more.⁴⁴ This was later revised to one MASH, one CSH, and two evacuation hospitals—a total of 1,060 beds per division—and this was approved by the Army in March 1980.⁴⁵ Full implementation would not be until 1986, but the 5th MASH at Fort Bragg, North Carolina, a support unit for the high-readiness XVIII Airborne Corps, was converted on 16 April 1982.

Between Vietnam and Operation URGENT FURY in Grenada in 1983, the Army's only battles were over budget and manpower, and, while the Army Medical Department observed the British experience in the Falkland Islands, there were no changes as a result.⁴⁶ There seems to have been little direct response to operations in Grenada either. There, the twenty C-141 loads required to move a MASH had been judged too bulky for early deployment by air, and the Army instead relied on the 82d Airborne Division's organic surgical elements, with patients to be evacuated to Navy ships offshore.⁴⁷ By the time elements of the 5th MASH could be flown in, the fighting was already over, and only a fraction of the medical unit was deployed: a single operating room, one intermediate-care ward, and two intensive-care beds.⁴⁸ What had sufficed for the paratroopers was their own surgical teams (of two surgeons, two nurse anesthetists, and three enlisted men), which worked alongside each brigade's medical company. The surgical team could do surgery and the medical company could provide some short-term holding capacity, relying on helicopters to evacuate postoperative patients. This capability was unique to the airborne and air assault divisions, and it seems to have been widely noticed. One post-operation recommendation was that "small surgically-intensive emergency medical treatment teams be developed from medical clearing company assets and deployed early with combat troops."⁴⁹ In 1985, the Army Medical Department

was evaluating a surgical squad of two surgeons, three nurses, and four enlisted for all brigades rather than just airborne and air assault units.⁵⁰

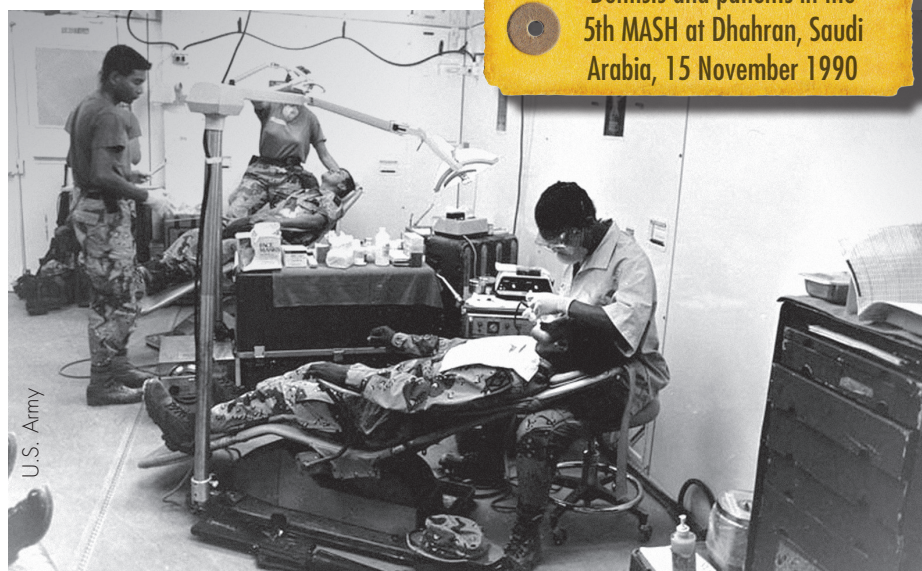
In the mid- to late 1980s, the Medical Department, and the Army as a whole, engaged in substantial doctrinal overhauls and ended up with more emphasis on combat brigades and their support.⁵¹ The Army had AirLand Battle, the Army of Excellence, and Force XXI; the Army Medical Department had the Medical Systems Program Review, Health Service Support to AirLand Battle (HSSALB), Medical Force 2000 (MF2K), and Health Service Support Futures. The following were some of a wide variety of ideas that circulated:

- Eliminating the MASH and instead splitting the evacuation chain with patients who would return to duty going to CSHs, and those who would not being sent to evacuation hospitals⁵²
- Having only one kind of combat zone hospital, the CSH⁵³
- Overhauling the MASH to thirty beds to restore mobility⁵⁴
- Having a Mobile Surgical Platoon replace the MASH by augmenting a hospital or work at a brigade medical company⁵⁵
- Having MASHs and surgical squads (or surgical

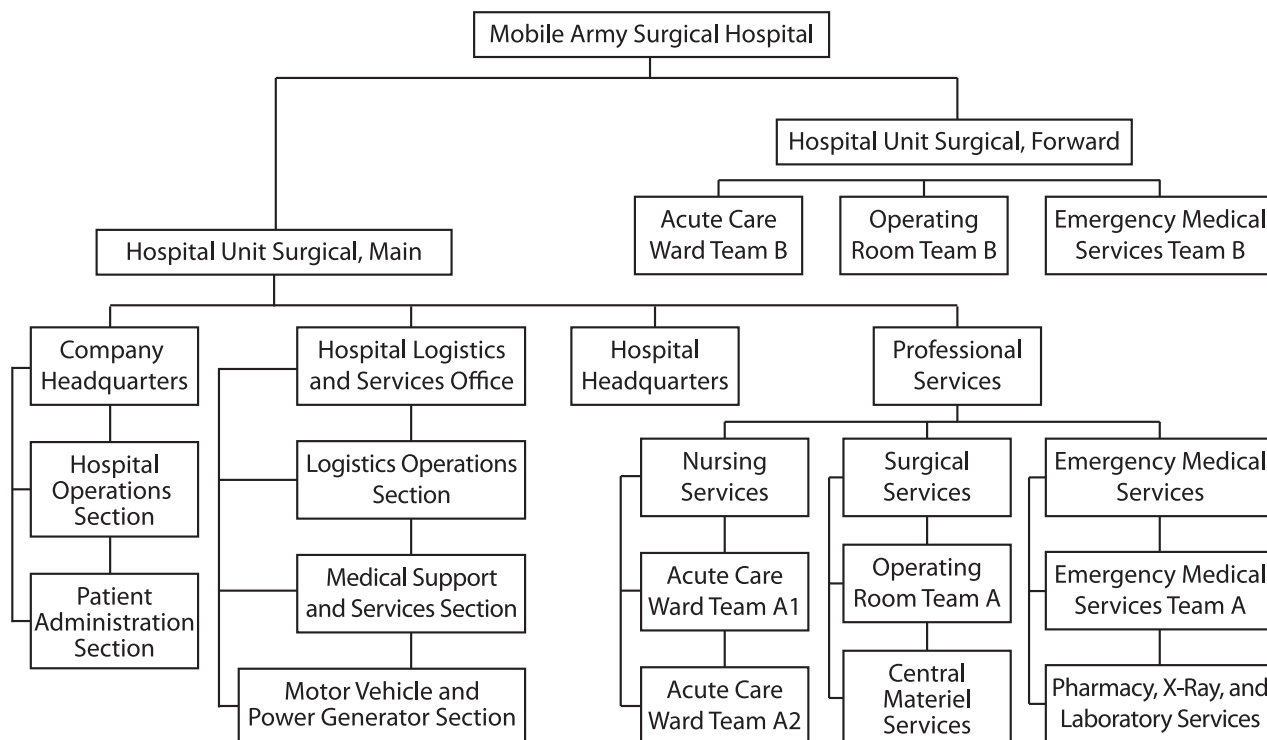
detachment, depending on terminology) at the brigade medical company⁵⁶

The Army Medical Department did not have full control over the decision. At one point, a proposed deletion of the MASH was briefed to the Army as a whole. "Retention of the MASH became an emotional issue with combat arms leaders and the recommendation was rejected and the AMEDD was directed to retain the MASH in the force structure."⁵⁷ This is the other side of the coin from Surgeon General Armstrong's 1952 comment about the MASH having "a remarkable psychological effect on the public."

By the late 1980s, the sixty-bed MASH still had well-documented mobility problems: a MASH could take three to seven days to establish, tear down, move to a new location, and set back up.⁵⁸ It was at least relatively mobile; estimates were that the CSH would take seventeen days to do the same thing. In large measure this was due to improving standards of medical care: World War II-era equipment had been light in comparison with Vietnam-era equipment, and the latest generation of Deployable Medical Systems was heavier still, albeit more sophisticated. Along with equipment were medical supplies, budgeted at



Dentists and patients in the 5th MASH at Dhahran, Saudi Arabia, 15 November 1990



This chart shows a proposed reorganization of the structure of the MASH under the MASH Force Development Test and Experimentation initiative, September 1992.

.35 pounds/man/day in the Second World War but ballooning to 1.55 pounds/man/day in the 1980s.⁵⁹

The last word in the 1980s was that there would be a thirty-bed MASH treating nontransportable patients near the division clearing station.⁶⁰ Patients would only be held for twenty-four to thirty-six hours, the MASH would not take medical patients and thus would not have full laboratory capabilities, and the MASH could send out a ten-bed Forward Surgical Team. However, the MASH would be the 'contingency' hospital, the first to deploy despite its limitations, and there would also be surgical squads working with brigades. The Army wanted to address problems the MASH had in providing forward resuscitative surgery, but there was no clear answer. Meanwhile, the Iraqi invasion of Kuwait would find the Army deploying the existing sixty-bed MASH to Saudi Arabia in Operation DESERT SHIELD.

SURGERY WITHOUT A HOSPITAL: THE FORWARD SURGICAL TEAM

If the American public demanded the highest levels of surgical support for its Army, then the Army had to find ways to make that possible, and it was increasingly hard to take a full hospital everywhere. An alternative had been germinating since Grenada: separate the surgical team and the hospital.⁶¹ During 1984–1985, some French equipment (from a parachute surgical unit) was tested for airborne operations, with the idea that a surgical team could fill the gap until a MASH arrived. The concept developed into a forward surgical team (FST), which had a patient-holding capability; it was really an operating team with a ward detached from a MASH, totaling twenty-five personnel, three trucks, and ten beds.⁶² The first chance for real-life testing was in Operation JUST CAUSE, the overthrow

of Panamanian "Maximum Leader" Manuel Antonio Noriega in December 1989. An FST was deployed and was overstaffed and overequipped but had excellent results. To avoid warning the Panamanian staff in the U.S. military hospitals in the Canal Zone and thus potentially warning the Panamanian military, U.S. military hospitals in Panama were not used. Instead, all patients were flown four hours from Panama to military hospitals in San Antonio, Texas. Despite the long flight after little treatment, the FST had done its work well, and no patient had an adverse reaction. In reviewing the FST, the Medical Department was exceptionally positive:

Recommendation: Reexamine conventional military medical doctrine to evaluate the costs and benefits of the decreased logistical requirements of far-forward surgical resuscitation and immediate far-back evacuation.⁶³

The next deployment, Operation DESERT SHIELD, would occur before much reflection was given to this subject but would point in the same

direction. With only one hundred hours of ground combat and few casualties, there were little data on how MASHs had performed, but the data were almost uniformly negative. Even the commander of probably the best-trained MASH in the Army (the 5th MASH from Fort Bragg that stayed highly ready to deploy with the 82d Airborne Division) wrote about how difficult it was to move a whole MASH, described three lighter options that he had used during DESERT SHIELD and DESERT STORM, and suggested ways to design a better MASH.⁶⁴ The large geographical area and fast-moving ground forces made mobility a necessity for medical support, and senior leaders adapted by creating FSTs from MASHs and a roughly equivalent element from CSHs as well.⁶⁵ In contrast to hospitals, FSTs met the need. One FST did open-heart surgery and kept up with the 24th Infantry Division as it made the “Hail Mary” sweep through the desert.⁶⁶

A “far-forward” surgery capability was identified as the AMEDD’s top priority for 1991.⁶⁷ In September 1991, there was an FST conference, and by early 1993 the Army Medical Department had digested the results and developed draft proposals for FSTs. A forward surgical team would have twenty personnel, two OR tables, and no beds—truly a team, not a hospital. It would be attached to combat brigades, would deploy with the brigade, work in the battle zone, do short surgeries, and only hold postoperative patients for short periods. It was also boldly incomplete: it would rely on the brigade’s medical company for key equipment such as X-ray machines and would also use the company’s minimal care ward for postoperative holding.⁶⁸ The FST was approved by the Army Medical Department in April and by the Army in September. On 13 September, development of the FST was far enough along that an official letter flatly stated, “I do not believe that the 30-Bed MASH is a viable organization for the Force Structure and should be replaced with the Forward Surgical Team.”⁶⁹ Related to this was the need to abolish MASHs (and the few surgical squads) so as to obtain the personnel for FSTs; within finite Medical Department resources,



Soldiers of the 5th MASH prepare to board C-130 Hercules aircraft bound for Haiti in support of Operation UPHOLD DEMOCRACY, September 1994.

something had to be lost for something else to be created.

Yet the MASH would linger until 2006. First, FSTs would take years to actually field. The initial briefings predicted that the first FST would be equipped and fielded in fiscal year (FY) 1995, but this soon slipped until FY 1997.⁷⁰ Second, the CSH was still immobile, so an alternative was necessary. Third, by 1992 the Cold War was clearly over, and the military was being downsized for the “peace

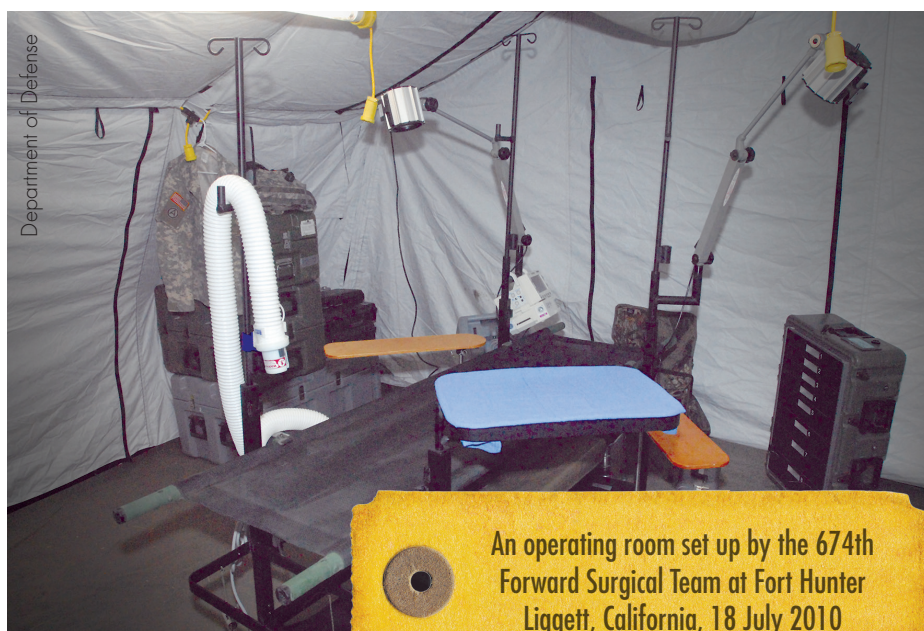
dividend.” European Command was absorbing especially large cuts because the Warsaw Pact had disintegrated, and U.S. Army, Europe, no longer had enough medical personnel to fill CSHs. U.S. Army, Europe, had penciled in two 30-bed MASHs, and, because it could not get more personnel, the MASH had to survive.⁷¹ Thus the acting deputy surgeon general declared to the deputy chief of staff for operations, “The 36-bed version of the [TOE] represents a fully mis-



Members of the 947th Forward Surgical Team (FST) treat an injured Afghanistan National Army soldier inside the Army Medical Center at Bagram Air Base, Afghanistan, 28 May 2002.



