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North Korea: How Did It Prepare for the 1950 Attack?

By Richard A. Mobley

Partisans will not decide the question. The people of the south know that we have a good army. Lately I do not sleep at night, thinking about how to resolve the question of the unification of the whole country. If the matter of the liberation of the people of the southern portion of Korea and the unification of the country is drawn out, then I can lose the trust of the people of Korea.

Kim Il Sung¹

Throughout the spring the Central Intelligence reports said the North Koreans might at any time decide to change from isolated raids to a full-scale attack. The North Koreans were capable of such an attack at any time, according to the intelligence, but there was no information to give any clue as to whether an attack was certain or when it was likely to come.

Harry S. Truman²

On the eve of the fiftieth anniversary of the outbreak of the Korean War, the danger of a surprise North Korean attack still remains the preeminent concern of decision-makers at the Combined Forces Command. The proximity of forces and the North's military readiness reduce warning time compared to that available in more typical examples of contemporary military confrontation. Written in the context of this continuing danger, this article addresses the North's preparations for war in 1950 primarily from a historical viewpoint. It nevertheless illustrates the difficulty of interpreting indications and discerning warnings as military intelligence was practiced half a century ago. It may tempt the reader to pose the question: Would we provide better warning today?

In hindsight, the preparations of the Democratic People's Republic of Korea (DPRK), as North Korea was officially titled, to attack the Republic of Korea (ROK) on 25 June 1950 appear extensive and striking. Initially, they entailed intense but discrete diplomatic lobbying by the North Koreans to secure Soviet and Chinese backing for an invasion. Beyond diplomacy, the preparations included extensive logistical activity, military mobilization, wide-ranging ground force movements, substantial command and control changes,

deception, and civil sector mobilization. Indeed, the range of activity provides a model for how one country might prepare to attack another. The P'yongyang regime ignored few preparations. This article will evaluate the preparations for war undertaken in three periods, observing the rapid growth of the Korean People's Army (KPA) from its foundation in February 1948 through December 1949; the military training and redeployment of forces undertaken between January and early June 1950; and the final, preattack measures adopted during June 1950.

The Buildup

Virtually every element of North Korean society participated in a military buildup from 1948 to 1950. However, the North undertook specific, preattack preparations relatively late in the force-generation process, and these were conducted under the guise of an unusually large field exercise.³ For example, the conscription that started in the summer of 1948 could just as well have been part of a long-term buildup of capabilities as a preparation for attack. Indeed, prior to the spring of 1950, most KPA activity would have fallen under the heading of general military buildup—simply the *creation* of an army as opposed to the

posturing of that army for attack.

Most notably, during this period the North Korean leader, Kim Il Sung, fostered strong diplomatic relations with the Soviet Union (USSR), the Chinese Communist party, and the newly installed People's Republic of China (PRC), which produced military dividends as well as diplomatic backing. The return of ethnic Korean military volunteers from China following their participation in China's civil war increased the North's military capabilities starting in 1949. Soviet military aid sharply tilted the correlation of forces on the peninsula in favor of the KPA. Moreover, the aid gave P'yongyang a distinct advantage in armor and artillery.⁴

Kim Il Sung, accompanied by other senior North Korean leaders, met with Joseph Stalin at least twice and with Mao Zedong once during the two years before the war. There are no minutes extant from Kim's 1950 meeting with Stalin, but *Pravda* revealed that an economic and cultural agreement resulted from Kim's first visit to Moscow in March 1949, and the minutes of that meeting have now been released to international researchers.⁵ The minutes and correspondence contained in the Russian archives reveal the extent, and success, of Kim Il Sung's lobbying, first for Soviet military aid and in 1950 for support for his invasion plans.

On 5 March 1949, Kim Il Sung met with Stalin in Moscow and answered many exceptionally detailed questions about the two Koreas. While the North Korean delegation stated that its army was stronger than that of South Korea, Kim observed that sea

defense was lacking, and he requested Soviet naval assistance. Kim also sought and obtained permission to send North Korean officers to the Soviet military academy for training. The Soviets and North Koreans signed eleven agreements that March. These offered a wide range of economic assistance and credit extension. From a military perspective, they included the temporary stationing of a Soviet naval unit in a North Korean port and the construction of a railway line linking the Soviet and North Korean rail networks. However, there is no evidence that the USSR and DPRK signed any agreement creating a purely military alliance.⁶

Although Stalin and Kim were not to meet again until the following spring, North Korea sought Soviet aid throughout 1949, while repeatedly claiming that Seoul was about to invade. On 3 September 1949, Col. Gen. Terentii Shtykov, the Soviet ambassador to P'yongyang, reported that the North had captured a communication sent to ROK forces on the Ongjin peninsula ordering the South Koreans to mount an artillery attack on a cement plant north of the 38th Parallel. The North Koreans also had indications from deserters, he continued, that the southerners intended to seize the portion of that peninsula north of the parallel as well. Kim Il Sung's personal secretary, Mun Il, advised Shtykov that Kim wanted permission to preemptively overrun the southern portion of the Ongjin peninsula and the nearby territory as far east as Kaesong. Mun Il also reported that "Kim Il Sung is convinced" that his forces "are in a position to seize South Korea in the course of 2 weeks, maximum 2

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months.”⁷ Soviet Deputy Foreign Minister Andrei Gromyko responded by asking probing questions about the balance of power between North and South. Gromyko sought Kim’s assessment of the South Korean military, the condition and anticipated utility of partisan elements in the South (presumably in support of the North’s general war aims), and the nature of U.S. military presence in and commitment to South Korea.⁸

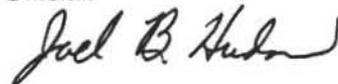
On 14 September the Soviet embassy in P’yongyang responded to Gromyko and summarized Kim’s plan as follows: The North would destroy the South Korean regiments on the Ongjin peninsula, occupy the area and the territory to its east, and then decide on the next move. If the KPA concluded that the army of the ROK was demoralized, it would strike south. If not, the KPA would simply hold the territory it had seized. The leaders of the North, however, could not undertake the Ongjin option without additional Soviet military aid. Meanwhile, they intended to “consolidate the defenses” along the 38th Parallel. The Soviet embassy commented that the North Korean plan was “not advisable.”⁹ Ten days later the Politburo directed Ambassador Shtykov to meet with Kim and advise him that the Soviets had concluded the KPA lacked the “necessary superiority of military forces” to attack the South.¹⁰

Such exchanges did yield considerable Soviet military aid. Although the Soviet Army withdrew from the North in December 1948, Moscow immediately established a special military advisory group in P’yongyang. Moreover, several thousand Soviet military advisers reportedly remained in the KPA, where as many as twenty were assigned to each division.¹¹ Using rail and sea transport, Moscow in 1949 provided the KPA with military equipment worth over 249 million rubles (roughly \$50 million at the official exchange rate), with nearly 80 percent going to the air force and most of the remainder to the artillery. Soviet aid flows more than trebled in 1950, and by the end of that year the USSR had provided 869 million rubles (\$174 million) worth of aid, of which 40 percent went to the air force and 44 percent to the artillery.¹² The Soviets provided machinery, arms, coal, and petroleum. Moreover, Soviet advisers were intimately involved in the North’s war planning, and at least portions of the KPA invasion plan were first prepared in Cyrillic script.¹³

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The Chinese Communists also had various incentives to support the North. Tens of thousands of ethnic Koreans had fought alongside the Chinese Communist Forces (CCF) in the civil war that had brought the Communists to power in mainland China. North Korea had provided a strategic rear area for Communist troops during this war. Chinese Communists had operated from North Korea, maintaining two important lines of communication through North Korea that connected their forces in northern and southern Manchuria. The Koreans had also provided aid, including more than 2,000 railway cars of materiel left by the Japanese.¹⁴

Beyond debts of gratitude, the Chinese had ideological motives to support P'yongyang against the South. Angry at the failure of the United States to recognize the People's Republic of China (PRC) and well aware of its ideological conflict with the West, Beijing concluded that confrontation with Washington was inevitable and that it would likely focus on three fronts: Taiwan, Indochina, and Korea.¹⁵