Surgical patients in the intensive care ward of the 212th MASH in Iraq, March 2003



An operating room set up by the 674th Forward Surgical Team at Fort Hunter Liggett, California, 18 July 2010

sion capable hospital”—even as the Medical Department was planning to move away from MASHs altogether.

In the late 1980s, attempts to recreate an actually mobile MASH continued. From 1988 to 1993, there was a prolonged effort to determine what medical equipment was necessary and then what manning levels and transportation requirements were needed to have an effective hospital.⁷² Then in April 1990, a draft

manual was circulated that used the thirty-bed MASH.⁷³ The MASH was designed with a Hospital Unit, Surgical, Forward (HUSF), that was much the same as the first-generation FST, with ten beds and two OR tables that could be split from the hospital but that could not sustain prolonged operations. When that MASH design was field-tested at Fort Bragg in September 1992, the HUSF proved effective, and several observers would

suggest slicing the existing MASHs into multiple HUSFs instead of trying to redesign the MASH.⁷⁴

The field tests also showed that more personnel were desirable, a few pieces of equipment were important (such as another air conditioner to keep the laboratory equipment cool enough to function), and more vehicles were vital. Of course, adding personnel and equipment back to the “mini-MASH” would risk the unit bogging down again. However, evolving standards of patient care led to more equipment being necessary, for instance more ventilators and monitors for the intensive-care beds.⁷⁵ (See Table 2 for an indication of how standards of care had changed.) Some reviewers were frankly against the MASH; some listed the problems and left it for others to decide if it could be fixed.⁷⁶ Ultimately, the Army approved the 36-bed MASH in February 1993 and began to make it work.⁷⁷

In addition to mobility problems, there were issues with receiving the right type of patients.⁷⁸ The resolution of this matter was straightforward in World Wars I and II, when there was a divisional triage point. It grew harder when helicopters could take an urgent-care patient back to the MASH and became even more difficult once divisional triage points disappeared. The MASH should receive patients needing only abdominal, orthopedic, chest, or neck surgery. That was implausible because urgent-care patients would be sent to the MASH whether it was optimal or not, and medical patients would find their way to a MASH because it was a hospital.

THE LAST HURRAH OF THE MASH

By 1992, Army plans foresaw only four MASHs: the 5th at Fort Bragg, the 212th and 502d in Germany, and the 43d in Korea. Only the 212th and 502d would be deployable, and the reasons for sending a MASH would change markedly.⁷⁹ Instead of deploying one surgical hospital per division, MASHs were sent because they were the most mobile and the smallest hospital available, which would be minimally disruptive to garrison health care and presumably cost the least.

The 212th MASH, still organized with sixty beds, went to Zagreb, Croatia, over the winter of 1992–1993. As the mission needed neither a mobile nor solely a surgical hospital, it was also augmented with various medical elements to the point that it was immobile. After six months, the 502d rotated in, taking over the equipment. By the mid-1990s, only the 212th remained.⁸⁰ It was more deployable for two reasons: its smaller size and it had its own clinical personnel. While the clinicians normally worked in a brick-and-mortar hospital, they did not need to be released by another commander to deploy. When the United States decided to send peacekeeping troops to Bosnia-Herzegovina in late 1995, the only two deployable hospitals in Europe were the 212th MASH and 67th CSH; the 212th was the only one mobile enough to go into Bosnia, and the 67th was used on the lines of communications. By 1999, when the United States sent troops to Albania and then to Macedonia to pressure the Serbs in Kosovo, the 212th was again the only strategically mobile hospital.⁸¹ A component (reinforced with other medical elements to form a task force) was sent, not as a surgical hospital, but because it was the only hospital that could be deployed quickly enough.

By the time President George W. Bush initiated Operation ENDURING FREEDOM on 7 October 2001, the Army was in the process of changing to only one kind of deployable hospital, the CSH. The 212th was available, and the commander half-expected to be called to support the operation.⁸² However, the war plan did not envision substantial U.S. units in Afghanistan, so FSTs could be used, with hospitals kept out of Afghanistan and patients moved out of country to those facilities.⁸³ Even after the Taliban government collapsed and the United States moved a hospital into Afghanistan, the 212th was not sent, which made personnel in the unit realize that if there was to be a second ground campaign in the Global War on Terrorism they might have a role.

The 212th MASH was deployed to Iraq to perform the doctrinal MASH mission, moving forward on the bat-

tlefield to provide surgical resuscitation to urgent-care patients. However, a full range of FSTs were also deployed, and a number of CSHs went as well.⁸⁴ The FSTs did what they were supposed to do and stayed forward with their brigades. The CSHs stayed in the rear, with some in Kuwait and some moving forward into Iraq either in part or in whole. However, because most of the fighting took place well north of the CSHs, they were not providing forward surgery and hospitalization. The MASH functioned as the middle ground, using its mobility to get forward and support the ground operations closing in on Baghdad and still having enough surgical and medical capability.⁸⁵ In fact, it organized as one medical ward, one surgical ward, and one ward for prisoners of war. As was predictable, most of the patients were not surgical ones. (One doctor commented that it should have been called a mobile Army emergency care and surgical hospital.⁸⁶) It had nonsurgeon physicians, including an internist, an obstetrician-gynecologist, a psychiatrist, a family practitioner, and an emergency medicine physician.⁸⁷ That was vital because less than one patient in seven was actually operated on, and the majority of the surgical patients were not at risk of dying. (Without forward surgery, they would likely have taken longer to recover or had a worse outcome, such as losing a leg, but they would not have died.)

The 212th treated 701 patients over twenty days, admitting 394; the peak for admissions was 48 patients for a 36-bed hospital. This indicates how important prompt evacuation was, and most patients were flown out twelve to forty-eight hours after admission. That was due in part to the lower acuity of the patients; they simply did not need much time to stabilize before they could fly. The other part was because of the Army Medical Department's efforts after DESERT STORM to improve evacuation and en-route care so that patients could more readily be flown back from forward surgery to hospitals.⁸⁸ This led to new equipment such as the Life Support for Trauma and Transport (LSTAT),

a litter with a wide range of physiological monitors and equipment, such as for oxygen and intravenous infusions.⁸⁹ As a result, the guidelines for transportability of patients had radically transformed since the late 1980s. (See Table 1.)

The last deployment by a MASH showed how much indeed had changed. In March 2005, an earthquake rocked northeastern Pakistan. The 212th MASH was in the process of converting to a CSH.⁹⁰ While the humanitarian mission did not call for much surgery, the 212th was the most mobile hospital in the Army and was sent. It was, however, reorganized, with fewer intensive-care-unit beds and more medium-acuity beds, and its mix of physicians was adjusted away from battlefield surgery, so it became a CSH in all but name. It performed mainly medical work and left its equipment for the Pakistani Army. On 16 October 2006, the last MASH was reorganized as a CSH.

CONCLUSION

As soon as forward resuscitative surgery was proved a viable way to save lives, the U.S. Army organized units to do so. After World War I, the units were standardized and retained, but, by World War II, they were outdated, and theater-specific solutions were improvised. This culminated in a specialist hospital, the MASH. That unit demonstrated its usefulness, but, because it was very specialized, it was problematic to use in wartime and to manage in peacetime. By the 1960s, the Army was already contemplating only one type of general-purpose deployable hospital, and the MASH showed that it was underequipped to handle the latest medical advances and was where tension played out between mobility and the improving standard of surgical care. The Army's desire for a general-purpose hospital, the growing sophistication and logistical burden of modern hospitals, and the reputation of the MASH would be the main factors affecting the MASH for the next thirty-five years. While the MASH got a reprieve in the 1990s due to problems finding a replacement for it, the Army continued to search for a better

mobile surgical alternative. As moving postoperative patients became safer and safer, the Army finally identified a solution: separating forward surgery and hospitalization, with helicopters bridging the gap. The Army has found innovative ways to provide life-saving surgery to the gravely wounded; the means change but the goal continues.



NOTES

1. This is covered in more detail in Sanders Marble, "Forward Surgery and Combat Hospitals: The Origins of the MASH," *Journal of the History of Medicine and Allied Sciences* (forthcoming).

2. Station List, Worldwide, Army Medical Department Units, 31 Jan 1950, U.S. Army Medical Department Center of History and Heritage (ACHH) files, Fort Sam Houston, Tex.

3. Annual Rpts, 1949, 4th and 5th MASHs, Entry 1001UD, box 188, Record Group (RG) 112, National Archives and Records Administration, Washington, D.C. (NADC). When the 124th MASH was formed, it was simply a re-designated station hospital that continued doing the same routine work except for exercises.

4. Annual Rpt, 1950, 2d MASH, Entry 1012, box 146, RG 112, NADC.

5. Annual Rpt, 1950, 1st MASH, Entry 1012, box 144, RG 112, NADC.

6. Annual Rpt, 1950, 3d MASH, Entry 1001UD, box 187, RG 112, NADC; "History—3d Surgical Hospital (Mobile Army), 1949–1965," *USARV [U.S. Army, Vietnam] Medical Newsletter* 1, no. 5 (June–July 1966): 16–19.

7. Field Manual (FM) 8–10, *Medical Service, Theater of Operations*, March 1951.

8. An overview of MASHs is in Scott Woodward, "The Story of the Mobile Army Surgical Hospital," *Military Medicine* 168, no. 7 (July 2003): 503–13. The 8066th Army Unit (Military History Detachment) prepared a thorough study, *The Surgical Hospital in Korea*, ACHH files. Albert E. Cowdrey's "MASH vs M*A*S*H," *Medical Heritage* 1, no. 1 (January–February 1985): 4–11, adds little. The reports of Eighth Army's Medical Section, in Entry 1001UD, boxes 196–97, RG 112, NACP, are valuable.

9. Annual Rpt, 1950, 8055th MASH, box 4717, RG 407, NACP.

10. Two evacuation hospitals were in Korea at the end of 1950. More were sent later.

11. Benjamin A. Strickland Jr. and James A. Rafferty, "Effects of Air Transportation on Clinical Conditions," *Journal of the American Medical Association* 145, no. 3 (January 1951): 129–33.

12. On the history of helicopter evacuation, see Peter Dorland and James Nanney, *DUST OFF: Army Aeromedical Evacuation in Vietnam* (Washington, D.C.: U.S. Army Center of Military History, 1982), and Darrel Whitcomb, *Call Sign—DUSTOFF: A History of U.S. Army Aeromedical Evacuation from Conception to Hurricane Katrina* (Fort Detrick, Md.: Borden Institute for Office of The Surgeon General, 2011). Early helicopters were employed in World War II, but substantial use did not occur until the Korean War.

13. Lt. Walter Marsh, "Army Surgical Hospitals at Work in Korea," *Army Information Digest* 8, no. 8 (August 1953): 52 and see also 48–51. In February 1953, Army terminology switched to Surgical Hospital (Mobile Army), and Marsh used the official, rather than the common, term.

14. George Barrett, "Helicopter Unit Saved 200 in Korea; Special Detachment Rescues Three Wounded Marines on One Hop to Hoengsong," *New York Times*, 26 Feb 1951.

15. H.H.T., "Wartime Romance Flourishes in Korea," *New York Times*, 28 May 1953.

16. Surgeon General's Early Morning Conferences, 24 Oct 1952, Entry 1019, RG 112, NACP. "Miracle in a Korean Hospital," *New York Times*, 25 Feb 1951, has an example of what the public was being told about MASHs.

17. Tables of Organization and Equipment (TOEs) 8–581, Evacuation Hospital, 30 Aug 1950, and 8–571A, Mobile Army Surgical Hospital, 15 Oct 1952.

18. Airborne Mobile Army Surgical Hospital, Army Airborne Center, Fort Bragg, N.C., 20 Apr 1951, ACHH files.

19. On the 43d MASH in Korea, see Annual Rpt, 1956, 43d MASH, Entry 1001UD, box 187, RG 112, NADC. See also comments on commanding the 44th MASH during 1959–1960 in Interv, John Bogart with Lt Gen Charles Pixley, 15 Apr 1985, Senior Officer Oral History Program, pp. 60–65, U.S. Army Military History Institute (MHI), Carlisle Barracks, Pa.

20. For some idea of peacetime activities, see "History—3d Surgical Hospital (Mobile Army), 1949–1965," pp. 16–19.

21. TOE 8–571R, Mobile Army Surgical Hospital, 18 Mar 1955, ACHH files.

22. Seventh Army Training Pamphlet 8–1, Medical Service for the Field Army in Atomic

Warfare, 15 May 1957; Army Medical Service Combat Development Group CDOG (Combat Development Objective Guide), Project 56–6, Aeromedical Evacuation, Dec 1959. Both at MHI.

23. Raymond Duke, "Problems of Modern Combat Medicine," *Medical Bulletin of the US Army, Europe* 18, no. 8 (August 1961): 156–58.

24. This discussion is based on two related documents: U.S. Army Combat Developments Command Study 57–6, Universal Hospital Organizational Base, Feb 1966, and U.S. Army Combat Developments Command Final Study, Combat Support Hospital TOE 8–123T, Sep 1967. Both at MHI. These studies were started in 1957 and took almost a decade to complete. While the Vietnam War doubtless caused some delay, they do not seem to have been high-priority projects. Lt. Col. Haral Bigham's staff study, Greater Flexibility for Combat Zone Hospitals, Army War College Research Element, 3 March 1969, looked at other ways, including modular elements, to augment or build hospitals.

25. U.S. Army Combat Developments Command Study 57–6, Universal Hospital Organizational Base, Feb 1966. The "stop gap" surgical capability consisted of ten men: two surgeons, a nurse anesthetist, and seven enlisted in support.

26. Ibid.

27. See John B. Wilson, *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, D.C.: U.S. Army Center of Military History, 1998), for more on both Pentomic and ROAD divisions.

28. TOE 8–571E, Mobile Army Surgical Hospital, 29 Apr 1964, ACHH files.

29. Spurgeon Neel, *Medical Support of the U.S. Army in Vietnam, 1965–1970* (Washington, D.C.: Department of the Army, 1991), is the only overall history of Army medicine in Vietnam to date.

30. Memo, 44th Medical Bde, 4 Aug 1968, sub: Evaluation of Hospital Capabilities, Entry 1015, box 27, RG 112, NACP.

31. Darrel McPherson, *The Role of the Army Medical Service in the Dominican Republic Crisis of 1965* (Washington, D.C.: Office of The Surgeon General, 1966), app. H.

32. Quarterly Operational Report-Lessons Learned (ORLLs), Army Combat Developments Command, 1967 and 1968, at MHI; Memo, The Surgeon General (TSG) to Assistant Chief of Staff for Force Development (ACSFOR), sub: TOE 8–571E, Mobile Army Surgical Hospital, 23 Jun 1967, Entry 1015, box 119, RG 112, NACP.

33. ORLL, Army Combat Developments Command 17 May 1967, MHI. In 1965–1966, issues in the medical supply chain were another problem. See Neel, *Medical Support of the U.S. Army in Vietnam*, pp. 82–83.

34. TOEs 8–571E, Mobile Army Surgical Hospital, 29 Apr 1964; 8–571G, Mobile Army Surgical Hospital, 15 Feb 1968, ACHH files. There is little written on the history of the MUST program.

35. Army Medical Service Activities Rpt, Calendar Year 1966, USARV Surgeon, box 2, RG 472, NACP.

36. ORLL 2–68, Medical Lessons Learned, MHI.

37. For patient evacuation and stays, see Maj. Henry Schmitt Jr., Lewis Patterson, and Raymond Armstrong, “Reoperative Surgery of Abdominal War Wounds,” *Annals of Surgery* 165 (February 1967): 173–85; Kenneth Pletcher, “Aeromedical Evacuation in Southeast Asia,” *Air University Review* 19 (March–April 1968): 16–29; Ellis Jones, Capt. Albert Peters, and Capt. Robert Gasior, “Early Management of Battle Casualties in Vietnam,” *Archives of Surgery* 97, no. 1 (July 1968): 1–15; Lt Col Robert Mosebar, Should the TO&E General Hospital Be Replaced By Air Evacuation? (Student essay, Army War College, 27 May 1968); Leonard Heaton et al., “Military Surgical Practices of the United States Army in Viet Nam,” *Current Problems in Surgery* (November 1966): 1–59.

38. Army Combat Developments Command, Final Draft Study, Medical Service—75, vol. 5, MHI.

39. FM 8–10, *Medical Support, Theater of Operations*, April 1970.

40. The background and results are in Final Report, Field Evaluation Combat Support Hospital, Sep 1971, document collection, Stimson Library, Fort Sam Houston, Tex. Two Army magazine articles on the tests are “Combat Support Hospital . . . Total Treatment in Military Medicine,” *Arrowhead* 30 (August 1971) and “A Decade of Progress—Medical,” *Arrowhead* 30 (June 1972). It seems reasonable to speculate that the strains of supporting the Vietnam War delayed the field test and even the decision on what equipment the unit should have.

41. *Annual Report of The Surgeon General, 1976–80* (Washington, D.C.: Office of The Surgeon General, 1988), pp. 107–12, covers the MASH and CSH developments. See also TOEs 8–063T, Surgical Hospital (Mobile Army), 16 Mar 1979, and 8–113H, Combat Support Hospital, undated draft. The tactical considerations were from the MUST equipment’s jet turbine.

42. TOE 8–571G, chg 18, Mobile Army Surgical Hospital, 1 Sep 1977. In TOE 8–063T (a renumbered MASH TOE), canvas ward tents were accepted to save space and weight.

43. TOE 8–113H, Combat Support Hospital, 1973, ACHH files.

44. This background information is, unusually, included in the test TOE 8–063T. See also TCATA Test Report FT 431, Mobile Army Surgical Hospital TTOE 8–063T, Nov 1979, Fort Hood, Tex., ch. 1. Available through <http://www.dtic.mil>.

45. Info Paper, Mobile Army Surgical Hospital Integration Into the Force, n.d., 1982 DAHSUM support files, ACHH files.

46. Lt. Col. John Harmon and Col. Craig Llewellyn, “Lessons of the Falklands,” *Medical Bulletin of the US Army, Europe* 41, no. 2 (February 1984): 11–13.

47. The literature on medical support in Grenada is sparse. Lt. Col. David Nolan, “Airborne Tactical Medical Support in Grenada,” *Military Medicine* 155, no. 3 (March 1990): 104–11; Lt Col Mary Fry and Cdr Robert Kayler, Health Service Support in Joint Operations—Operation ‘Urgent Fury,’ Executive Research Project 1988 S25, Industrial College of the Armed Forces; Maj. Thomas Broyles, “A Comparative Analysis of the Medical Support in the Combat Operations in the Falklands Campaign and the Grenada Expedition” (Master of Military Arts and Sciences thesis, Fort Leavenworth, Kans., 1987); Edgar F. Raines Jr., *The Rucksack War: U.S. Army Operational Logistics in Grenada, 1983* (Washington, D.C.: U.S. Army Center of Military History, 2010).

48. This may have been delayed because many nurses were female. Interim After Action Report (AAR), URGENT FURY, 23 Apr 1984, ACHH files.

49. Ibid.

50. DF, Medical Squad, Surgical, TOE 08507LA00 and TOE 08507LB00, 5 Nov 1985, ACHH files. Apparently, this unit was also known as Forward Area Surgical Team. See “FAST Makes Life and Death Difference,” *Health Services Command Mercury* (February 1991): 6.

51. See, inter alia, John Romjue’s body of work, including *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973–1982* (Fort Monroe, Va.: Historical Office, U.S. Army Training and Doctrine Command [TRADOC], 1984); *The Army of Excellence: The Development of the 1980s Army* (Fort Monroe, Va.: Historical Office, TRADOC, 1993); *American Army Doctrine for the Post–Cold War* (Fort Monroe, Va.: Historical Office, TRADOC, 1996).

52. TRADOC Pamphlet 525–50, U.S. Army Operational Concept for Health Service Support AirLand Battle, 11 Apr 1986.

53. Info Paper, Health Service Support to AirLand Battle, 21 Apr 1987, ACHH files. I am grateful to the staff members of the Directorate of Combat and Doctrine Development, U.S. Army Medical Department Center, for copies of their working files on the MASH and forward surgical team (FST).

54. Draft TOEs [c. mid-1987], ACHH files. Halving the number of beds was due to, first, casualty modeling that showed a division would only generate fifteen patients per day that needed urgent surgery, and second, an expectation that helicopters could move postoperative patients after twenty-four hours. Maj. David Pattillo “Portable surgical hospitals in the North Burma Campaign: lessons for providing forward surgical support to nonlinear operations in Airland operations” (Master of Military Arts and Sciences thesis, Fort Leavenworth, Kans., 1993), p. 131n12.

55. Briefing Slides, Health Service Support to AirLand Battle, n.d. [c. 1987], ACHH files.

56. Briefing Slides, Medical Force 2000 and Synchronization of the Health Service Support Effort, n.d. [c.1988], ACHH files.

57. Pattillo, “Portable surgical hospitals in the North Burma Campaign,” p. 131n12, cites interviews for this information.

58. Maj. James Ross, “Study of Vehicle Transportation Requirements for Hospitals at the Corps Level” (Master’s thesis, Air Force Institute of Technology, September 1990), especially pp. 36, 44–46.

59. White Paper (Final Draft), Academy of the Health Sciences, Health Service Support Futures, Mar 1989, ACHH files. The statistics include all medical supplies, including fluids and cylinder gases, not just hospital supplies. However, expected technology advances for portable oxygen concentrators and advanced fluids would still budget medical supplies at one pound/man/day.

60. This is drawn from White Paper (Final Draft), Academy of the Health Sciences, Health Service Support Futures, Mar 1989. The Academy of Health Sciences seems not to have noticed that there was no longer a division clearing station.

61. The British and Israelis were using forward surgical teams by the early 1980s, but their experiences do not seem to have affected the decisions of the U.S. Army. Lt. Col. M. A. Mel-som, Maj. M. F. Farrar, and Maj. R. C. Volkers, “Battle Casualties,” *Annals of the Royal College*

of *Surgeons of England* 56 (1975): 289–303; D. S. Jackson, C. G. Batty, J. M. Ryan, W. S. P. McGregor, “Army Field Surgical Experience,” *Annals of the Royal College of Surgeons of England* 65 (1983): 281–85; Oded Gasko, “Surgery in the Field During the Lebanon War, 1982: Doctrine, Experience and Prospects for Future Changes,” *Israel Journal of Medical Science* 20 (1984): 350–54. Momentum may have been supplied by a special operations surgical team that deployed five days before the element of the 5th MASH. Raines, *The Rucksack War*, pp. 286–87, 403–05.

62. Pattillo, “Portable surgical hospitals in the North Burma Campaign,” pp. 77–78.

63. Lessons Learned Rpt, Operation JUST CAUSE, U.S. Army Academy of Health Sciences, 1 Jun 1990, ACHH files.

64. Col. Kenneth Steinweg, “Mobile Surgical Hospital Design: Lessons from 5th MASH Surgical Packages for Operations Desert Shield/Desert Storm,” *Military Medicine* 158, no. 11 (November 1993): 733–39. One National Guard MASH moved so little during the operation that it even tried to continue training surgical residents. Lt. Col. Richard Hoefer et al., “Training Resident Surgeons in Combat: An Experience During the Persian Gulf War,” *Military Medicine* 157, no. 12 (December 1992): 657–59.

65. Col John Bull, Medical Care for Echelons Above Division—Is Medical Force 2000 Adequate to Need? U.S. Army War College Study Project, 1992, MHI; Issues from Professional A/A [After Action] Reviews, Operation DESERT STORM, Phoenix, Ariz., June–July 1991, ACHH files. A “light surgical unit deployable” was created ad hoc for the 25th Infantry Division in Hawaii but never deployed. “New Unit Gives 25th Division Deployable Surgery Capability,” *Health Services Command Mercury* (April 1990): 12.

66. Heike Hasenauer, “Airborne Medics: For Forward Surgical Team Soldiers the Job Is Clear: Do What’s Necessary to Keep Casualties Alive Until They Arrive at a Rear-Area Hospital,” *Soldiers* 49, no. 10 (October 1994): 23–24.

67. Draft Concept for Health Service Support to Army Operations: Forward Surgical Team, 16 Jun 1993; Draft Surgical Company URS (Unit Reference Sheet), 16 Jun 1993. Both in ACHH files.

68. Memo, 9 Dec 1992, sub: Draft Concept Forward Surgical Team, ACHH files. This was not hearkening back to the auxiliary surgical group’s teams; those were personnel with mini-

mal equipment and needed essentials such as an operating room.

69. Unit Reference Sheet, Surgical Company/Forward Surgical Team, 5 Oct 1993; Memo, Commanding General (CG), Army Medical Department (AMEDD) Center and School, for TSG, 13 Sep 1993, ACHH files.

70. Briefing, Future Restructuring Initiatives, n.d. [c. 1992]; Briefing, with notes, Forward Surgical Team Concept and Design Update, 30 Jun 1994. Both in ACHH files.

71. Memo, 12 Jan 1993, sub: Modified Table of Organization and Equipment Documentation of the MASH; Decision Matrix, 30-bed MASH, n.d. [c. Jan 1993]; Notes of Telecon, author with Lt Col (Ret.) Larry Wild, 12 Oct 2006. All in ACHH files. I am grateful to Larry Wild for providing useful documents on the later years of the MASH.

72. Info Paper, 30 Bed MASH Medical Material Sets, 1 Nov 1992; Info Paper, Early Feedback on Test Results from the Operational Evaluation of the Medical Force 2000 MASH, 19 Nov 1992. Both in ACHH files.

73. Preliminary Draft FM 8–10–13, Employment of the Mobile Army Surgical Hospital, April 1990, ACHH files.

74. Test Rpt, Force Development Testing and Experimentation, Mobile Army Surgical Hospital, Feb 1993 (hereafter cited as Test Rpt); Force Development Evaluation Rpt (FDER) on the Force Development Test and Experimentation of the Medical Force 2000 Mobile Army Surgical Hospital, 15 Jun 1993 (hereafter cited as FDER). Both are available at <http://www.dtic.mil>.

75. FDER, app. G, an. 3.

76. Test Rpt, app. D; FDER, apps. F, G.

77. More beds could be managed using the same number of personnel because there were enough nurses; other sections were shorthanded. Memo, 5 Feb 1993, sub: Modified Table of Organization and Equipment Documentation of the MASH, ACHH files.

78. Test Rpt, app. D.

79. This section mainly draws on the author’s research for *Skilled and Resolute: A History of the 12th Evacuation Hospital and 212th MASH, 1917–2006* (Borden Institute for the Office of The Surgeon General, forthcoming).

80. Memo, 23 Jun 1995, sub: History of the AMEDD Force Structure in Europe, 1992–95, ACHH files.

81. Col. Alan Moloff and Lt. Col. Suzan Denry, “The Contingency Medical Force: Chronic Challenge, New Solution,” *Military Medicine* 166, no. 3 (March 2001): 199–203.

82. Interv, Lt Col Judith Robinson with Lt Col Kenneth Canestrini, 24 May 2003, OIF–380, ACHH files.

83. Interv, Sanders Marble with Col Ronald Maul, 17 Nov 2005, OIF–397, ACHH files, discusses some early Operation ENDURING FREEDOM medical planning. E-mails, Maul to author, 2009.

84. There is little material published about medical unit operations (as opposed to clinical results) in Operation IRAQI FREEDOM. Maj. Alec Beekley, “United States Military Surgical Response to Modern Large-Scale Conflicts: The Ongoing Evolution of a Trauma System,” *Surgical Clinics of North America* 86 (2006): 689–709, has a bit. Gregory Fontenot et al., *On Point: The United States Army in Operation IRAQI FREEDOM* (Washington, D.C.: Office of the Chief of Staff, U.S. Army, 2004), has a complete order of battle.

85. Comments on the 212th during Operation IRAQI FREEDOM are rooted in several dozen oral histories plus briefings and other unit records on file at the Office of Medical History; Lt. Col. John Cho et al., “Operation Iraqi Freedom: Surgical Experience of the 212th Mobile Army Surgical Hospital,” *Military Medicine* 170, no. 4 (April 2005): 268–72, contains clinical data.