With this outlook, Beijing ultimately endorsed Soviet and Korean overtures to support the North's military adventure. Most critical to the war effort, the Chinese Communists allowed over 30,000 ethnic Korean CCF veterans to return to Korea as organized units during 1949–1950. They represented over a third of the people the KPA had under arms at the time of the invasion and enabled the North Koreans to deploy three divisions of approximately 10,000 men each, originally composed almost entirely of former CCF regiments. These three divisions represented almost half of the seven divisions that participated in the invasion's first wave. While the disposition of all of the CCF returnees remains unknown, at least one regiment in a fourth division participating in the assault had also come from China.¹⁶

Bolstered by this aid and relying upon conscription begun in 1948, the infant KPA grew rapidly. In September 1949 the North Koreans advised the Soviets that it had 97,500 men under arms, including air force and coastal defense troops, plus another 23,200 police. They also reported that they possessed 64 tanks, 59 armored cars, and 75 planes. The North informed the Soviets that it had artillery, armor, and air superiority over the South but admitted that it lacked sufficient military supplies and still needed more ships.¹⁷

The best source of information in English on North

Korea's preinvasion buildup is a comprehensive, formerly classified study entitled "History of the North Korean Army," which the G-2 Section, Far East Command, prepared during the Korean War. Informed by interrogation reports, captured enemy documents, and analysis undertaken during the first year of the war, the study provides a brief history of each KPA division. The following comments on ground activity rely heavily, but not solely, on this study.¹⁸

The Korean People's Army produced ten divisions in just over twenty-eight months. Founded in February 1948, the KPA had an estimated 60,000 troops by year's end, including three infantry divisions—the 1st, 2^d, and 3^d. In late 1948 it also created a tank battalion, which expanded to a regiment by May 1949 and possibly a division—the 105th Tank Division—by the outbreak of the war. During 1949 the personnel strength of the KPA doubled with the addition of an estimated 40,000 conscripts and over 20,000 returnees from the CCF, and it fielded another three infantry divisions—the 4th, 5th, and 6th.¹⁹

Growth accelerated in the first half of 1950, when the KPA brought four more divisions on line—the 7th, 10th, 13th, and 15th. Of these organizations, the 5th, 6th, and 7th Divisions were especially potent, since they were originally composed entirely of veteran units of the CCF. Additionally, almost immediately after the offensive started, the KPA transformed the 1st, 3^d, and 7th Border Guard Brigades deployed along the 38th Parallel into another three divisions.²⁰

Veterans of the 164th Division, Chinese Communist Forces, constituted the 5th Division, KPA, which was activated at Nanam in extreme northeastern Korea in August 1949. The 164th was reorganized to bring it into conformity with the organizational structure of a standard KPA infantry division. Interestingly, from August to December 1949, the 5th Division reportedly engaged in road repairs and military construction. The far northeast would be the source of other KPA divisions, including the 15th, and the North Koreans may have wanted to improve their country's infrastructure and lines of communication before creating and moving these additional forces.²¹

The 6th Division, created in the far northwest, also originated from a Chinese unit, the 166th Division. Once the 166th arrived in Sinuiju from China in July 1949, the North Korean military reorganized and retrained it to conform to KPA standards. From

September to December 1949, the 6th conducted tactical training up to company level.²²

The KPA also moved south. In June 1949 the 3^d Division moved its headquarters south to Wonsan, while two of its regiments advanced even farther south—the 9th Regiment to Kumsong and the 7th Regiment to Ch’orwon. During 1949 the 3^d conducted advanced training and kept most of its units in the field.²³

Other KPA units also conducted tactical training. The 2^d Division conducted antiaircraft artillery, individual combat, and other training up to battalion level. The new tank unit began field training in August and was cited for its performance in a large, combined exercise held in September. The Far East Command reported that several thousand armor and air force personnel trained extensively in the Soviet Union. The DPRK reportedly established “Democratic Youth League Training Centers” in each province, which provided military training, and a “Supporting Committee of Fatherland Defence.” All men between seventeen and forty years of age were ordered to receive military training.²⁴

That fall the North asserted to the Soviets that its officer and troop training was superior to that of the South. It also claimed superior discipline and “moral-political relations.” However, the North admitted that its pilots were inadequately trained and its “large caliber arms” unprepared.²⁵

Preparations for War, January–May 1950

In early 1950 the DPRK achieved diplomatic breakthroughs with Moscow that enabled it to quickly accelerate its military and economic buildup. Its diplomacy included approaches to Stalin and Mao to support an invasion and a request to China to return additional military volunteers. The North Koreans increasingly mobilized their economy for war, focusing particularly on restoring their military industrial base. The North also initiated a more pervasive draft. Aided by Soviet advisers, the KPA now began initial planning for a broad-scale invasion. Concurrently, the KPA created new divisions and undertook increasingly sophisticated tactical training.

Diplomacy. High level meetings with China and the USSR continued. Thus the Soviets and North Koreans had frequent exchanges even before Stalin met again with Kim in April. In January 1950 Kim

continued to lobby for Soviet aid and support for a preemptive attack. At a luncheon with the Soviet ambassador on 17 January, Kim said that he wished to visit Stalin again and to seek approval of his plans to liberate the South. Kim commented that he would propose to attack the Ongjin peninsula, which, he argued, the KPA could take “in three days.” Seoul could be taken “in several days.” The Soviet ambassador merely replied that Stalin might again receive Kim.²⁶ Stalin responded to the ambassador’s report by saying that an invasion would need “large preparation” and “must be organized so that there would not be so great a risk.” Stalin offered to discuss the matter with Kim.²⁷

Kim also approached the PRC. He sent Kim Kwang-hyop, the KPA Second Army commander, to Beijing to request the return of an additional 14,000 ethnic Korean troops in the CCF equipped with Chinese arms. Chairman Mao reportedly agreed to this request on 22 January.²⁸

Quickly turning back to the USSR, Kim again sought military assistance, although Stalin had yet to promise unequivocal Soviet backing for an invasion. On 4 February Kim approached the Soviet ambassador and asked his advice on whether the KPA should field three more infantry divisions in addition to the seven it already possessed. Receiving a noncommittal response, Kim then asked him to approach Stalin with a request to buy Soviet arms for the proposed new divisions in 1950, using aid the Soviets had promised for 1951. Stalin endorsed the proposal with a written comment, “it is possible.”²⁹

Consequently, on 9 March, Kim requested between 120 and 150 million rubles (\$24–30 million) worth of Soviet military aid in 1950. In return the Koreans would in 1950 provide the Soviets gold worth 53.6 million rubles (\$10.7 million), silver worth 1.8 million rubles (\$360,000), and monazite concentrate, which could be used in the production of atomic weapons, worth 79.5 million rubles (\$15.9 million).³⁰ The Soviets agreed, and on 14 March the North Koreans submitted a seven-page list of the equipment they required to outfit the three new divisions. This included artillery, ammunition, engineering equipment, aircraft, and medical supplies.³¹

Finally, Kim Il Sung requested to meet “unofficially” with Stalin in early April. Heading the list of proposed discussion topics were the “path and

methods of unification of south and north of the country.”³² Kim made this unpublicized, repeat visit to Moscow between 30 March and 25 April 1950. No minutes of these meetings are extant, but available documents indicate that, during the discussions with Stalin, Kim proposed to mass troops along the 38th Parallel, propose a plan for the peaceful reunification of Korea, and then attack when Seoul rejected it. According to a North Korean participant, Kim assured Stalin that with a decisive surprise attack, the war could be won in three days—before the United States could react. Kim remained convinced that an attack would be greeted by an uprising of 200,000 Communists in the South and that guerrilla fighters in South Korea’s southern provinces would assist his army.³³

Stalin reportedly approved Kim’s attack plans during these meetings, provided that Kim first consult with Mao Zedong. Moscow also agreed to major increases in military aid and shortly afterward started shipping large amounts of weapons and military equipment through Ch’ongjin en route to the 38th Parallel. These included T34 tanks, artillery pieces, and naval craft. In addition to the ninety-three propeller-driven fighters and fighter-bombers that the Soviets bequeathed to the North Koreans upon their departure in 1948, the USSR delivered an additional sixty such aircraft in April 1950.³⁴