86. Interv, Maj Lewis Barger III with Maj David Wolken, 23 Jul 2003, OIF–023, ACHH files.

87. Cho et al., “Operation Iraqi Freedom: Surgical Experience of the 212th Mobile Army Surgical Hospital.”

88. Brig. Gen. Russ Zajtchuk and General Gordon Sullivan, “Battlefield Trauma Care: Focus on Advanced Technology,” *Military Medicine* 160, no. 1 (January 1995): 1–7; Lt. Gen. Paul Carlton and Col. Donald Jenkins, “The Mobile Patient,” *Critical Care Medicine* 36, no. 7 (July 2008): S255–S257.

89. Capts. Timothy Hudson and Sean Grimes, “Life Support for Trauma and Transport: First Field Use,” *Military Medicine* 167, no. 9 (September 2002): 705–10.

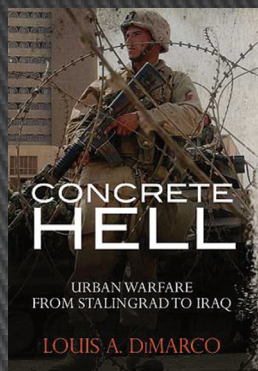
90. Comments on the 212th during Operation LIFELINE are rooted in eighteen oral histories plus voluminous briefings and other unit records filed at the ACHH, and Capts. J. P. Fernald and E. A. Clawson, “The Mobile Army Surgical Hospital Humanitarian Assistance Mission in Pakistan: The Primary Care Experience,” *Military Medicine* 172, no. 5 (May 2005): 471–77, contains clinical data.

Coming Soon...



BOOKREVIEWS

Concrete Hell: Urban Warfare from Stalingrad to Iraq



By Louis A. DiMarco
Osprey, 2012
Pp. x, 232. \$25.95

Review by Michael A. Boden

In *Concrete Hell: Urban Warfare from Stalingrad to Iraq*, Louis A. DiMarco examines the course of urban combat since World War II to the present in order to offer a broader understanding of warfare in the twenty-first century. *Concrete Hell* is a study of both the continuity and inconsistency of urban fighting over the past three-quarters of a century. The author, justifiably, perceives the increasing importance of urban sectors as centers of gravity for competing forces, particularly since the advent of World War II, as industrialization and population growth have generated vastly larger urban areas with their integral strategic endeavors. In this amplified strategic context, cities, to DiMarco, provide “a political value that is of much greater strategic importance than the purely material military advantage” (p. 9) to the opposing sides of the conflict, and he foresees the study of urban warfare as in-

creasingly relevant to understanding future struggles in their entirety. The appreciation of recent urban operations becomes critical to enhancing the overall strategic success of any military undertaking.

To achieve his goal, DiMarco examines nine important urban fights of the recent past, incorporating a broad assortment of battles, campaigns, and asymmetric military operations. Among the events studied are some “standard” city fights that have been scrutinized in numerous other forums, such as Stalingrad and Grozny. Additionally, though, the author covers a second category of examples, providing another perspective on what it means to fight in a city. Cases of such nontraditional urban conflicts include British operations in Northern Ireland from 1969 to 2007 and the 2002 Israeli operation against the Palestinian refugee camp at Jenin. Other struggles analyzed are the fight for Aachen in World War II, the Inch’on landings and capture of Seoul in 1950, the battle for Hue City in Vietnam, and the French colonial campaign in Algiers. His concluding example looks at the very recent actions of the U.S. Army in Ramadi, 2006–2007.

Such a wide disparity of samples strengthens the overall utility of the work and directly contributes to the distinctive flow of DiMarco’s research and analysis. Notably, the author begins with the assumption that there are certain conditions and considerations that have been present in all the situations he examines. Some of these factors include the imperative of having an “all arms” force to conduct the battle, the importance of the human dimension to the fight, and the significance of operations outside the city. But the author couches each of his particular illustrations with the added assertion

that there is no single, definitive trajectory for an urban battle. Any consistent attributes of urban warfare will be shaped and balanced depending on the specific context of the battle at hand, to include consideration of political, social, economic, and cultural conditions of the fight.

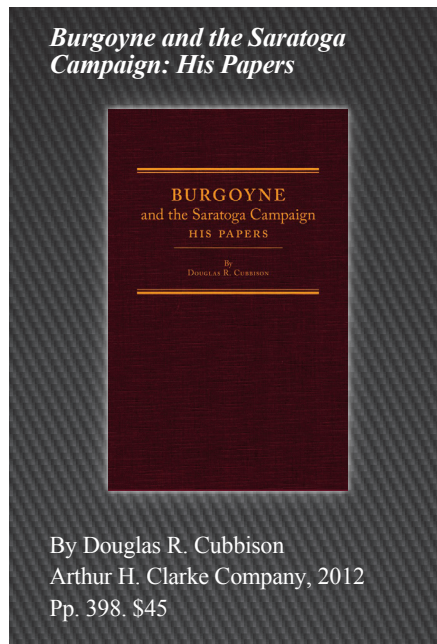
Another noteworthy contribution in *Concrete Hell* is the addition of the final two chapters on the battles in Jenin and Ramadi. While there is no shortage of analysis conducted or books written on the broader topics of the Arab-Israeli conflict or Operation IRAQI FREEDOM, most current studies focus on these events as distinct entities. DiMarco places these two operations in the spectrum of urban warfare over the course of numerous decades. By doing so, the reader is able to identify both the similarities and the differences of these fights to those that have occurred previously, adding a unique perspective of continuity and broadening the study of fighting in an urban environment. Not only can one see the influences of previous generations of city fighting, but also the potential for future developments.

In general, DiMarco’s study achieves success in all of the supplemental considerations for an undertaking of this nature. His analysis is well-supported by quality maps, the chapters are coherently organized, with synopses followed by analysis for each battle, and the conclusions are built on logical and sequential foundations. As a structure of narrative and evaluation, this model works well. This process does, however, tend to ensure that each battle he examines, with the exception of the first case-study, Stalingrad, is told from the perspective of the aggressor, the force attacking the city. Certainly, the author includes a summary of how the defenders organized their ac-

tions, but DiMarco evaluates specific challenges almost entirely from the viewpoint of the attacker. The author is able, therefore, to provide a consistent and comprehensive analysis of armies in the search to defeat an enemy in urban terrain but does not present a comparably detailed examination of how a military force defends that same objective.

In conclusion, at the beginning of the second decade of the twenty-first century, DiMarco posits that the progression of urban warfare has led to this point in time where the dominant form of urban combat is a “hybrid type . . . somewhere between intense conventional combat and low-intensity internal security operations” (p. 212). Based on his research and analysis, this assessment is quite accurate, and his evaluation of the previous half-century certainly supports his visualization of the modern state of urban warfare. What DiMarco presents in *Concrete Hell* is a comprehensive and insightful analysis of the development of urban combat over the past seven decades and one that offers useful observations into not only the study of past urban warfare, but also the possibilities of future challenges when fighting a determined enemy. His work will appeal to historians with an interest in recent conflict as well as to those seeking to gain an understanding of the modern battlefield and what that environment will look like in the years to come.

Dr. Michael A. Boden, a retired Army officer, is an associate dean of academic affairs at Dutchess Community College in Poughkeepsie, New York. Previously, he taught history at the United States Military Academy at West Point and Hofstra University. He is currently editing, for publication, his dissertation on Friedrich Engels and nineteenth-century socialist military thought.



Review by John R. Maass

Douglas R. Cubbison’s recent volume on the pivotal Saratoga Campaign of 1777 consists of two parts. In the largest section, the author provides students of the American War for Independence with a valuable collection of document transcripts related to Lt. Gen. John Burgoyne’s operations in New York, in which the general intended to march his army from Canada to Albany and to link up with British forces marching north from New York City. Many of these papers “provide hitherto unpublished accounts of the campaign, particularly as regards its planning, preparations, and logistics” (p. 20). Combined with four excellent maps of the theater and the battles of the Saratoga Campaign, the documents offer fascinating details on many aspects of Burgoyne’s activities, particularly the difficulties he encountered securing adequate provisions and transportation for his army. Moreover, this account presents for the first time “a complete picture from Burgoyne’s perspective of the surrender negotiations” (pp. 139–40) with his American opponent, Maj. Gen. Horatio Gates, including four previously unpublished letters. Having these papers compiled into one volume makes Cubbison’s book a valuable and accessible reference work.

The other part of *Burgoyne and the Saratoga Campaign* is “Lieutenant General John Burgoyne and his Lead-

ership in the Saratoga Campaign,” an odd, 121-page essay by Cubbison. It is more than an analysis of Burgoyne’s leadership in the 1777 operations that led to the surrender of his army, but it fails as a traditional campaign narrative, which appears to be Cubbison’s intention. The author describes the campaign in detail from Burgoyne’s perspective, concluding that the British general had good working relationships with Sir Guy Carleton, the British commander and governor in Canada, and Lt. Gen. Sir Henry Clinton in New York. Burgoyne’s goal was to split New England from the southern colonies by seizing Albany and then coordinate with Clinton or the British commander in chief in North America, Sir William Howe, who planned a separate campaign against Philadelphia. Cubbison writes that before Burgoyne left Canada, he was aware that Howe would operate in Pennsylvania and thus could not support him. Burgoyne “had no choice but to proceed on his expedition” (p. 42), regardless of Howe’s plans and actions. The author contends that Burgoyne’s advance was a successful one, despite logistical difficulties and the lack of provisions. His army’s progress was impeded by terrain, weather, and the enemy’s delaying tactics, although Cubbison contends that American efforts to slow the British southward march have been overestimated by previous historians. He also argues that Burgoyne brought an appropriate train of artillery with his column, not an excessive one, as previous scholars have suggested.

After taking Fort Ticonderoga in July, Burgoyne’s men quickly reached Skenesboro on the southern point of Lake Champlain. Here Burgoyne halted for several weeks due to continuing shortages of food, forage, and carts. His army then crossed the Hudson River and met its first setback at the Battle of Freeman’s Farm (19 September), where Gates’ American army prevented Burgoyne’s progress. Here, Burgoyne was “entirely halted” (p. 115) and lost the initiative, his “freedom of action severely constrained” (p. 124). After a failed offensive on 7 October, the British general decided to retreat and lacked “determination and resolution” (p. 137). Cubbison provides an excellent

account of the surrender negotiations before ending his narrative abruptly.

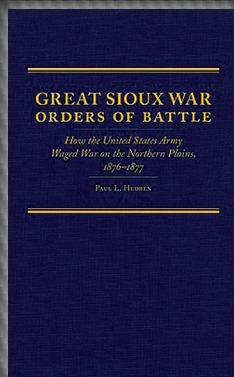
Unfortunately, the essay includes far too many mundane details about supplies, army rations, transportation, winter quarters, and even the price of Madeira for an essay supposedly about Burgoyne's leadership. Curiously, the author writes little about the American forces opposing Burgoyne at Saratoga, and they are not even mentioned until the Battle of Freeman's Farm. While Cubbison is well within his rights to focus on Burgoyne's campaign, leaving out an account of the American forces creates an unsatisfying narrative, too much of which he writes in a passive voice. He also fails to set up the story of Freeman's Farm for the reader, does not discuss Burgoyne's plans for the action, and offers scant details of Gates' response to the British approach.

Finally, the history of British operations in America in 1777 is one of controversy, conflicts among key leaders, and missed opportunities. Poor communications, personal animosities, and a lack of coordination between Burgoyne, Carleton, Clinton, Howe, and Southern Department Secretary Lord George Germain combined to contribute to Burgoyne's surrender and make for one of the war's most fascinating stories. Cubbison virtually ignores these issues, especially the misunderstanding between Burgoyne, Germain, and Howe over the latter's responsibility to move to Albany from New York. The absence of a discussion of this key crisis and the confusion among King George III's top commanders in America is a significant flaw in the author's essay on leadership.

Dr. John R. Maass is a historian at the U.S. Army Center of Military History. He received a bachelor's degree in history from Washington and Lee University and a Ph.D. in early U.S. history from the Ohio State University. He is the author of the first pamphlet in the Center of Military History's Campaigns of the War of 1812 series, titled *Defending a New Nation, 1783–1811* (Washington, D.C., 2013).



Great Sioux War Orders of Battle: How the United States Army Waged War on the Northern Plains, 1876–1877



By Paul L. Hedren
Arthur H. Clark Company, 2011
Pp. 240. \$39.95

Review by Gary L. Cheatham

Great Sioux War Orders of Battle: How the United States Army Waged War on the Northern Plains, 1876–1877, by Paul L. Hedren, is volume 31 in the Arthur H. Clark Company's Frontier Military Series of monographs. This series bears a University of Oklahoma Press imprint and focuses on the history and exploration of the American West. Hedren, who has authored more than thirty scholarly books and articles on the subject of the American frontier, is well-qualified to write about the conflict between the U.S. Army and Northern Plains Indians in the 1870s.

The book begins by addressing why "some students of the Great Sioux War" incorrectly "postulate that the U.S. Army was not at all well suited for this extraordinary conflict" (p. 9). On the contrary, Hedren argues that the Army was well-led, adequately equipped, and suitably trained for its mission. Proof of the Army's preparedness is seen not in defeat, such as at the Battle of the Little Bighorn, but in the fact that the Army ultimately won the Great Sioux War. To understand how the Army won the war, the author contends that the focus needs to be on the entire conflict, not on any single aspect such as George Armstrong

Custer's defeat at the Little Bighorn. According to Hedren, the "historical record" clearly shows that the Army's overall condition and preparedness was "appropriate for the American West in 1876" (pp. 9–10). This is seen in the Army's "order of battle," which the author defines as including the "command structure, strength, and disposition of personnel, equipment, and units" (p. 10). Furthermore, to fully comprehend the Army's conduct in single actions, such as "at Powder River, Rosebud Creek, and especially Little Big Horn," readers need to focus on the entire two-year campaign in the context of the study of the Army's organization, operations, and order of battle (p. 9).

Great Sioux War Orders of Battle is divided into three parts. Part 1 examines the preparedness of the Army to conduct operations on the Plains. This includes assessing the Army's training, materiel, cadre of veteran Civil War officers, and unconventional warfare readiness. The author's discussion concerning changes in strategy and tactics in the years following the Civil War is especially convincing in arguing that the Army, although significantly reduced in size after the Civil War, remained a highly trained and professional fighting force. Overall, Hedren successfully dispels any idea that the Army was ill-prepared for the Great Sioux War.

Part 2 probes the Great Sioux War by studying the twenty-eight deployments that made up the conflict from early 1876 to the late summer of 1877. The author discusses each deployment in detail, including its location and time frame, and a textual description of its activities and movements. The description of each deployment also cites the organization and officers involved, all of which help the reader follow the sequence of events in relation to the key components. This may be the most valuable section of the book in that Hedren uniquely dissects each deployment, which sheds new light on the campaign. The author's attention to the specifics

of each deployment is particularly impressive. However, the interconnectivity of some of the deployments is not easily followed in this section. It would have been helpful if the book included a map showing the relationships of the deployments to each other.

Part 3, titled “What Went Right and Wrong?: Reflection and Analysis,” not only considers the Army’s ultimate victory, but provides a thorough analysis of the factors influencing its disastrous loss at the Little Bighorn and poor performance at Powder River. Although Hedren takes a fresh approach to analyzing the Battle of the Little Bighorn, not surprisingly he concludes that the Army’s defeat in the battle was caused largely by two factors: the “phenomenal efforts of tribesmen allied for cultural and societal survival” (p. 163), and a “fragmented” command (p. 176). The author breaks ranks with some historians in rallying to the defense of Custer’s command decisions immediately preceding the Battle of the Little Bighorn, referring to them as “all logical” (p. 175). According to Hedren, “Custer and his company commanders never controlled their fate” at Little Bighorn because their decisions were “driven by the actions of the Sioux and Northern Cheyennes” who overwhelmed the defenders (p. 176).

The book contains seven appendixes and a map of the Northern Plains during the Great Sioux War, which shows some of the locations discussed in the book. One appendix lists the places of duty in the West and corresponding dates of service of the participating U.S. Army regiments and companies. Other appendixes provide critical information on individual staff, field, company, and medical officers that can easily be referenced while reading the text. Additional appendixes list the battles and skirmishes, casualty figures, and the names of officers killed or wounded in the two-year campaign. The final appendix is a brief glossary of period military terms. The book concludes with an extensive bibli-

ography of primary and secondary sources and an index.

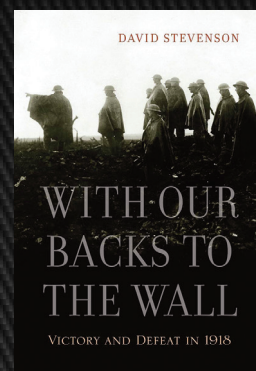
Noticeably missing from the list of appendixes are details on tribal participation in the Great Sioux War. Hedren’s apparent explanation for this missing information is found in the Preface, where he briefly states that the focus of the book is on the U.S. Army’s involvement in the Great Sioux War. The author asserts that his work is “necessarily a one-sided look at this war,” which he follows by suggesting a few “stellar books” for anyone wanting to learn more about Sioux and Northern Cheyenne participation (p. 10). Unfortunately, the justification as to why this approach was necessary seems to fall short.

At a glance, the book’s largely non-narrative format may seem more appealing to specialists than general readers, but such a conclusion does not do justice to the study. Although researchers on the Great Sioux War will immediately see the value of the work’s in-depth examination, the book will also likely interest the generalist because of Hedren’s non-technical writing style and unique approach to looking at one of the most important times of popular Western history. This is an impressive study and well-researched guide to a short-lived period of U.S. Army history, when brave soldiers and great warriors met on the battlefields of the Great Plains in the 1870s. *Great Sioux War Orders of Battle* is highly recommended as a standard text on how the U.S. Army operated during the Plains Indian wars.

Gary L. Cheatham is currently an assistant professor of library services at Northeastern State University in Tahlequah, Oklahoma. His publications include journal articles and book chapters on topics dealing with Kansas and Oklahoma history.



With Our Backs to the Wall: Victory and Defeat in 1918



By David Stevenson
Belknap Press of the Harvard
University Press, 2011
Pp. xxxii, 688. \$35

Review by Mark E. Grotelueschen

David Stevenson has done for 1918 what Hew Strachan did for 1914 in his magisterial *The First World War*, volume 1, *To Arms*. A massive study running to 547 pages of text supported by over 80 pages of notes, excellent maps, and a comprehensive bibliography, *With Our Backs to the Wall* is a work of superb scholarship that covers both the Allies and Central Powers, as well as each of the major theaters (with the exception of East Africa).

Stevenson begins with an excellent prologue that neatly summarizes the first three years of the war while stressing why the war was neither won nor negotiated to a conclusion in that period. He shows how prewar antagonisms (that grew into an “ocean of hate” during the war [p. 2]), the support of allies, relative unity on the home front, a tenacious hope of ultimate victory, the demands to justify sacrifices already made, as well as entangled and extensive war aims all kept the war going. The remaining five hundred pages explain how and why, after more than three and a half years of deadlock, the Allies won the war between March and November 1918. During that period, a great race was playing out in which the results of two massive strategic adjustments competed against each other to determine the victor—the collapse of the Russian war effort and the beginning of American

involvement. Though the first years of the war saw the entry of other important players—such as the Ottomans, Italians, Rumanians, and Bulgarians—none of them altered the outcome of the war the way the Russians and Americans did in 1917–1918. The Russian departure from the war released hundreds of thousands of Germans to reorder the balance of power on the Western Front, while American entry brought hundreds of thousands (ultimately more than two million) of fresh soldiers to the Allied side, as well as enormous financial and industrial resources.

Stevenson answers the question of why the Allies won the war when they did by taking two different approaches over eight lengthy chapters. The first method, accomplished in the first two chapters, describes the operational events of the final eight months of the war. In an eighty-page chapter on the crucial period of March to July 1918, the author discusses the risky German offensives that failed to yield a victory prior to the arrival of a critical mass of American soldiers that promised to make a German victory practically impossible. For Stevenson, this interval emerges as the true strategic turning point of the war; the most dangerous time of the war for the *Entente* since 1914, but also the moment that did irreparable damage to the German Army—not just in terms of material and manpower (since the losses to the Allies were even worse than those suffered by the German Army), but especially morale. The false promises of supposed “victory offensives” and an unimpeded American reinforcement crushed the hopes of the German Army. The next chapter describes the subsequent Allied offensives that drove back and ground down the German forces in the final four months of the war. Allied successes in this period, which saw the Franco-American Aisne-Marne offensive of July, the British Amiens attack of August, the St. Mihiel attack of September, and then the contemporaneous offensives all along the Western Front (as well as successful attacks in Italy, Macedonia, and Palestine), generally resulted from improved tactics and techniques, numerical advantages in materials and manpower, and superiority in morale. Throughout this discussion, Stevenson’s

narrative is a model of thoughtful analysis and wide-ranging synthesis.

The next five chapters involve a second approach, more topical than chronological. Stevenson describes how the new methods of warfare, military manpower and morale, the naval war, industrial and economic forces, and sociopolitical developments on the home fronts contributed to Allied victory in 1918. Beyond discussing the successful integration of tanks, airpower, gas, and artillery, the author explains how developments in intelligence collection, communications, and logistical arrangements were crucial to Allied success. One of his central assertions regarding manpower and morale is that the deployment of the American Expeditionary Forces (AEF) was of “capital importance” to Allied victory (p. 245). Stevenson concludes that America “not only deployed impressive manpower reserves, but its morale and discipline were good enough for it to fight and to achieve its objectives. . . . That this was so had major implications for troop morale everywhere else” (p. 255). The chapter on the “unspectacular struggle” of the naval war of 1918 rightly asserts that “its outcome was emphatic and underlay every other Allied superiority” (p. 311). It includes important discussions not just of victory in the antisubmarine war, of which “convoy was the principle instrument” (p. 312), but also of the “peculiar naval triumph” of the Allied surface fleets and the “immense construction, manufacturing, and repair programmes” that “underpinned the Allies’ triumph” (p. 335). One theme that emerges here is just how “indispensable” the Anglo-American maritime collaboration was, logistically and operationally, to Allied naval victory, and therefore to Allied victory in general (p. 348).

Regarding what he calls “the war between the workshops,” Stevenson again stresses the important role of the United States in determining how the Allies outdid their enemies in the task of solving “one supply emergency” after another (p. 350). Those more familiar with the Second World War than the First might be surprised to learn that America’s greatest material contribution was not in “finished manufactures”—such as tanks, artillery, trucks, and machine guns—but

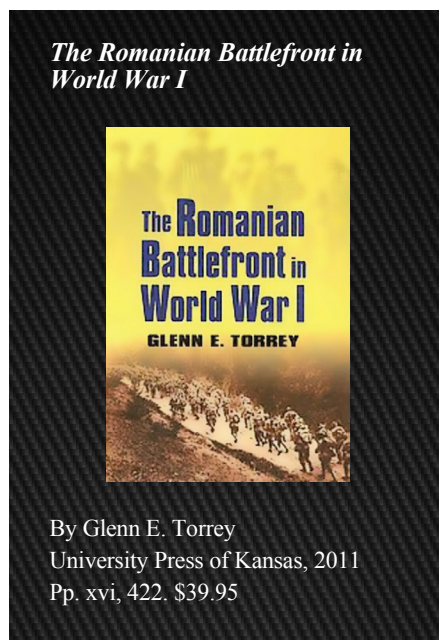
in “food, raw materials, and finance” (p. 351). The story of American dollars, wheat, steel, and oil may not be as well known as the Ludendorff offensives or the British victory at Amiens, but this chapter shows it was every bit as important to the ultimate outcome. Stevenson makes it perfectly clear that despite the difficulties related to the American mobilization effort, culminating with the “winter crisis” of 1917–1918, “without American supplies the French army could not have held the line” (p. 361). Sections on the economic challenges and contributions of the British Empire, France, and Italy—all substantial—follow, and the author stresses that it was the cumulative, coordinated, and increasingly cooperative effort of the major Allies that enabled them to better meet the demands of 1918 than the Central Powers, some of whose armies were stretched for supplies, while their populations “reached the brink of starvation,” or in the case of the Ottoman Empire, “crossed it” (p. 407).

Though its allies were collapsing logistically and financially, Stevenson concludes that Germany—faced as well with dire challenges in these realms—was not directly forced to capitulate for these reasons, but rather for “political and morale factors” (p. 420). This conclusion places great import on the final chapters that discuss the social and political forces on the home fronts and the final decisions to accept defeat and victory in late 1918. Regarding the social and political aspects, the Allies of 1918 clearly won the battle to maintain stability in their general populations. The author shows how the Allies, for all their problems at home, proved more resilient than their opponents, especially in the way they utilized and managed women, their working-classes (especially the Leftists among them), their nationalist elements on the Right, and their “superior,” though far from flawless, political leadership (p. 492). Regarding the decisions concerning victory and defeat, Stevenson provides favorable assessments of Vittorio Orlando, George Clemenceau, David Lloyd George, and Woodrow Wilson. The book’s final chapter shows why the German military and political leadership sought an armistice in the fall of 1918, and why

the Allies ultimately agreed to one. The author asserts that the Bulgarian surrender of late September proved critical to convincing the Germans to seek an end to war, coming as it did after ten weeks of uninterrupted military defeats on the Western Front and an awareness that its other allies were nearing collapse as well. Still, the reasons and purposes for the German decision to pursue a cease-fire were more complicated than clear, as were the various American and Allied responses. And yet, as Stevenson says, ultimately “all three sides of the American-German-Allied triangle decided to call a halt” (p. 521), the result not of any one specific factor or event, but of “a conjuncture” that was emerging “in which all parties saw it in their interest to settle now” (p. 524).

This study now becomes the authoritative work on the final year of the war. Previous works on 1918, such as Barrie Pitt’s *1918: The Last Act* (New York, 1962), Hubert Essame’s *The Battle for Europe, 1918* (New York, 1972), and John Terraine’s *To Win a War: 1918, the Year of Victory* (New York, 1978), generally focus on the operational events of just the Western Front. And none of them approach the level of scholarship of *With Our Backs to the Wall*, nor incorporate the breadth of discussion or the depth of analysis of this book. All those interested in the First World War or in the broader question about why wars are won and lost should buy and enjoy this impressive work of wide research, clear argumentation, and lucid writing.

Dr. Mark E. Grotelueschen is a lieutenant colonel in the U.S. Air Force and currently serves as an associate professor of history at the U.S. Air Force Academy. He is the deputy for military history in the department of history and has served as the chair of the academy’s African studies group. He holds degrees from the Air Force Academy, the University of Calgary, and Texas A&M University and is the author of *The AEF Way of War: The American Army and Combat in World War I* (New York, 2007), which was again selected for the 2014 U.S. Army Chief of Staff’s Professional Reading List.



Review by Mark Klobas

There are historians who plow a single field and others who make a name for themselves plowing multiple ones. And then there are those such as Glenn E. Torrey who spend their careers plowing a solitary furrow. In Torrey’s case, that furrow has been the history of Romania in World War I, and his efforts have yielded a valuable harvest of books and articles about the men, the events, and the legacies of this overshadowed part of the global conflict. This book, a military history of the Romanian front from Romania’s entry into the war to the postwar occupation of Budapest, represents the culmination of his career, and the decades of study and often challenging archival work involved in its production are evident on every page.

Torrey begins by setting the stage for the war. He presents Romania’s decision to join the war as fundamentally an opportunistic one, governed by the desire of many Romanians (especially that of Prime Minister Ion I. C. Brătianu) to annex predominantly Romanian Transylvania from the Austro-Hungarian Empire. Yet while the Romanians spent nearly two years negotiating with the *Entente* Powers to secure the best possible terms, little effort was put into preparing the Romanian military for the impending conflict. The Romanian Army, a force composed of mainly peasant conscripts, was large but

poorly armed and lacking in leadership. Despite the example of modern warfare on display in both France and the Eastern Front, Romanian tactics remained firmly embedded in the pre-war concepts of “frontal assault and *offensive à outrance*” adopted from the French (pp. 16–17). While the author is critical of the politically imposed decision to start the war with an invasion of Transylvania, he argues that the army’s deficiencies made defeat likely no matter what strategy had been adopted.

While the Central Powers were aware of Brătianu’s overtures toward the *Entente*, Romania’s declaration of war in August nevertheless came as a surprise, thanks to contradictory information from the German and Austro-Hungarian ministers in Bucharest, both of whom believed that the Hohenzollern king of Romania ultimately would veto intervention. Initially caught off guard by the Romanian thrust into Transylvania, the Central Powers recovered quickly and counterattacked with an offensive in the Dobrogea, the southern region of Romania and one heavily populated with ethnic Bulgarians. The rapid advance of the Bulgarian, German, and Turkish forces there led the Romanian high command to abandon the northern offensive and transfer forces to the beleaguered region, an effort that ended in a failed attempt to invade Bulgaria. This left the occupying forces in Transylvania vulnerable to an Austro-German counteroffensive, which reclaimed the region little more than six weeks after the Romanians had declared war. Throughout the fall, the Romanians reeled from successive blows at the hands of the Central Powers, gradually withdrawing from Wallachia and surrendering their capital, Bucharest, in early December.