While still in Moscow, Kim had his ambassador to China arrange for him to meet with Mao in April or early May to discuss the “question of the unification of Korea.” The Chinese warned that the meetings must be held in secret if the North had formulated a concrete plan for unification.³⁵ On 12 May Kim advised the Soviets that he understood from an emissary that Mao had concluded that peaceful unification was impossible and that “solely military means” were required. Mao also observed that there was no need to be afraid of the United States as the “Americans will not enter a world war for such a small territory.”³⁶ Nevertheless, Mao agreed to transfer one army group closer to Korea, fearing that Japan might attempt to intervene on behalf of the ROK.³⁷ Kim confirmed on 12 May that he would leave for Beijing the next day to discuss Korea’s military plans and to provide Mao an outbrief on his discussions in Moscow. Kim told the Soviet ambassador that he had intended to ask for ammunition for the Japanese and American arms carried by his troops that had returned from China. However, he

subsequently learned that the Soviets had provided sufficient military aid to meet all of the KPA’s requirements. Most important, Kim advised the Soviet ambassador that he had ordered the KPA to prepare for war in June, although Kim was not sure the KPA would be ready by then.³⁸

Civilian Impact. A Far East Command evaluation written after the war’s outbreak stated that the DPRK had refurbished the arms production infrastructure that was built in northern Korea during the Japanese occupation and damaged during World War II. This infrastructure was the backbone of North Korea’s armament supply at the time of the invasion. The factories in this system gradually resumed operations in 1948–1950, producing small arms and ammunition to supplement military equipment left behind by the Japanese and Soviet occupation forces.³⁹ The Far East Command concluded that the Korean economy had provided increasing amounts of light arms, ammunition, and food to the KPA. It noted, however, that this had required a cutback in the construction of schools and light industrial plant. The local production of military materiel thus combined with Soviet seaborne arms deliveries and the import of equipment by North Korean veteran units returning from China to equip the enlarged Korean People’s Army.⁴⁰

In early 1950 the North moved ordnance from highly visible urban areas to isolated rural sites. It prepared hidden dumps to receive additional supplies, weapons, and munitions.⁴¹ Having already built a 225,000-ton capacity refinery at Lake Ch’onkilho in the northeast, the DPRK increased its oil supply in April 1950 by importing another 100,000 tons of oil from Romania and by further enhancing its refining and storage capacity.⁴² A June 1950 CIA estimate, while acknowledging that North Korea’s heavy industrial plant production was approaching 70 to 85 percent of 1944 levels, concluded nevertheless that even as of mid-May a large segment of the domestic economy was uncommitted to the logistical support of the armed forces. In other words, the economy had not fully mobilized for war a few weeks before the outbreak of hostilities.⁴³

Increasingly active efforts to draft men into the military likely had an indirect effect on the civilian economy. Starting in mid-1949, all men in the younger-age cohorts were required to undergo physical exams, and all civilians had to receive military training. In its

buildup for war in 1950, the KPA placed increasing numbers of people under arms, including women and former Japanese conscripts.⁴⁴

Between February and April 1950, the North created a security zone along the 38th Parallel. It evacuated civilians from a five-kilometer belt along the parallel, claiming the ROK was preparing to attack. In some cases, the evacuation was so hasty that the areas designated to receive the evacuees were unprepared for them. In other cases, farmers were reportedly forced to move in the midst of spring planting. The security zone's purpose, however, was a mystery; and U.S. Army intelligence analysts readily ascribed defensive intentions to this activity.⁴⁵

Unconventional Warfare. Pro-Communist guerrilla groups conducted significant attacks within South Korea until April 1950, when the ROK launched large-scale operations against the guerrilla bands operating within its territory. The guerrilla activities sponsored by the North included combat reconnaissance missions on the Ongjin peninsula and to the north of Kaesong. From these missions, the North Korean high command concluded that it would enjoy overwhelming superiority.⁴⁶ Interestingly, Northern infiltration efforts and guerrilla warfare sharply subsided in the spring of 1950, perhaps indicating that the North was attempting to conserve its resources and to encourage reduced ROK readiness before the attack.⁴⁷

Military Planning. In February 1950 the Soviets dispatched an enlarged military assistance team to North Korea. Lt. Gen. A. P. Vasiliev arrived in P'yongyang on 23 February to head the Soviet Military Advisory Group, superseding the Soviet ambassador as the main military adviser to the KPA.⁴⁸ Following Kim's return from Moscow in late April, a senior Soviet team assisted the KPA in developing a new war plan. Headed by Vasiliev, the team rejected the original KPA plan on the grounds that it inadequately addressed combined arms coordination and was too "defensive." The Soviet team's draft called on the KPA to advance 15–20 kilometers per day, occupy Seoul within 3 days, and complete its "main" military activity within 22–27 days.⁴⁹

General Kang Kon, the KPA chief of staff, assigned a team to flesh out the Soviet plan in an effort that lasted until the end of May. The North Korean team prepared supporting documents that addressed combined arms coordination, engineering support,

logistics, and reconnaissance. According to then Col. Yu Sung Chul, a member of the KPA planning cell and chief of the Operations Bureau of the KPA, the plan explicitly addressed the concealment of military movements under the guise of training.⁵⁰ Kim Il Sung advised the Soviet ambassador on 30 May that he had approved the plan. Noting that Kim appeared "very confident of a quick victory," Shtykov reported that Kim intended to attack around 30 June. Fearing that the KPA's preparations might be detected and that July rains could further delay the offensive, the ambassador urged that it be launched no later than the end of June.⁵¹

At the tactical level, North Korean staffs began studying Soviet-prepared 1:25,000-scale maps of South Korea, particularly with an eye to understanding the river systems and key towns near Seoul.⁵² Soviet advisers also participated in operational planning at the division level and conducted unspecified "reconnaissance" of the 38th Parallel. The advisers withdrew from the front at the time of the attack, however, leaving wartime command and control in North Korean hands. The North Korean staff's lack of experience in large-scale combat soon became evident. In Shtykov's view, the KPA command staff "organized the battle command poorly," used "artillery and tanks in battle badly," and lost communications throughout the entire chain of command.⁵³

Military Buildup and Readiness. In January 1950 the KPA had approximately 110,000 troops.⁵⁴ It then added the 7th (later designated the 12th), 10th, 13th, and 15th Infantry Divisions, giving P'yongyang ten divisions at the time of the invasion. Rapid unit formation, reorganization, redesignation, and forward movement complicated the ground picture. It became remarkably complex during June, when virtually every division in the KPA moved at least a few miles in what the Soviet ambassador called "concentration."⁵⁵

The North continued to transplant regiments in March 1950, exchanging the combat-hardened 14th Regiment from the 6th Division with the inexperienced 1st Regiment of the 1st Division. The 1st Division continued extensive training and before 15 June assembled at Namch'onjom north of Kaesong. The 2^d Division intensified its training

near Hamhung until it deployed to Hwach'on, where it arrived on 17 June. The 4th Division continued mountain warfare training into June 1950.⁵⁶

As a former CCF element, the 5th Division started a new training cycle in January to familiarize itself with KPA terminology and tactics. In February it began advanced training in camouflage and mountain warfare up to company level. By April it was fully up to strength, and by May it had received its full allowance of weapons and equipment. Interestingly, the division's troops were required to turn in the Japanese or American weapons they had brought with them from Manchuria and received new Soviet equipment instead.