The onset of winter and the demands of the other fronts led the German and Austrian high commands to shift to a defensive posture. This gave the Romanian Army time to recover and reconstruct its devastated units. Torrey gives considerable credit here to the French military mission led by General Henri Berthelot, which persevered through low morale and a typhus epidemic to reconstitute Romanian forces. Now rebuilt, the Romanian Army launched an offensive in July 1917 in conjunction with the

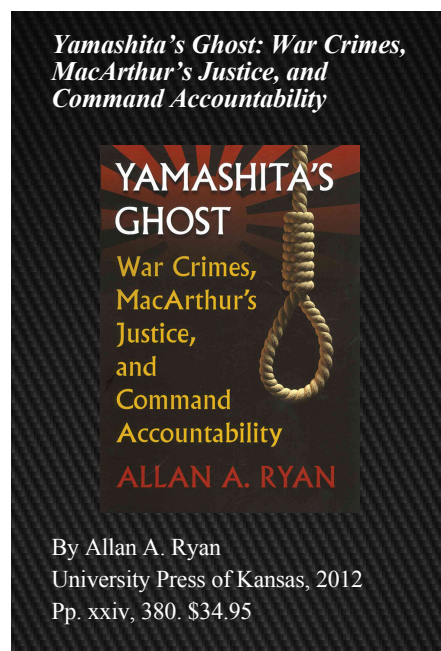
Russians. With their expectations defined by their successes in the previous year, the Germans and Austrians were surprised by the improved capability of the Romanian forces, who distinguished themselves in combat against the armies of the Central Powers. Poorly supported Austro-German counteroffensives were defeated, with the author calling the Romanians' defensive victory at the battle of Mărășești "the most significant victory of [the Romanian] army in World War I, and possibly in all of Romanian history" (p. 236).

Yet Romanian success was soon undermined by events in Russia. The Bolshevik Revolution in November 1917 led to the collapse of the already erratic Russian war effort, leaving the Romanians desperately overstretched against numerically superior Austro-German forces. The decision by the commander of the Russian forces on the front, General Shcherbachev, to seek an armistice forced the Romanians to sign a debilitating peace treaty at Buftea on 5 March 1918. The failure of the Ludendorff Offensive in the summer of 1918, however, gave the Romanians new hope. By dragging out the demobilization of the army, the Romanian high command was well positioned to reenter the war mere hours before the armistice with Germany came into effect in November 1918. Though this did little to impress the Allies, the subsequent usefulness of Romanian forces in stabilizing the Balkans after the war, particularly in dealing with the Communist threat in Hungary, strengthened the hand of the Romanian delegation at the Paris Peace Conference, helping to ensure that the Romanians received nearly all the territory that had been promised in 1916.

Torrey's book is a masterful account of its subject, one that presents decades of painstaking research in a clear and absorbing narrative. Though primarily focused on military operations, he deftly weaves into his story personal anecdotes, which bring to life what might otherwise be a dry reporting of events. If there is a flaw in his book, it lies in his tendency to overstate the significance of the Romanian front to the overall war, such as his assertion that the Romanian collapse in 1916 contributed not only to the decision by the Germans to resume

unrestricted submarine warfare but also to the demise of the British and French governments then in office (p. 168), when the role of developments on the Romanian front was more incidental than significant. Still, such assertions underscore a larger point, which is that fronts like that in Romania have been unjustly neglected in terms of the overall picture of World War I. This reviewer hopes that Torrey's excellent book, which likely will stand as the definitive account of the war in Romania for decades to come, will go far toward rectifying this deficiency.

Mark Klobas teaches history at Scottsdale Community College in Scottsdale, Arizona. A graduate of Texas A&M University, he is the author of several book reviews and is currently at work on a biography of twentieth-century British newspaper editor James Louis Garvin.



Review by Fred L. Borch III

This is the first comprehensive study of the trial of Japanese General Tomoyuki Yamashita for war crimes committed by him and his troops in the Philippines between October 1944

and September 1945. Author Allan A. Ryan, a distinguished lawyer and former military and federal civilian prosecutor, is to be commended for his careful analysis of the 4,055-page trial transcript of the proceedings against Yamashita. His conclusion is that Yamashita not only did not get a fair trial but that his conviction and execution by hanging were unjust. *Yamashita's Ghost* insists that it was both legally and morally wrong for Yamashita to be held accountable for the horrendous war crimes committed by his troops. This is because Yamashita either could not control the members of his command (because American forces destroyed his ability to do so), or did not know that they were committing rapes, murders, and other atrocities (again because U.S. forces had disrupted his communication with his subordinates), or both. The author also argues that the legal principle established by the *Yamashita* case—that a commander may be held criminally liable for the war crimes committed by his subordinates even if he did not know about them, much less had the ability to prevent them—is wrong-headed and should be jettisoned.

Yamashita's Ghost has received high praise from readers. Retired Supreme Court Justice John Paul Stevens called it "really excellent . . . constructive and perceptive." John W. Dower, whose *Embracing Defeat: Japan in the Wake of World War II* (New York, 1999) was awarded a Pulitzer Prize, writes that the book "belongs on any short list of incisive trial-based studies of war crimes and war responsibility." Stevens and Dower are correct, as *Yamashita's Ghost* is well-written and perceptive and deserves to reach a wide audience.

Tomoyuki Yamashita had been a career Army officer and, when he took command of all Japanese Army units in the Philippines in October 1944, had been in uniform since 1906. While he had many staff assignments, Yamashita also had extensive experience in military operations. In the 1930s, he served in occupied Korea and later commanded an infantry division in northern China. His greatest combat achievement, however, was his smash-

ing victory over the British in Malaya and Singapore in 1942. But, after achieving what historian John Toland called “the greatest land victory in Japanese history,” Yamashita (whose success earned him the moniker “Tiger of Malaya”) was posted to faraway and relatively quiet Manchuria. He spent the next two years on the border with Soviet Siberia, preparing for a fight with the Red Army that never came.

In September 1944, as the Japanese military situation began deteriorating in the Pacific, Yamashita was recalled to Tokyo and then reassigned to the Philippines. When he arrived in Manila in early October and took command of the 250,000-man Imperial Japanese Army’s Fourteenth Area Army, Yamashita began preparing a defense against the expected American invasion of the islands.

After the successful U.S. landings on Leyte on 20 October 1944 and the crushing defeat of the Japanese Navy at the Battle of Leyte Gulf, Yamashita’s days were numbered. In the months of fighting that followed, casualties on both sides were heavy. Collateral damage to civilians and their property likewise was great. But, when U.S. troops finally liberated the Philippines in September 1945, they discovered that Japanese troops also had inflicted thousands of “horrendous atrocities” on Filipinos and American POWs—“ghastly murders, tortures, rapes, arson, and other crimes.” As *Yamashita’s Ghost* makes all too apparent, the barbarity of the war crimes committed in the Philippines was almost beyond belief—but not entirely unexpected given that Japanese soldiers had raped 20,000 women and murdered as many as 200,000 civilians in the notorious “rape” of Nanking in 1937.

But just who was responsible for the thousands of war crimes committed in the Philippines? Those individuals who had carried them out, of course. But, given that the atrocities were so numerous and widespread, General Douglas MacArthur believed that Yamashita also was accountable because he “unlawfully disregarded and failed to discharge his duty as commander to control the operations of the members of his command, permitting them to commit brutal atrocities and other

high crimes.” This was a new offense; no enemy commander had previously been prosecuted by an American military tribunal for war crimes committed entirely by others, on the theory that he had failed to control his subordinates. But MacArthur thought that Yamashita was responsible as the senior Japanese commander, and consequently he convened a military commission to hear the evidence against him. That tribunal, consisting of five Army general officers, heard five weeks of testimony from 286 witnesses. The tribunal also evaluated 423 exhibits.

Yamashita’s Ghost argues convincingly that the accused did not get a fair trial. There were serious evidentiary and procedural flaws in the process. The commission members knew that MacArthur “wanted justice meted out swiftly” and Maj. Gen. Russel B. Reynolds, the senior officer on the panel, repeatedly pushed the proceedings along, often to the detriment of the defense. While there is no evidence that MacArthur or anyone else in the chain of command directly influenced the commission members, the five general officers sitting in judgment of Yamashita clearly knew what was expected of them. In any event, the orders and regulations creating the military commission were overly favorable to the prosecution because the tribunal “was not bound by technical rules of evidence,” which meant that any and all hearsay was admissible if the commission members thought it was helpful, including depositions (written testimony) taken from men and women who would not appear before the tribunal.

As *Yamashita’s Ghost* demonstrates, the defense presented evidence, albeit ultimately unconvincing, that Yamashita had “complete ignorance” of the atrocities committed by Japanese personnel and that his single-minded focus on the Japanese defense of the Philippines also meant that it was not reasonable for him to have known about these war crimes, much less prevented them. After all, argued the defense counsel, Yamashita could not have deterred what he did not know about.

General Reynolds and his fellow commissioners, however, rejected

these excuses and found Yamashita guilty of failing to forestall starvation, execution, massacre, torture, rape, murder, burning, and other war crimes committed by thousands of Japanese personnel under his command. The tribunal’s rationale was “that the crimes were so extensive and widespread, both as to time and area, that they must either have been willfully permitted by the accused, or secretly ordered by him.” Or, as prosecutor Maj. Robert Kerr argued, the lawless acts of Yamashita’s subordinates “were so notorious and so flagrant and so enormous . . . that they must have been known to the accused if he were making any effort whatsoever to meet the responsibilities of command.” If he did not know, then “it was simply because he took affirmative action not to know.”

Having found Yamashita guilty, the military commission sentenced him to be executed. Yamashita’s defense counsel did apply to the U.S. Supreme Court for leave to file a writ of habeas corpus; they hoped the justices would review his case. But that court, in a six to two decision, rejected the application. As a result, Yamashita was hanged in Manila on 23 February 1946.

Ryan’s conclusion is that, because the military commission that tried and convicted Yamashita was flawed, his conviction and execution were unjust. *Yamashita’s Ghost* also contends that, because Yamashita was tried for an offense that was entirely new to the law of armed conflict, his conviction and execution was also unjust. The author’s conclusion is that Yamashita’s “ghost lingers in the law” because the “ill-considered” principle of command responsibility established by his case continues to exist in “official American policy” and in the law of armed conflict.

This reviewer disagrees. As Ryan himself writes, “The law can change, and does change to meet changing circumstances.” The Nuremberg war crimes trials prosecuted German government officials for “crimes against humanity” and “crimes against peace,” offenses that had not previously been charged but that are today accepted

as legitimate offenses under the law of armed conflict. Given the clear and convincing evidence of widespread (and not sporadic) war crimes that occurred while Yamashita was in command, it was entirely appropriate to hold him legally responsible. As the judge advocate who reviewed Yamashita's case for legal sufficiency wrote, "The atrocities were so numerous, involved so many people, and were so widespread that the accused's professed ignorance is incredible."

Today, the principle of command responsibility (or *respondeat superior*) established by Yamashita's trial is firmly established in U.S. military law and the law of armed conflict. Field Manual 27-10, *The Law of Land Warfare* (Washington, D.C., 1956), the American military's bible on the law of armed conflict, states that a commander is responsible for war crimes committed by his troops "if he has actual knowledge, or should have knowledge . . . that troops subject to his control are about to commit or have committed a war crime" and that commander "fails to take the necessary and reasonable steps" to prevent this crime. The United Kingdom—our closest ally—has a similar command responsibility rule. The standard was incorporated into the 1977 Additional Protocols to the Geneva Conventions. Finally, international judicial bodies, such as the International Criminal Tribunal for the Former Yugoslavia and International Criminal Court, also have endorsed the "knew or should have known" standard for command accountability for war crimes committed by subordinates.

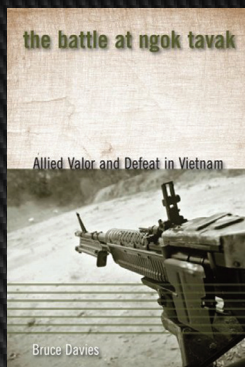
Yamashita's Ghost argues that one reason to jettison the legal standard established by the military commission is that the United States "ignored the Yamashita precedent after the Vietnam War," in that it failed to convict anyone superior to Lt. William F. "Rusty" Calley for the massacre at My Lai. Similarly, America's failure to convict any superior commander after the mistreatment of Iraqi prisoners by U.S. soldiers at Abu Ghraib demonstrates that the Yamashita rule should be eliminated. But this is flawed reasoning; the fact that the United States

may have failed to adhere to the law of armed conflict does not mean that the fault is with the law. Personal liability for war crimes remains a foundational principle of the law of armed conflict today and, given the role of the commander in military operations, it is just as important for that leader to be held accountable for war crimes committed by his subordinates in some circumstances. Yamashita may not have received a fair trial in the procedural sense. He was, however, guilty as charged, and justice was done.

Fred L. Borch III is the regimental historian and archivist for the U.S. Army Judge Advocate General's Corps. He earned history degrees from Davidson College and the University of Virginia, and law degrees from the University of North Carolina, the University of Brussels (Belgium), and The Judge Advocate General's School. He also has a master's degree in national security studies from the Naval War College.



The Battle at Ngok Tavak: Allied Valor and Defeat in Vietnam



By Bruce Davies
Texas Tech University Press, 2008
Pp. xx, 242. \$24.95

Review by Frank L. Kalesnik

The Battle at Ngok Tavak: Allied Valor and Defeat in Vietnam by Bruce Davies describes a North Vietnamese Army (NVA) assault on a Special Forces camp

in May 1968 and subsequent efforts to locate and recover the remains of Americans killed there. The Australian author, himself a Vietnam veteran, provides a thorough and interesting analysis based on a variety of sources, offering the reader perspectives from "both sides of the hill." The scope of the first part of the work is essentially tactical and is derived from both participants' accounts and official records. The second part of the book deals with the political aspects of the recovery effort, initiated by veterans and their families, which is covered in great detail.

Situated near the Laotian border, the Ngok Tavak Forward Operating Base (FOB) was a satellite of the Kham Duc Special Forces camp located seven kilometers to the northeast. While Kham Duc was the primary objective of an assault by elements of the 2d NVA Division, the 40th Battalion of the 1st Viet Cong (VC) Regiment conducted a preliminary attack on the Ngok Tavak outpost. Bloodied in severe fighting near Da Nang during the Tet offensive, the division withdrew to the mountains near the Laotian border in March 1968. The month of April was spent thoroughly reconnoitering the American positions. Delayed a week awaiting the arrival of heavy weapons, the North Vietnamese were ready to attack on 10 May.