The 6th Division also continued an active training schedule until mid-June. During January and February it conducted extensive field exercises with particular emphasis on mountain warfare and night combat.⁵⁷

The 7th Division, subsequently designated the 12th Division, was the third division to be manned almost entirely by returnees from China, in this case men deriving from elements of four Chinese divisions. This division arrived at Wonsan in mid-April. In March the KPA created the 10th, 13th, and 15th Divisions. Founded at Sukch'on, the 10th initially trained there before moving south to Chaeryong in mid-June for a month of training in mountain warfare and night combat. The

13th Division was created from the 4th Independent Division that had been located in Manchuria until July 1949. Upon its activation, the 15th Division received training in Hoeryong and Najin in the northeastern corner of Korea.⁵⁸

The KPA conducted increasingly large exercises in the first half of 1950. Combined arms exercises involving units up to regimental level began at the beginning of the year. According to then-KPA Maj. Chu Yong-bok, during February engineer detachments began specialized training to breach fortified areas in Chientao in eastern Manchuria and river crossing exercises on the upper Taedong River. In March the KPA conducted a larger exercise "dubbed 'Thrusting into Enemy Fortress[es] and Infiltration from Behind the Enemy,'" in which two infantry divisions, a mechanized infantry division, and assorted tank units reportedly participated. The U.S. Korean Military Advisory Group estimated in June that all North Korean units, except for one division and certain battalions of the Constabulary brigades, had by then concluded training on subjects that included the battalion in the attack, the firing of rifles at moving targets,



the assault of fortified positions, and road marches. By May all major units had also been subjected to visits by national command-level inspection teams.⁵⁹

The KPA also began moving additional equipment to the border area, including potent T34 tanks. Interestingly, in an assessment finished in mid-May, the CIA reported the movement of North Korean tanks, heavy artillery, and troops toward the border “in recent months” and concluded that the North was developing a capability to launch an attack aimed at limited but significant objectives, including the capture of Seoul. The CIA commented that KPA and North Korean Border Constabulary units near the 38th Parallel now equaled or surpassed the strength of similarly deployed ROK army units. Although the CIA concluded that the North and South were roughly equivalent in terms of combat effectiveness, the agency acknowledged northern superiority in armor, artillery, and aircraft.⁶⁰

By late May most of the Soviet weapons and ammunition requested by Kim had been delivered to the three new divisions. Nevertheless, Kim suddenly requested more supplies, particularly gasoline and medical aid, and Stalin ordered that their delivery “be accelerated.” By the end of the month, the KPA General Staff and Soviet military advisers reported that the KPA was ready to begin concentrating forces along the 38th Parallel. They stated that seven of the KPA’s ten divisions were ready to go on the offense. Stalin later informed Kim that, in his view, at the time of the attack the North had ten divisions “well fitted out with officer corps and more or less satisfactorily trained.”⁶¹

Preparations for Attack (June 1950)

Korea presented a complex picture in June. Infiltration subsided, and P’yongyang even made peaceful overtures. Simultaneously, it moved the divisions that remained elsewhere in the country to near the 38th Parallel, prepared infiltration teams in support of wartime missions, completed war planning and disseminated operations plans, initiated command and control changes, and undertook limited deception measures, such as the internal announcement of a summer training exercise.

These military moves were accompanied by additional diplomatic approaches to the ROK. Perhaps as a deception measure, the DPRK made reunification proposals in the three weeks immediately before the war. On 8 June the P’yongyang press published a

manifesto by the Central Committee of the United Democratic Patriotic Front, calling for the election of a unified Korean legislative assembly. This assembly would form a new government after dissolving the existing governments in Seoul and P’yongyang. The new assembly was to meet in Seoul by 15 August 1950. On 19 June the chairman of the Standing Committee of the Supreme People’s Assembly called for combining the assemblies of the North and South to draft a constitution, supervise general elections for a national assembly, and form a new central government.⁶²

As war preparations accelerated in earnest, the North Korean government on 8 June placed its railroads in “emergency status” and banned all but urgent official travel. Subsequent reports suggest that the government relied heavily upon rail to move large amounts of personnel, armor, artillery, and other war materiel southward.⁶³ Far East Command’s G-2 noted the closure to all but military traffic of the rail line linking Sariwon to the 38th Parallel, as well as reports of the recruitment of women for assignments in military communications and nursing and the hurried conscription of teenagers.⁶⁴

Throughout June the military changed key leaders, drafted and disseminated closely held operation plans, and reorganized for war. Early in the month the KPA simultaneously replaced several division commanders and staff leaders. On 9–11 June senior field officers ranking as low as brigade commander attended a meeting at the National Security Department in P’yongyang. Stressing secrecy, KPA General Staff officers advised them they would conduct approximately two weeks of field maneuvers with participation expanding from elements of a division to several divisions, culminating in the largest field exercise since the creation of the KPA. The divisions were to move south immediately.⁶⁵

On 11 June the KPA created two new echelons in the chain of command, the 1st and 2^d Corps, also called the 1st and 2^d Auxiliary Command Posts, respectively. The 1st Corps would oversee the western front and control the 1st, 3^d, 4th, and 6th Divisions, including the tank unit of the last division. In the east, the 2^d Corps would direct the 2^d, 5th, and 7th Divisions and a mechanized regiment. The small 2^d Corps staff deployed to Hwach’on on 12 June. The KPA also continued to modify units, enlarging the T34-equipped

105th Armored Regiment to at least an armored brigade.⁶⁶

Aviation units also increased their readiness. Logs from the 3^d Squadron designated 19, 20, and 22 June as days for "airplane preparations," in contrast to the routine servicing and inspections logged during preceding weeks. At any time during this period, each air group was to have ten fighters at the ready. All aircraft were to be fully armed between 12 and 20 June. Such activity would, however, be in keeping with a nationwide exercise.⁶⁷

Concern about operational security pervaded the preparations. Briefings included admonitions for secrecy, and the North used security nondisclosure agreements for those privileged to read its closely held operations plans. P'yongyang conducted the final set of war preparations under the guise of summer combined arms joint operations training. Thus most of the participants thought they were engaged in exercises until just hours before the assault. A North Korean bulletin published on 18 June advised that "a large-scale military exercise will be held near the 38th Parallel. Therefore, no soldier should communicate with people outside. Everyone should be cautious, in order that this top secret should not be disclosed to the enemy."⁶⁸

To hide its activity, the North moved its logistics shipments primarily at night. The DPRK began to transmit false, unencrypted summer training summary messages and training status reports over open lines to convey the impression that only exercise activity was under way. The bogus messages even specified rewards and punishments for performance in training. In his after-action report, Ambassador Shtykov opined that "the intelligence service of the enemy probably detected the troop redeployment, but we managed to keep the plan and the time of the beginning of troop operations secret."⁶⁹

The KPA issued detailed orders in mid-June. On 18 June the KPA's intelligence chief ordered all frontline division commanders to provide detailed reporting on their opposing ROK units. The chief of staff of the 2^d Division issued an order that observation posts be established by 21 June. The division was to complete combat preparations for an assault on Ch'unch'on by 1800 that day and artillery preparations by midnight on the twenty-second.⁷⁰

A KPA directive of 19 June included a detailed list

of lines of advance and assembly, river crossings, and supply points. All units were to complete combat preparations by 23 June. The 19 June order also directed the 2^d Corps' Engineer Section to clear land mines and obstacles and to prepare for bridging operations. A captured document subsequently revealed that a North Korean engineer unit cleared mines near the 38th Parallel between 242200 and 250400 June, local time. On 22 June the 4th Division commander directed subordinates to set up specific targets and to complete attack preparations by the next day. Presumably, other division commanders issued similar orders that day.⁷¹

The most striking of all of North Korea's war preparations was the extensive southbound movement of six divisions from throughout the country to the 38th Parallel during a twelve-day period in June 1950. In the situation report he transmitted the day after the invasion, Ambassador Shtykov reported that the KPA concentrated units near the 38th Parallel during 12–23 June. The "redeployment" was "orderly" and in accordance with the "plan of the General Staff." The move involved approximately 80,000 troops. The KPA completed this extensive forward deployment only two days before it attacked.⁷²

In the final three weeks before the attack, the KPA evidently moved ten divisions over distances ranging from under 20 to over 400 miles. Although an estimated brigade of railroad guard troops and a rail network largely oriented along a north-south axis likely facilitated this effort, the redeployment remains an impressive logistical accomplishment.

Launching the Attack

By 24 June the seven divisions that joined in the initial attack were arrayed along the 38th Parallel, while another three relatively new and inexperienced divisions constituting the second echelon were situated behind them. The 6th Division, which had completed its field training on 16 June, started the war when it initiated a two-pronged attack from Haeju, at the west of the front line. The division's 1st Regiment attacked toward the Ongjin peninsula at 0100 on 25 June, while the remainder of the division continued along the highway toward Kaesong and Munsan-ni. The 6th Division took the port city of Inch'on on 30 June. The 1st Division had assembled at Namch'onjom before mid-June. On 15 June it moved approximately twenty

miles south to Songhyon-ni, just a few miles short of the 38th Parallel. It attacked south across the parallel at 1130 on 25 June, skirted Kaesong, and pushed on to Munsan-ni.⁷³

The 4th Division departed the P'yongyang area on 16 June and reached Yonch'on on the eighteenth. Supported by the 105th Tank Brigade, it struck due south down the highway toward Uijongbu, crossing the 38th Parallel at 0430. The 3^d Division consolidated its headquarters and all three regiments at Ch'orwon on 14 June. On the morning of 24 June, it began moving into its assembly area along the Kumhwa-Seoul highway, its assigned route of attack. It met the 4th Division at Uijongbu on 26 June and with it pushed on into Seoul two days later.⁷⁴

The 2^d Division moved from Hwach'on to its line of departure on the evening of the twenty-fourth. It captured Ch'unch'on on 27 June and proceeded southwest toward Seoul, crossing the Han River on 1 July. The 7th Division, now redesignated as the 12th Division, assembled at Inje about 22 June. Supported by thirty T34 tanks, it joined the 2^d Division's attack on Ch'unch'on but then turned southeast toward Hongch'on, which it captured on 29 June. By 25 June the 5th Division had transited over 400 miles south from Nanam in the far northeast to a point on the east coast of Korea south of Yangyang, just above the 38th Parallel. It attacked down the coastal highway, crossing the line at 0500 on 25 June and taking Chumunjin by noon. It seized Kangnung the following day.⁷⁵

The 10th Division and the very new 13th and 15th Divisions contributed to the second wave. Elements of the 10th Division conducted advanced training near P'yongyang and Chaeryong between 16 June and 25 July 1950. This division entered Seoul on 27 July. The 13th Division moved from Sinuiju on the Yalu River to just north of the 4th Division's assembly area during June, and the 13th crossed the border behind the 4th on 27 June. The 15th Division assembled behind the 2^d Division at Hwach'on about 24 June and entered the ROK behind it on 28 June.⁷⁶

Ambassador Shtykov reported that on 24 June the KPA had issued its divisional commanders orders disclosing the date and time of the attack. KPA officials also read the troops a "political order" that claimed the KPA was about to counterattack in response to an attack the South Korean Army had made across the 38th Parallel. In consequence, North Korean soldiers

were unaware that their government had initiated the war.⁷⁷

In a volume published in 1990, University of Chicago history professor Bruce Cumings observed:

Large numbers of interview transcripts with North Korean POWs that are now available defy easy summary, but this much can be said: many of them document southward movement toward the parallel from the middle of June to June 22 or 23; most of the POWs believed this was for summer battle maneuvers and war games, although some suspected a war was about to begin . . . the vast majority of the POWs captured in the summer of 1950 thought the South had started the war. That is, even their own experience of moving quickly toward the parallel, being issued live ammunition, being told to prepare as if real battle were in the offing, did not prove to them that the North started the war.⁷⁸

Writing forty years after the outbreak of the war, Cumings found the situation sufficiently complex to raise serious doubts as to who initiated the Korean War. This attests to the effectiveness of the North's program of disinformation, denial, and deception. Cumings then stated that "the evidence suggests considerable doubt, even today, that the North launched a premeditated, carefully planned, full-scale invasion on June 25." Instead, he suggested that it might have responded to a provocation from the South. The documents released in the past decade from the Russian archives, upon which this article draws heavily, have since led Cumings to alter his approach. Thus in a published 1995 communication he was able to write of "Kim's timing for an invasion" and of the North Korean leader's view that "South Korean 'liberation' was to come courtesy of, and only of, the Korean People's Army."⁷⁹

Infiltration

The North also sought to coordinate the guerrilla war in the South with its conventional war effort. A Soviet representative in P'yongyang reported that Kim Dar Sen, a leader of partisan detachments in the ROK, arrived in P'yongyang on 3 April to report on the partisan movement and to receive orders.⁸⁰ Cross-border infiltration was in itself not unusual, but the teams that the North dispatched in the last few weeks

before the war no longer sought to create liberated areas but instead carried instructions to foment unrest, disrupt communications, and revive insurgent organizations. On 10 June a heavily armed guerrilla unit commanded by Kim Tal-sam crossed the 38th Parallel at two points in Kangwon Province en route to several towns astride major lines of communication: Hongch'on, Wonju, Yongju, and Ch'ongju. The unit was to contact local guerrillas and reorganize them for attacks on southern communications at the outbreak of hostilities.⁸¹

Simultaneously, some 750 to 1,500 former east coast partisans were formed into the 766th Unit, which reported directly to the KPA General Staff. It was assigned to disrupt communications and other military operations between ROK lines. The unit departed Yangyang by boat on 24 June, landed at Chumunjin the next day, and moved on to Kangnung on the twenty-sixth. Moreover, Ambassador Shtykov reported that the DPRK navy landed two battalions of naval infantry and some 1,600 partisans at two other coastal locations.⁸²

Postscript

Beyond satisfying historical interest, this review of North Korea's preparations for the 25 June 1950 invasion may assist us to understand current threats, particularly if we ask how potential North Korean prewar preparations today, or PRC preparations for an attack on Taiwan, would resemble those undertaken in North Korea fifty years ago. However, our challenges have changed since 1950. Published sources suggest that both Far East Command's G-2 Section and the CIA then failed to warn of impending danger due to a lack of focus, a lack of reliable collection systems, an inability to differentiate between a pervasive buildup of general military capabilities and specific war preparations, and difficulty in culling useful data from the large volume of human intelligence reports and false alarms besieging General Douglas MacArthur's staff in Tokyo. Complicating the matter was a situation of quasi-war on the peninsula, characterized by numerous incidents along the border with South Korea—over 800 in 1949 alone—and active guerrilla movements within the South.⁸³ Moreover, the United States remained unaware of some of the more striking preparations described in this article until they were disclosed by captured enemy soldiers and documents,

revealed in memoirs and interviews decades later, or betrayed in recent years by unexpectedly opened archives.

The benefit of hindsight tempts us to underrate the difficulty of warning of war in 1950. North Korea's gross military capability was then well known to the U.S. intelligence community. Thus, intelligence collectors reported the North's implementation of a draft, its growing order of battle, the return of former CCF units, the creation of a security zone along the 38th Parallel, and some aspects of the KPA's southward movement. The final CIA assessment, released on 19 June 1950, succinctly summarized these developments and admitted that P'yongyang *could* overrun Seoul. However, the agency also asserted that the North had delayed invasion "in favor of a coordinated campaign involving political pressure within southern Korea, subversion, propaganda, economic pressure, and military actions by infiltration of guerrilla forces." In contrast, Far East Command analysts, while observing the KPA's growing size, estimated that it would require several months to attain the two-to-one force superiority that the U.S. Army, at least, desired for offensive operations.⁸⁴

The intelligence community failed to provide explicit warning, in part because it was confronted with so much "background noise" that significant developments did not stand out. The community had received repeated rumors of a North Korean invasion, and talk of invasion was indeed almost routine during 1949–1950. These premature warnings likely undermined trust in such reporting and desensitized analysts.⁸⁵ More important, many of the more significant indicators discussed above simply were not detected before the conflict.

The American intelligence community's failure to provide tactical warning in June 1950 derived primarily from inadequate collection, not mistaken analysis. Unaware of the KPA's actual size, U.S. analysts knew even less about the extent of southbound KPA movement in mid-June 1950, although both finished and raw intelligence reports referred to southbound movement before that period. The changes in command and control structure, the apparently widespread issuance of written operations and reconnaissance orders, the heightened aircraft readiness, the distribution of live ammunition and grenades to

frontline troops, and the North's mine-clearing efforts all went undetected. Thus, the 38th Parallel likely appeared little different, and perhaps even less threatening, in June 1950 than it did in mid-1949, when fierce fighting raged on the Ongjin peninsula.

Despite these intelligence-collection shortfalls, all U.S. agencies reported a general growth in North Korean capabilities. Nevertheless, such striking developments as the evacuation of civilians from near the 38th Parallel apparently did not receive appropriate high-level attention. No one coherently pieced together the few observed qualitative changes into a credible warning of attack.