The Ngok Tavak garrison was a mixed bag. Australian Capt. John White commanded the 11th Mobile Strike Force (Mike) Company, including 2 Australian warrant officers, 3 U.S. Army Special Forces soldiers, 3 South Vietnamese Army Special Forces soldiers, 3 interpreters, 122 Nung mercenaries, and a 30-man Civilian Irregular Defense Group (CIDG) platoon. Supporting arms included a 5-man CIDG mortar team and an artillery platoon of 41 marines with two 105-mm. howitzers (lifted in by helicopter on 4 May—the originally planned date for the North Vietnamese attack). White did not want the artillery, stating that "our Marine artillery could not support us as it could only fire on high angle in the dense foliage and we were having contacts outside that range" (p. 57). White, in fact, flew to Da Nang to request the marines' withdrawal and assumed they would be leaving in a few days. The platoon's

ammunition supply, both in quantity and type, was also an issue, as was the problem of resupplying from the stockpile at Kham Duc.

The employment of artillery was Lt. Col. Daniel Schungel's idea. As I Corps' senior Special Forces officer, Schungel had a contentious relationship with the Marine Corps, which he blamed for the loss of the Special Forces camp at Lang Vei on 7 February 1968. According to the author, "He allegedly displayed his displeasure in a Machiavellian manner by requesting that two Marine howitzers be placed at Ngok Tavak to support a Special Forces reconnaissance force that was located there. This, so it was said, was to ensure that the Marines would not leave him in the lurch again if his camps were attacked" (pp. 19–20).

Australian Capt. Peter Ray, another Mike Force commander, had this to say:

The I Corps Mike Force companies were being sent off on what were at times quite unrealistic tasks given their level of training and their numbers. Furthermore, Lt Col Schungel [senior SF officer, I Corps] committed the Mike Force elements to operations, which were unsound, with an inadequate level of support, even down to insufficient radios for the basic nets. He was undoubtedly a most courageous man who believed in leading from the very front, but I believe he was tactically naïve [p. 17].

Maj. Dang Ngoc Mai's battalion, approximately three hundred fifty men strong, began its assault shortly after 0300 on 10 May. Sappers created a breach that flamethrower teams exploited. The attackers penetrated the eastern portion of the position, quickly routing the CIDG, which included many traitors who joined the attack. Major Mai was wounded within yards of Captain White's command post; in the chaos, the Marine artillerymen, fighting as infantry in isolated pockets and being supported by an AC-47D Spooky gunship, put up a resistance effective enough to prevent the enemy from overrunning the entire position. Come morning, the 40th Battalion

was ordered to withdraw and set an ambush for American forces sent to reinforce Kham Duc, while local Viet Cong secured Ngok Tavak. This enabled the defenders to retake captured positions and evacuate the wounded by helicopter. Captain White decided to evacuate, leaving the dead behind. Air strikes covered the withdrawal, which concluded with a helicopter lift to Kham Duc, also under attack and subsequently evacuated on 12 May.

In his analysis of the battle, Davies determines that the North Vietnamese attack was unnecessary because Ngok Tavak was already "isolated by a tactically silly plan by the allied force" (p. 121). He concludes,

In the end, a tactical advantage was handed to the attacking battalion via the sum of many errors committed by the allied force. That a number of the defenders managed to escape was through the steadfastness of a few Marines who broke the momentum of the assault, and the quick arrival of Spooky and other attack aircraft. Captain John White's disobedience and tactical adroitness in sidestepping a waiting ambush on the road to Kham Duc, coupled with the courage of some Marine helicopter pilots who flew the rescue flights, was their final saving grace [p. 123].

The second part of the book describes the tortuous process families and veterans underwent to locate and properly bury the remains of servicemen left behind at Ngok Tavak. Closure finally came on 7 October 2005, when American flags were presented to the families of eleven marines and one soldier at a ceremony at Arlington National Cemetery. Of particular relevance is retired North Vietnamese Maj. Gen. Phan Than Du's comment to American veterans visiting Ngok Tavak and Kham Duc in 1995: "There were many young American kids of the 196th Brigade who were very lucky at that time, but for us we were very sad because we lost the opportunity to destroy them" (p. 187).

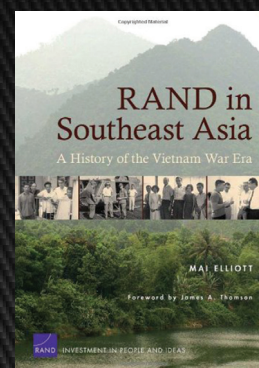
Well written and thoroughly researched, *The Battle at Ngok Tavak* will interest students of tactics, the Vietnam

War, and the impact of war on veterans and their families. It also serves as a cautionary tale, cutting through Special Forces mythology to illustrate the dangers of reliance on small numbers of elite soldiers, indigenous forces, supporting arms, and airpower when facing a determined enemy with large numbers of disciplined troops. One might also conclude that, while Captain White may not have wanted artillery, he did get what he needed—a platoon of marines.

Dr. Frank L. Kalesnik received his bachelor's degree in history from the Virginia Military Institute in 1983, and his master's degree and Ph.D. in American history from the Florida State University in 1989 and 1992, respectively. He has taught at the Virginia Military Institute and the U.S. Merchant Marine Academy. He served as a field historian for the Marine Corps History Division and worked as a historian for the Department of the Air Force. He is currently command historian for Marine Corps Forces, Special Operations Command.



RAND in Southeast Asia: A History of the Vietnam War Era



By Mai Elliott
RAND Corporation, 2010
Pp. xxii, 672. \$35

Review by Nathaniel L. Moir

RAND in Southeast Asia provides a firsthand perspective of this important research organization and its work as a

proponent of the Vietnam War. During the conflict, it was also embroiled in controversy due to research analyst Daniel Ellsberg's unauthorized release of the *Pentagon Papers*. As a balanced history of the institution's research on Vietnam, Mai Elliott's undertaking investigates and reveals a range of distinct and conflicting viewpoints, such as Ellsberg's, among RAND's analysts. As a result, *RAND in Southeast Asia* coalesces into a complex and downright fascinating account that is well worth the reader's time.

Divided into eleven chapters, the book describes how RAND was initially and substantially funded by the Air Force to improve its operations and maximize efficiency as a dynamic branch of the military. As the think-tank grew, it also contributed a wide range of research to numerous fields of study that included the social sciences, operations evaluation, and economics. Although RAND completed predominately scientific analyses, an important examination conducted early in the war focused on the Viet Cong and National Liberation Front's organizational structure and operations.

This investigation, the "Viet Cong Motivation and Morale" research project, was initiated in 1964 and was originally led by RAND researchers John Donnell and Joseph Zasloff. As an important, early, and long-held research effort for RAND, the undertaking also usefully acts as a central narrative in Elliott's work.

As RAND's largest research study on the growing war in Vietnam, this specific project consisted of interviews with Viet Cong and, to a lesser extent, North Vietnamese soldiers who were captured or defected to the South Vietnamese government. From the start, Donnell's and Zasloff's research was received with varying degrees of ambivalence by the Joint Chiefs of Staff and their respective services. Although the study succeeded in supplying cultural intelligence regarding the enemy, there were criticisms within the Department of Defense that "the report was not actionable, and did not provide guidance on ways to hurt the Viet Cong" (p. 89).

Although the project was intelligence-driven, it was not tactical intel-

ligence *per se*, or intelligence to find, fix, and destroy the enemy. Rather, the project's goal was to furnish greater understanding of the political rationale for why the Viet Cong were successfully thwarting both the South Vietnamese government and early American advisory efforts in a manner similar to how the Viet Minh overcame the French in the 1950s. Unfortunately, despite calls for change by individuals such as Bernard Fall, the Republic of Vietnam's political plight and inability to implement political reform were superseded by military efforts, especially during the MACV commanding tenures of General Harkins (1962–1964) and General Westmoreland (1964–1968).

In late 1964, Leon Goure took the "Viet Cong Motivation and Morale" project in a different direction that was more in line with what the Air Force sought. In this phase of the study, RAND focused on psychological effects of weapons and military operations, particularly those systems used by the Air Force to support ground troops, and how these assets affected Viet Cong motivation. No doubt, the appearance of an AC-47 gunship on the horizon or the oncoming rumble of an imminent B-52 Stratofortress Arc Light mission must have been paralyzing for Viet Cong and North Vietnamese forces. The Air Force, therefore, sought to more accurately understand how such air operations could contribute to the overall war effort for purely military-related outcomes. As time and hindsight would later reveal, these findings would prove irrelevant politically except for the harm done to the United States' position as the air war became increasingly controversial at home and abroad.

Unfortunately, the study, as led by Goure, manipulated its findings by cherry-picking Viet Cong responses. Such Viet Cong perspectives, critics alleged, were primarily single sources that validated the Air Force's vision and rationale for air operations. Critics maintained that not only was the Air Force not provided with empirically accurate data by RAND but, perhaps more troubling, that the Air Force did not diligently seek the full story of its air operations' impact

upon the Vietnamese people and their country. Understandably, this particular project and the motivations behind it became controversial within RAND itself.

Several RAND studies provided the Air Force with evidence—through different research efforts not related to Goure's project—that its air operations were counterproductive and led to civilian casualties and other unwarranted destruction through poor targeting and excessive bombing. Elliott's evidence is clear that these RAND analysts were ignored because their work did not match what military and civilian leaders expected or wanted to hear. The problem of successive administrations ignoring RAND analysts' efforts, particularly Daniel Ellsberg's and Anthony Russo's, would later have severe implications for both RAND and, indirectly, the Nixon administration.

Before Elliott's chapter on the *Pentagon Papers*, pacification and RAND's contribution to General Abrams' "one war" effort is addressed. Due to CORDS director Robert Komer's close and direct affiliation with RAND, the organization began to focus on fewer topics and to emphasize political considerations versus technical studies for the military. In short, pacification began to gain in prominence as a research focus. Notable efforts on this subject included projects by individuals such as David Elliott and joint studies by Bing West and Charlie Benoit.

Although many RAND analysts had previous military experience—including Daniel Ellsberg, a former Marine officer—the author recounts how controversy and personal and moral conflicts often complicated research for RAND staff. In a manner similar to more recent controversies surrounding the employment of social scientists in Iraq and Afghanistan through the Human Terrain Team effort, this contentious issue greatly affected RAND and it would become painfully clear with the publication of the *Pentagon Papers*.

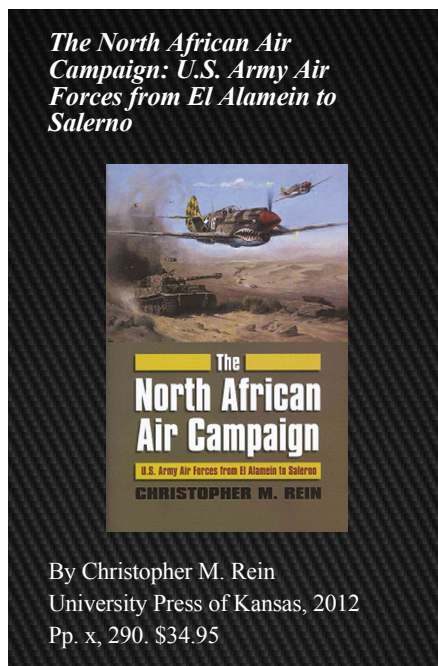
This major event is the focus of a pivotal chapter of the book. Initially, a great number of researchers, among them

Anthony Russo and Daniel Ellsberg, were supportive of American efforts in Vietnam. The ground truth they gained while in Vietnam, however, along with consistent dismissal of research that conflicted with the U.S. military's point of view, contributed especially to Ellsberg's controversial decision to leak thousands of classified documents.

Elliott pulls no punches on this subject and her candor throughout the book is an important reason why *RAND in Southeast Asia* is a valuable work for students of the war. Another strength of the volume is the inclusion of RAND researchers' personal stories and how they came to work for RAND in Vietnam. As a staff member and wife to RAND analyst David Elliott, the author writes well and with the authority of firsthand experience. Numerous anecdotes, both humorous and tragic, are woven into her historical account in a manner that adds depth to RAND's involvement in the war and its research on the conflict.

Although *RAND in Southeast Asia* weighs over five pounds and is a lengthy 626 pages, it is a highly rewarding investment. Each chapter is detailed and complex but also interesting and stylistically easy to follow. As a result, Mai Elliott's work deserves the attention of students and scholars alike and should be regarded as the definitive history of this intriguing organization during the Vietnam War.

Nathaniel L. Moir is a military intelligence and psychological operations-qualified captain in the U.S. Army Reserve. Commissioned through Officer Candidate School, he deployed to Afghanistan as a psychological operations detachment officer in charge in 2010 and 2011. Subsequently, he worked from 2011 to 2013 as a senior research analyst in the Program for Culture and Conflict Studies at the Naval Postgraduate School in Monterey, California. He recently matriculated into the Ph.D. program for history at the State University of New York at Albany, where he will study U.S. history and twentieth-century foreign policy.



Review by Mark J. Reardon

Lt. Col. Christopher M. Rein, a member of the Air Force Academy faculty, has produced a crisply written and long overdue reappraisal of the United States Army Air Forces (USAAF) during the North African Campaign in World War II. The author explains his choice of that particular offensive by stating that it offers a logical starting point for examining alternative means of employing airpower in future conflicts. Rather than examine the late World War II, Gulf war, or IRAQI FREEDOM scenarios, all of which featured friendly air forces possessing overwhelming numerical, logistical, and technological superiority, Rein suggests that the current Air Force leadership would be better served by a historical case study involving technological parity, major logistical shortfalls, limited aircraft availability, and competing theater requirements.

According to the author, the North African Campaign of 1942–1943 offers a useful example of how the USAAF prevailed over a peer competitor during uncertain times. Indeed, the overall strategic situation at the onset of the offensive appeared suitably bleak as British control of the Middle East seemed in doubt after German and Italian ground forces succeeded in advancing within striking distance of Cairo in June 1942. However, in less than a year enemy forces threatening the Suez Canal had

been forced to retreat into Tunisia, where more than 250,000 Italian and German troops entered captivity in May 1943. Over the period separating nadir and triumph, the Axis powers lost thousands of tanks and artillery pieces, hundreds of ships, and thousands of aircraft in a vain effort to maintain their foothold in Africa. Given that the USAAF played a major part in bringing about that change in strategic fortune, Rein contends that the North African Campaign of 1942–1943 provides current Air Force leaders with a far more realistic future operational blueprint than more recent conflicts.

The author sets the foundation for his thesis by examining post-World War II Navy and Army historical accounts portraying American airmen as universally eschewing close air support in favor of strategic bombing. By demonstrating that the USAAF possessed the doctrine, aircraft, and pilots capable of achieving success in its opening campaign against Adolf Hitler's vaunted *Luftwaffe*, Rein offers an effective counter to the notion that the U.S. Army Air Forces neglected its responsibility to support ground forces during the interwar years. At the same time, the author points out that several prominent USAAF leaders remained fixated on the panacea of strategic bombardment, a viewpoint that threatened to undermine air-ground relations following the enemy defeat in Tunisia.