With such extensive preparation, the attack itself was almost anticlimactic. The KPA had secured essential diplomatic and military backing from the USSR and PRC. It had built an army, moved it south, and achieved near-total surprise. Today the United States is better postured to monitor such activity, but the North is unlikely to present the dramatic warning picture it displayed in 1950. The Defense Intelligence Agency's recent unclassified studies characterize the KPA today as deployed well forward. It need not undertake large movements of artillery, tanks, and personnel prior to initiating hostilities. With over a million people under arms, North Korea need not even engage in prewar mobilization for certain attack scenarios. In other words, the North presents a challenging warning problem, but in different ways than it had in 1950.

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THE CHIEF'S CORNER

John Sloan Brown

With this edition of *Army History* I am pleased to report promising major initiatives under way in each of the Center of Military History's divisions.

The Field Programs and Historical Services Division, as I hope you all well know, is eagerly preparing to host the Conference of Army Historians on 6–8 June 2000. The theme is the Korean War, contributors will be very diverse and extraordinarily interesting, and the conference program is available even as I write at the Center's website, www.army.mil/cmh-pg. We certainly do look forward to seeing as many of you there as can possibly make it. Looking a little further ahead, we have scheduled the equally exciting annual Total Army Military History Detachment Training Course for 9–15 July 2000.

The Histories Division has brought the proposed Chief of Staff's Reading List to maturity. It will be announced as part of a larger Military Heritage Initiative during the Army's 225th birthday celebrations on 14 June 2000. Once promulgated, the reading list will encourage habits of reading and reflection in our officers and NCOs, complement the educational efforts of the Army School System during the long intervals between school attendances, and provide excellent material for officer and NCO professional development.

The Museum Division has just finished its successful and well-attended Fifth Annual Museum Training Course, and it is already making plans for the next one. It has also completed work on a very important site study for the proposed national Army Museum, and we should be able to share details of this important study with you in the next issue. Meanwhile, log on to www.mdw.army.mil/oldguard/ and take a look at yet another pace-setting initiative, a virtual tour of the Old Guard Museum at Fort Myer, Virginia.

Production Services continues with its very active program of publication and distribution. Within a quarter, we should see *Soldiers Are Our Credentials* (General Reimer's collected works and selected papers), John Carland's *Stemming the Tide* (a history of combat operations in Vietnam, 1965–1966), Ed Raines's *Eyes of Artillery* (a history of the early years of Army aviation), and a Korean War CD-ROM, complemented by three (out of an eventual five) commemorative campaign brochures. This is not to mention the "cargo pocket" history of the United States Army that we intend to promulgate with some fanfare to support the Army birthday celebrations.

As you can see, it will be a productive yet challenging quarter for the Center of Military History. We do look forward to sharing the fruits of all these initiatives with you as time progresses.

New Publications

The Center of Military History and the Army Corps of Engineers have jointly issued *After DESERT STORM: The U.S. Army and the Reconstruction of Kuwait* by Janet A. McDonnell (CMH Pub 70–59). It is available from the Government Printing Office (GPO) in paperback only for \$21 under stock number 008–029–00344–9.

The Center of Military History has also issued revised and updated editions of two previously published titles. The new edition of *Armies, Corps, Divisions, and Separate Brigades*, a volume in the Army Lineage Series compiled by John B. Wilson, is CMH Pub 60–7 (cloth) and 60–7–1 (paper). The cloth edition may be ordered from GPO under stock number 008–029–00350–3 for \$67, and the paper edition is available under stock number 008–029–00349–0 for \$61.

The revised edition of *Quarters One: The United States Army Chief of Staff's Residence, Fort Myer, Virginia*, by William Gardner Bell is CMH Pub 70–22. This publication is available only to official account holders from the Army Publications Distribution Center.

“The Patriotic Odor”: Sanitation and Typhoid Fever in the National Encampments during the Spanish-American War

By Vincent J. Cirillo

Thou shalt have a place also without the camp, whither thou shalt go forth abroad:
And thou shalt have a paddle upon thy weapon; and it shall be, when thou wilt ease thyself
abroad, thou shalt dig therewith, and shalt turn back and cover that which cometh from thee:
For the LORD thy God walketh in the midst of thy camp, to deliver thee, and to give up
thine enemies before thee; therefore shall thy camp be holy: that he see no unclean thing in
thee, and turn away from thee.

Deuteronomy, 23: 12–14

The following article is a modified version of the paper the author presented at the 1998 Conference of Army Historians in Bethesda, Maryland.

The medical history of the Spanish-American War of 1898 has received little scholarly attention, perhaps because it is viewed as “no more than a colorful episode of the Ragtime Era . . . a matter of little historical consequence.”¹ Hostilities lasted only four months, and the number of dead and maimed paled in comparison to the Civil War.

A dominant theme of Civil War historiography has been the profound human costs. Indeed, any Civil War buff can quote the familiar statistic that as many men died in that four-year conflict as in all the nation’s other wars combined through Vietnam.² When considering the medical history of a war, however, casualty figures are not “the be-all and the end-all.” Despite horrific losses, little was learned in the Civil War that significantly advanced medical theory.³ Ignorance of the role of microbes in contagion and the infection of wounds proved an insurmountable obstacle to medical progress.

Conversely, the War with Spain, despite its brevity and low casualties, had a significant impact on American military medicine. Walter Reed and his associates established the importance of human contact and flies in the epidemiology of typhoid fever, developed the concept of healthy typhoid carriers as agents of infection (before the exposure of the infamous “Typhoid Mary”), and eliminated typhomalarial fever as a disease entity. Perhaps of greatest importance, their work exposed the culpability of line officers in the typhoid epidemic

that ravaged the Army from June to December 1898, thereby driving much-needed reforms in military education.

During the Spanish-American War, as in almost all previous wars, many more soldiers died from bacilli than from enemy bullets.⁴ For every American soldier who died in combat, more than seven died from disease (see *Table 1*), despite the advances in scientific medicine and public hygiene that had taken place since the Civil War. Nearly three-quarters of the deaths from disease occurred among volunteers stationed stateside, who had never been within a hundred miles of the enemy. America’s national encampments proved more deadly than the Cuban battlefields.

Typhoid fever was the major killer of American soldiers during the Spanish-American War. It was epidemic in the national encampments. A panel of Army medical officers studied the records of ninety-two

Table 1

Total United States Army Deaths from All Causes in the Continental United States, Cuba, Puerto Rico, and the Philippine Islands during the Spanish-American War (1 May to 30 September 1898)⁵

<u>Cause of Death</u>	<u>Enlisted</u>		<u>Total</u>
	<u>Officers</u>	<u>Men</u>	
Killed in Action	23	257	280
Died of Wounds	4	61	65
Died of Disease	<u>80</u>	<u>2,485</u>	<u>2,565</u>
TOTAL	107	2,803	2,910 ^a

a. In a total force of 274,717 officers and men, this figure represented a mortality rate of 1.06 percent.

volunteer regiments, comprising 107,973 officers and men, from the dates they were mustered into federal service (May to July 1898) to the dates they were mustered out (September to December 1898) or to the end of 1898. They confined their studies to six camps occupied by soldiers who had *not* been outside of the continental United States, i.e., Camps Thomas (Chickamauga Park, Georgia), Tampa (Tampa, Florida), Alger (Falls Church, Virginia), Meade (Middletown, Pennsylvania), and Cuba Libre and Panama Park (both at Jacksonville, Florida). In all, the Army physicians found that 20,738 recruits contracted typhoid fever in 1898 and 1,590 of them died—a mortality rate of 7.7 percent of those infected. Typhoid fever accounted for 87 percent of the deaths from disease in the assembly camps during the war (see *Table 2*).⁶

Table 2

Morbidity and Mortality from Typhoid Fever among Ninety-Two U.S. Army Volunteer Regiments in the National Encampments during the Spanish-American War (1898)⁷

Camp/Army Corps	Deaths		
	Typhoid Fever Cases	Deaths	from All Diseases
Alger/Second	2,226	212	259
Cuba Libre and Panama Park/Seventh	3,985	368	427
Meade/Second	2,690	150	168
Tampa/Fourth	1,498	99	112
Thomas/First	5,921	344	397
Thomas/Third	<u>4,418</u>	<u>417</u>	<u>469</u>
TOTAL	20,738	1,590 ⁸	1,832

Typhoid fever, one of the great scourges of nineteenth-century armies, had a long history, but by the start of the Spanish-American War its symptoms, lesions, and causes had been identified. Pierre Louis, the celebrated French pathologist who in 1829 gave the name “typhoid” to the typhus-like fever then raging in Paris, had located the fever’s distinctive lesions in Peyer’s patches, aggregates of lymph nodes in the small intestine.⁹ Although Louis noted that these lesions were *always* present in typhoid fever, and *never* present in any other disease, he failed to recognize the significance of this morbid process in the transmission

of the fever. By placing typhoid fever among the exanthemata, diseases characterized by continued fever and cutaneous eruptions (smallpox was the paradigm), British physician William Budd provided the insight needed to link the anatomical changes with the clinical histories that implicated infected feces in the origin and spread of typhoid fever. The typhoid lesion bore the same pathological relationship to typhoid fever that the smallpox eruption bore to smallpox. The pocky gut was the mechanism by which the contagion spread.¹⁰

In 1873 Budd published his magnum opus *Typhoid Fever*, which summed up nearly thirty-five years of careful clinical observations and deep reflection on the subject. Budd reasoned that the specific typhoid germ was contained in the yellowish matter that oozed from ulcerated intestinal follicles and that the patient’s fecal discharges were the vehicle for disseminating this morbid matter.¹¹ Further, Budd demonstrated that thorough disinfection of intestinal discharges, privies, clothing, bed linens, and hands, using calcium chloride, zinc chloride, chlorine water, or carbolic acid, could prevent the spread of typhoid fever.¹²

Budd’s findings had enormous implications for the military, since one could expect the severest outbreaks of typhoid fever under camp conditions, where common latrines served as receptacles for the daily excreta of large groups of men—as many as 60,000 at Camp Thomas in 1898. Army sewage studies later determined that a population of that size discharges an average of 9.4 tons of feces and 21,000 gallons of urine daily.¹³ That posed a prodigious disposal problem! Typhoid fever was so prevalent in nineteenth-century America that among any large assembly of recruits from different parts of the country there would be some individuals already infected with the disease. Their stools provided the locus of typhoid pathogens that could incapacitate their susceptible comrades within a two-week incubation period after rendezvous. Yet epidemics could be prevented, even in situations where typhoid fever was imported into the camps, by strict adherence to the simple and inexpensive disinfectant measures proposed by Budd.

From his Civil War experience Brig. Gen. George M. Sternberg, the Army’s surgeon general, realized that disease would probably be the leading cause of death of American soldiers in the impending conflict. He also understood that high morbidity and mortality rates from

disease were not inevitable and that they could be checked by existing preventive measures. On 25 April 1898, the same day that Congress declared war, Sternberg issued Circular No. 1, outlining the rules of personal hygiene and camp sanitation. Among the surgeon general's detailed instructions for strict sanitary policy was the proviso that all discharges from fever patients be disinfected immediately with solutions of carbolic acid or calcium chloride. Had his recommendations been carried out, there would have been little sickness. Unfortunately, although Sternberg reiterated his instructions in August, they were largely ignored and typhoid fever became rampant.¹⁴

Budd had recognized that typhoid fever was contagious, and he had even predicted the existence of a specific germ, which was subsequently discovered by Carl Joseph Eberth in 1880.¹⁵ By 1892 the following quite modern description of *Bacillus typhosus* (later renamed *Salmonella typhi*) could be found in the basic American textbook on bacteriology: a rod-shaped, motile, non-spore-forming aerobe with flagella surrounding the periphery of the cell.¹⁶

In 1896 Fernand Widal announced his discovery of specific agglutinins in the blood of typhoid patients and its application in the diagnosis of typhoid fever.¹⁷ Blood serum from a patient with typhoid fever caused a culture of typhoid bacilli to lose their motility and to clump together. Two years later, in the third edition of his *Principles and Practice of Medicine*, William Osler reported favorably on the specificity of the Widal serodiagnostic test. It was positive in 96 percent of the 2,283 typhoid fever cases tested and negative in 98 percent of the 1,365 nontyphoid fever cases.¹⁸ Notwithstanding the test's great potential value in diagnosing typhoid fever, the Army had neither diagnostic laboratories in the camps nor personnel trained to perform it.

Thus by 1898 the causative agent of typhoid fever had been identified, the Widal serodiagnostic test was available, the mode of transmission via infected feces was established, and effective preventive measures were known. The failure to protect the health of American soldiers who never went near a battlefield became a national scandal. Why was typhoid fever, a preventable disease, the major killer of the war? To answer this question, the War Department in 1898 convened a board consisting of Maj. Walter Reed, Victor Vaughan, and Edward Shakespeare to determine



An Intestine Ulcerated by Typhoid Fever
(Photo from William Budd, *Typhoid Fever* [1873])

the cause of the typhoid epidemic in the national encampments. Major Reed, the board's only Regular Army officer, served as its chairman.¹⁹

In August and September 1898 the board inspected all the major encampments and began a systematic analysis of the sick reports of nearly 108,000 officers and men. Twenty-one months later, in June 1900, the board completed its exhaustive investigation and concluded that "camp pollution was the greatest sin committed by the troops in 1898." Proper disposal of human waste, it found, was essential for maintaining the health of a command. The board noted that "wherever and whenever men congregate and live without adequate provision for disposing of their excrement, there and then typhoid fever will appear."²⁰

In the area of the Third United States Volunteer Cavalry at Camp Thomas, the board found "the sinks [latrines] full to the top with fecal matter; soiled paper was scattered about the sinks, and the woods behind the regimental camp was strewn with fecal matter. The Second Kentucky Volunteer Infantry was located in the woods; fecal matter was deposited around trees, and flies swarmed over these deposits not more than

150 feet from the company mess tents; the odor in the woods just outside of the regimental lines was vile.”²¹ Such conditions were not novel in military encampments. When faced with similar conditions during the Civil War, Col. Alfred Gibbs had dismissed Surgeon Benjamin Kneeland’s objection to the disgusting stench with the offhand remark that “that odor was inseparable from the army. . . . He said it was not exactly the odor of sanctity, but it might properly be called the patriotic odor.”²²

The board blamed line officers for the unsanitary conditions. In the military, medical officers can only recommend; line officers command. Physicians’ recommendations were commonly disregarded as contemptible intrusions from inferiors. In a foolhardy display of bravado, a corps commander deliberately drank water every day from a well condemned by a medical officer. Fortunately for the line officer, he did not come down with a fever. Presumably, he was immune to typhoid, doubtlessly having drunk polluted water for much of his Army life.²³

Despite the continual protests of medical officers, line officers and recruits neglected sanitation.²⁴ Inexperienced volunteer officers, anxious to be popular with the enlisted men, were particularly lax in enforcing discipline. It was their responsibility to put a stop to promiscuous defecation about the campsite, but they did not seem to care what the men did. Discipline was the key; without it sanitary regulations could not be enforced. In his military hygiene lectures to company-grade officers at the U.S. Infantry and Cavalry School at Fort Leavenworth, Kansas, Army Surgeon Maj. Alfred A. Woodhull emphasized, “Nothing . . . so distinctly marks ill-disciplined troops as soil-pollution by human waste, and apart from its intrinsic nastiness it is a powerful factor in the spread of disease.”²⁵

Medical officers and line officers should have the same goal, namely to preserve the fighting strength of the Army. Safeguarding the health of troops is crucial for the success of any campaign. Wars are waged by able-bodied combatants, and, as Woodhull observed, “the sick are for the time as ineffective as the dead.”²⁶ Typhoid fever, a severely debilitating disease, caused an enormous drain on the Army’s resources. The 20,738 cases of typhoid fever that occurred during the War with Spain equaled the loss of the services of twenty regiments of infantry! Why then were medical officers and line officers at odds? Why was there “an immense

amount of friction between the headquarters and the surgeons,” as Capt. Francis P. Fremont, an infantry officer who served during the war on the staff of the Second Division of the Third Corps, maintained in testimony before a presidential commission appointed to investigate the conduct of the war?²⁷

Tension between medical officers and line officers arose from a number of circumstances, causing a rift that proved detrimental to the welfare of the Army. Line officers consistently underestimated the deadliest of all enemies—infectious disease—and paid mere lip service to camp sanitation. They offered the excuse that they were too busy with matters of military necessity to squander their time and energy on such mundane issues as the proper location of company latrines.