In a chapter entitled "Learning with the British," Rein studies how the Royal Air Force influenced the USAAF in the opening phase of the American involvement in the Middle East. Early American observers had noted that the British lacked heavy bombers in the Mediterranean theater because the Royal Air Force (RAF) refused to divert them from the ongoing nocturnal aerial offensive against Germany. As a result, a provisional detachment of American B-24 four-engine heavy bombers originally tabbed for duty in China found itself diverted to Palestine in early 1942. It was followed by a mixed bombardment group consisting of both B-24s and B-17s, along with a medium bomber group equipped with twin-engine B-25 Mitchells and a fighter group with Curtiss P-40 Warhawks, all

of which eventually formed the Ninth Air Force. Although these American units benefited from their exposure to RAF intelligence and logistical systems, the heavy and medium bomber units conducted daylight precision bombing in accordance with American doctrine rather than adopt British night bombing tactics. By doing so, American airmen reintroduced a capability in theater that had been unavailable since the arrival of German fighters in early 1941 prevented British bombers from conducting long-range daylight operations.

The USAAF's hard-won experience in the Middle East, however, did not benefit American airmen taking part in Operation TORCH, code name for the November 1942 invasion of Vichy French North Africa led by Lt. Gen. Dwight D. Eisenhower. As the author explains, "There was simply too little time between the Alamein battle and Operation TORCH to fully incorporate the wealth of experience gained in the Western Desert into new units supporting the new operation" (p. 65). As a result, many lessons learned by the Ninth Air Force were relearned by its sister organization, the Twelfth Air Force, during the subsequent Tunisian Campaign. In spite of determined opposition, the B-17 heavy bomber groups of the Twelfth Air Force, along with the B-24s of the Ninth Air Force, waged a fierce interdiction campaign against ports and airfields in Italy, Sicily, Sardinia, and Tunisia that ultimately staunched the flow of Axis reinforcements and supplies bound for North Africa. However, not everyone within the USAAF viewed that success in the same manner. In the minds of some American airpower advocates, the sustained use of B-17s and B-24s against interdiction targets served as an example of not employing strategic bombers, except in emergencies, to support ground forces.

The January 1943 Casablanca Conference provided senior USAAF leaders with the leverage they needed to redirect the use of B-17 and B-24 groups in the Mediterranean. During the meeting, the commander of the Eighth Air Force, Maj. Gen. Ira C. Eaker, persuaded British attendees to cease their opposition to employing U.S. heavy bombers in

precision daylight raids. The conference led to the POINTBLANK directive, which authorized the British and American air forces to conduct a combined bomber offensive against Nazi Germany. Participants at Casablanca also agreed to launch an amphibious invasion of Sicily following the conquest of Tunisia. During the follow-on TRIDENT conference held in Washington, D.C., in May 1943, Prime Minister Winston Churchill and President Franklin D. Roosevelt sought to fundamentally alter the strategic situation in the Mediterranean by authorizing the use of USAAF heavy bombers against Rome in an effort to bring about the downfall of Italian dictator Benito Mussolini.

A series of intense air attacks in mid-June 1943 against the island of Pantelleria, which forced the Italian garrison to capitulate before Allied troops landed, paved the way for the Sicilian invasion. Encouraged by these developments, in mid-July USAAF senior leaders directed the withdrawal of five groups of B-24 heavy bombers, to include three groups transferred from England, from ongoing combat operations to take part in a low-level raid against the Romanian oilfields at Ploesti in accordance with the POINTBLANK directive. The B-24s carried out the attack on 1 August, which resulted in the loss of 53 aircraft for meager results. Rein makes a strong case that the diversion of these assets allowed the Germans to withdraw their troops from Sicily just before the island fell. He explains that the B-24s, which were capable of flying high enough to avoid most enemy antiaircraft fire, would have rendered the port of Messina incapable of supporting an organized evacuation. He also details how a similar disconnect between theater operational needs and the strategic vision of USAAF leaders occurred in early September when Twelfth Air Force B-17s were employed against "strategic" targets in southern France and central Italy rather than used to support the fiercely contested Anglo-American landings at Salerno on the Italian mainland.

Although the overall air war in the Mediterranean during this period is worthy of detailed examination, Rein's focus is limited to USAAF aircraft and organizations capable of

achieving effects at the operational level. He also highlights the decision made by senior Air Force leaders, who cited the POINTBLANK directive as justification, to divert strategic bomber assets from the theater commander at a critical point in the offensive. The lesson is not that senior USAAF leaders made a serious error in judgment, but that hard choices will have to be made during future conflicts whenever sufficient assets are lacking to accomplish multiple tasks. However, because he focuses on the strategic and operational levels of war, this volume does not cover tactical aerial combat, nor does it provide detailed information on the opposing German and Italian air forces.

Notwithstanding what some might characterize as critical omissions, Rein delivers a solid account of USAAF operations in the Mediterranean. His analysis of the impact that decisions made at the Casablanca and TRIDENT conferences had on the conduct of an ongoing operation is particularly insightful. This reviewer feels strongly that Rein offers sound advice to the current leadership of the Air Force when postulating that our military in the future may not enjoy the same advantages that it has in the past. The author concludes by noting, "An air doctrine built around support of land and naval forces would be the U.S. Air Force's strongest possible contribution to building an effective joint team. As the campaign in North Africa demonstrated, armed forces are most effective when used synergistically, multiplying the effectiveness of each arm" (pp. 204-05). In these times of fiscal austerity and strategic uncertainty, the Department of Defense would do well to consider his words.

Mark J. Reardon retired from the U.S. Army in 2006 after twenty-seven years of active duty. In addition to coauthoring the Center of Military History's *From Transformation to Combat: The First Stryker Brigade at War* (Washington, D.C., 2007), he recently edited *Defending Fortress Europe: The War Diary of the German 7th Army in Normandy* (Bedford, Pa., 2012).



THE CHIEF HISTORIAN'S FOOTNOTE

DR. RICHARD W. STEWART



VIETNAM AT 50 YEARS

The year 1964—50 years ago—was a crucial year in the history of our involvement in Vietnam. The United States had long been closely entwined with the fortunes of Vietnam. During World War II, advisers from the Office of Strategic Services (OSS) were sent to help the Viet Minh, and later the French, fight the Japanese. Following the war, as part of our commitment to rearm France as a critical North Atlantic Treaty Organization (NATO) ally in the fight against communism, the United States formed a Military Advisory Assistance Group (MAAG) to improve the flow of equipment and other support to the French military. The United States aided France even though the French were fighting the same Viet Minh that had received U.S. assistance during the Second World War. With the defeat of the French at Dien Bien Phu in 1954, Vietnam was divided into two parts—a Communist North and a non-Communist South—with the United States committed to supporting the South. That assistance grew over time as the United States sent more advisers, military equipment, and civilian development aid to the government of President Ngo Dinh Diem in order to fight a growing North Vietnamese-directed insurgency. With the dispatch of U.S. Army Security Agency intelligence personnel and helicopter units in 1961 and 1962, American involvement deepened. When President Diem was assassinated during a coup led by a number of South Vietnamese Army officers, with U.S. knowledge if not complicity, America found itself fully engaged in propping up that new Southeast Asian country.

The fall of Diem ushered in debilitating instability throughout 1964. In January, Maj. Gen. Nguyen Khanh overthrew the main coup leader, Maj. Gen. Dong Van Minh. A dizzying number of plots, counterplots, and changes of administration and personnel followed. This led to near paralysis of the government throughout the year. With American support, General Khanh tried to re-energize the effort to build up the armed forces and restore governmental authority throughout the

embattled countryside, but the results were less than satisfactory.

The coup against Diem had another unintended consequence for U.S. aid to South Vietnam. The opposition of the Military Assistance Command, Vietnam (MACV), commander, General Paul D. Harkins, to the coup had poisoned his relationship with U.S. Ambassador Henry Cabot Lodge. On 25 April 1964, President Lyndon B. Johnson announced that Harkins' deputy, Lt. Gen. William C. Westmoreland, would soon replace General Harkins as MACV commander. General Westmoreland was an experienced and decorated combat commander from World War II. He had transferred to airborne troops after the war and led the 101st Airborne Division, served as superintendent of the United States Military Academy at West Point, and commanded the XVIII Airborne Corps. He seemed ideal for the position, combining combat experience, administrative skill, and advanced business management. At nearly the same time, Ambassador Lodge resigned to take part in the U.S. presidential election and was replaced by recently retired chairman of the Joint Chiefs of Staff General Maxwell D. Taylor. An entirely new team was in place by mid-1964; however, it faced the same daunting task of improving the provision of American assistance and the effectiveness of the South Vietnamese government and military against an ever expanding enemy presence.

The year 1964 also saw the initiation of a multiyear U.S.-directed, but covert, series of intelligence, psychological operations, reconnaissance, and sabotage missions aimed at North Vietnam and southern Laos. These campaigns, part of Operation Plan 34A, were run by an organization called Military Assistance Command—Studies and Observation Group, or MACV-SOG, a cover name for a joint special operations unit. SOG personnel directed many of their missions against the so-called Ho Chi Minh Trail (really a series of roads and trails) that were used to infiltrate North Vietnamese soldiers and supplies through Laos and Cambodia into South Vietnam. Seaborne op-

erations were launched at the coastline of North Vietnam using fast, armed motorboats, with later dire consequences in the run-up to the Tonkin Gulf incident in August 1964.

The more overt missions of U.S. Army Special Forces units in South Vietnam made the headlines in 1964. On 6 July, a reinforced Viet Cong battalion almost a thousand strong hit the small Civilian Irregular Defense Group (CIDG) camp of Nam Dong defended by approximately three hundred South Vietnamese soldiers and their U.S. and Australian advisers. The attack began just before dawn and raged for five hours with heavy casualties on each side. A special forces team from the 7th Special Forces Group (Airborne) commanded by Capt. Roger H. C. Donlon quickly organized the defensive effort. According to a later citation, Donlon personally neutralized an enemy demolition team and was severely wounded in the stomach but continued to direct the fight, rescuing his injured team sergeant. Wounded again, he fought on using small arms, mortar rounds, and recoilless rifle fire, sustaining a third wound. The enemy finally retreated. For his actions that day, Captain Donlon received the nation's highest award, the Medal of Honor, the first such award for operations in Vietnam and the first to a soldier while serving in the Special Forces.

The resultant publicity of the Nam Dong action and the subsequent Medal of Honor recommendation highlighted to the American people that the United States was fighting a war in the shadows in an obscure country that most Americans could not locate on a map. That struggle was soon to hit the headlines of every newspaper in the United States because of what appeared to be unprovoked attacks by North Vietnamese patrol boats on U.S. naval elements in international waters. Those incidents, real and illusory, were to send the conflict in Vietnam in an entirely new direction.

On 2 August 1964, the destroyer USS *Maddox* was on an intelligence-gathering mission when it was attacked in open waters by three Soviet-built P-4 motor torpedo boats. Although the torpedoes missed their mark and only one round from enemy deck guns hit the destroyer, the U.S. response was immediate and deadly. Navy F-8 Crusader jets dispatched from the aircraft carrier USS *Ticonderoga* strafed all three P-4s and left one boat dead in the water and on fire. President Johnson and his military and civilian advisers decided that the United States could not retreat from this clear Communist challenge. They reinforced *Maddox* with the destroyer USS *Turner Joy* and directed the ships continue their mission in the Gulf of Tonkin.

On the night of 4 August, the warships reported being attacked by several fast craft. U.S. analysts and leaders in Washington were persuaded by interpretation of special intelligence and reports from the ships that North Vietnamese naval forces had engaged the two destroyers. However, analysis of that data long after the purported assaults and additional information gathered on the 4 August episode throw doubt on these claims. It now seems apparent that North Vietnamese naval forces did not strike *Maddox* and *Turner Joy* that summer night in 1964 although the attacks on 2 August were quite real.

However, Washington policymakers believed at the time that the North Vietnamese had indeed struck U.S. destroyers again and were determined to do something about it.

In response to the actual attack of 2 August and the suspected one on 4 August, the president ordered Seventh Fleet carrier forces to launch retaliatory strikes against North Vietnam. On 5 August, aircraft from the carriers *Ticonderoga* and USS *Constellation* destroyed an oil storage facility at Vinh and damaged or sank about thirty enemy naval vessels in port or along the coast. Of greater significance, on 7 August the U.S. Congress overwhelmingly passed the so-called Tonkin Gulf Resolution, which enabled President Johnson to employ military force as he saw fit against the Vietnamese Communists.

American aerial and naval forces immediately began to move into Southeast Asia in greater numbers. Two squadrons of Air Force B-57 Canberra jet bombers moved to the Bien Hoa Air Base north of Saigon and two additional squadrons of interceptors and fighter-bombers deployed to the Tan Son Nhut and Da Nang air bases. General Westmoreland asked for a Marine Expeditionary Brigade and either the 173d Airborne Brigade on Okinawa or a brigade of the 25th Infantry Division in Hawaii to be prepared for immediate deployment to Vietnam along with two HAWK (Homing All the Way Killer) air defense missile battalions. The buildup of forces in Vietnam was about to begin.

The Viet Cong insurgents did not take long to react to the escalation of tensions in the region. During the rest of the year, they initiated a number of terrorist and sabotage attacks against U.S. facilities. Bars, restaurants, stadiums, and other places visited by Americans were hit by grenades. On the night of 1 November, Viet Cong saboteurs infiltrated the sprawling air base at Bien Hoa and launched a series of mortar strikes against the American bombers and personnel stationed there. In the course of about thirty minutes, the Communists killed four Americans, wounded seventy-two others, and destroyed most of a squadron of bombers.

By the end of 1964, the United States was deeply entrenched in South Vietnam and morally and practically bound to its survival as a free nation. The prestige and power of the United States was on the line in what was viewed as another battlefield of the Cold War. For more on how the U.S. commitment to South Vietnam expanded from World War II to the start of major ground combat operations in 1965, see the U.S. Army Center of Military History's first commemorative brochure in the U.S. Army Campaigns of the Vietnam War series entitled *Deepening Involvement, 1945-1965* (2012), which kicks off the Center's commemoration of the 50th anniversary of the Vietnam War. This publication is available in both hard-copy and digital formats. For more information, please visit our Web site at <http://www.history.army.mil/catalog/pubs/76/76-1.html>.

As always, I can be reached at Richard.Stewart2@us.army.mil.



CNH

ARMYHISTORY

The Professional Bulletin of Army History