Many of the medical officers’ recommendations were dismissed as unrealistic or unnecessary fads. The Army, line officers argued, was not a church picnic. Sacrifice, privation, suffering, and neglect were inevitable; they came with the territory.²⁸ Real soldiers had no expectations of being pampered with feather beds and lamb chops. Instead, they were expected to endure the hardships of camp life without complaint, indeed with a certain amount of pride. Maj. Gen. Joseph Breckinridge, who commanded a field army at Camp Thomas in August and September 1898, exclaimed, “You have got to get camp fevers with camp experience just as much as a child gets teeth.”²⁹ Military commanders never understood that much of the suffering they took for granted was needless and preventable. Further, they failed to appreciate that they stood *in loco parentis* toward their young men and were acting as their “guardians and protectors,” in Woodhull’s words, as well as their commanders.³⁰

In performing their duty, medical officers were sometimes perceived as whistle-blowers with ulterior motives, and they could be treated harshly by their superiors. On 16 July 1898, Maj. John Martin, a volunteer surgeon at Camp Thomas, was threatened with a court-martial unless he retracted his claim that too many cases of typhoid fever were occurring there. Although it pained him to see the facts suppressed, Martin caved in under pressure and recanted.³¹ Subsequent events showed that Martin had been right.

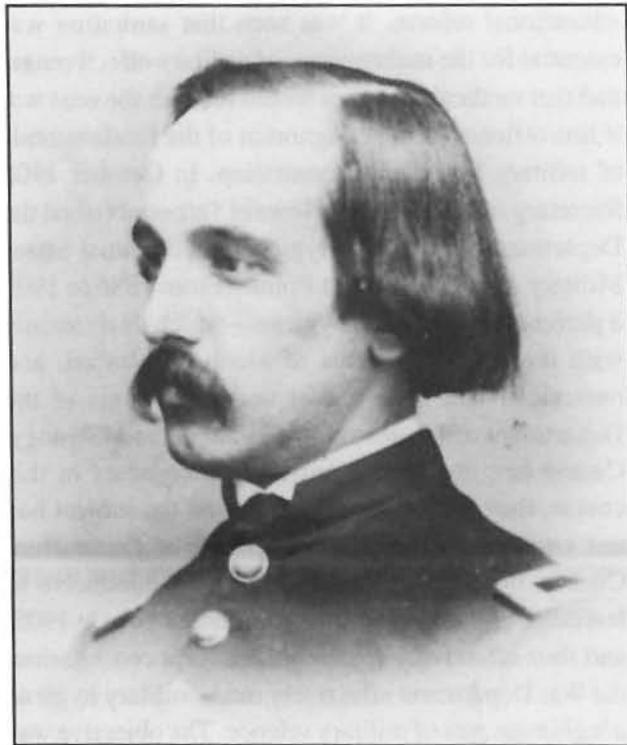
Line officers were jealous of their right to command, and they had difficulty accepting advice from subordinates who were not regarded as an integral

part of the military hierarchy. Officers of the line perceived medical duties as wholly clinical; that is, doctors restored the health of the sick and disabled. The idea that healthy men were as worthy of their attention as the sick was inconceivable. Therefore, attempts on the part of medical officers to interfere with the daily activities of *healthy* soldiers, even to prevent illness, came dangerously close, in the line officers' eyes, to usurping their command.³²

The Army doctor was given full control over caring for the sick; however, when it came to the broader question of military hygiene and the preservation of the health of the Army as a whole, his role was limited to that of an adviser. This advisory role placed singular demands on the Medical Department. A medical officer's sanitary advice, no matter how sincerely motivated or diplomatically expressed, implied censure. The line officer's pride could easily be wounded at the thought of a subordinate's suggesting that his methods were enfeebling his own command. Alfred Woodhull had long cautioned his fellow medical officers that they needed to be sensitive to the line officer's point of view, urging that "advice should never be tendered without occasion and always with the single motive of public good. Bearing this in mind, the utmost pains will be taken to avoid the least unnecessary irritation. To offer advice offensively may practically defeat the object. . . . However unpleasant it occasionally may be, it must always be recognized that in all military matters the ultimate responsibility rests upon that commanding officer."³³

A clear illustration of the Army's failure to appreciate the principles of public health appears in the use of rotating details of untutored enlisted men to hospital duty during the typhoid epidemic, which peaked in September 1898. Using trained nurses would have cost the Army more but would have saved soldiers' lives. Reed and his medical colleagues explained the problem:

Each morning 100 men were detailed to attend those sick with typhoid fever, to place and adjust bedpans, and to carry the contents of these to the sinks and to disinfect them. These men, at least the majority of them, were wholly ignorant of the nature of infection; they had never had any training as nurses;



Major Woodhull

(Photo courtesy of National Library of Medicine)

they knew nothing about the desirability or necessity of being careful in order to prevent infecting themselves, and they knew less about means of disinfecting their hands soiled with typhoid discharges. At the close of the day these men were returned to their company tents, and the next morning a new detail of the same number went through with the same routine. A more effective means for the spread of typhoid fever could scarcely have been devised.³⁴

The incompetency of these unqualified corpsmen translated into human tragedy. Witness the anguished plight of George Hoover of Evanston, Illinois, who rushed to his son's bedside at the Second Division hospital in Jacksonville, Florida, only to watch him die of typhoid fever. Enraged by the ignorance of the male attendants, Hoover shrieked, "My [two] boys have come here to die, if necessary, for their country, but not to die for want of care."³⁵

While acknowledging that the Medical Corps shared the guilt for the typhoid epidemic, the culpability of line officers was emphasized. Reed's scathing comments on the indifference of line officers to camp hygiene awakened authorities to the need for

educational reform. It was seen that sanitation was essential for the maintenance of military effectiveness and that medical tragedies would recur in the next war if line officers remained ignorant of the fundamentals of military hygiene and sanitation. In October 1905 Secretary of War William Howard Taft established the Department of Military Hygiene at the United States Military Academy at West Point.³⁶ From 1886 to 1905 a perfunctory course in hygiene—which dealt mainly with the harmful effects of alcohol, tobacco, and narcotics—had been taught under the aegis of the Department of Chemistry, Mineralogy, and Geology. Cadets had not been required to take notes in this course, they had not been graded, and the subject had not counted toward their standing at graduation. Clearly, these conditions had not been conducive to learning.³⁷ By making the subject compulsory in 1905, and thus effectively a prerequisite for a commission, the War Department effectively made military hygiene a legitimate part of military science. The objective was not to make line officers medical experts but to expand their qualifications for command.

In conclusion, scientific knowledge was not enough to alter military culture. It had to be translated into practice. Medical officers required the cooperation of line officers who had the ultimate authority to implement effective sanitary procedures. That cooperation was not forthcoming during the Spanish-American War. The Army's resulting failure to maintain the sanitary encampments its medical officers knew to be essential had tragic consequences for the health of American soldiery.

Dr. Vincent J. Cirillo is an independent scholar who holds a Ph.D. in the history of science and medicine from Rutgers University. His article on "The Spanish-American War and Military Radiology" is scheduled to appear in the May 2000 issue of the American Journal of Roentgenology. Dr. Cirillo is currently writing a book on the Spanish-American War's impact on military medicine.

NOTES

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2. James M. McPherson, *Battle Cry of Freedom: The Civil War Era* (New York, 1988), p. 854.

3. Mary C. Gillett, *The Army Medical Department, 1818–1865* (Washington, D.C., 1987), p. 279.
4. Disease continued its reign in the Anglo-Boer War (1899–1902), but claimed fewer deaths than did combat wounds in the Russo-Japanese War (1904–1905). The latter outcome has been attributed in part to the respect shown their medical officers by Japanese line officers. See William Osler, "War, Wounds, and Disease," *The Quarterly Review* 224 (July 1915): 150–61; Henry F. Vaughan, "Contributions to Epidemiology and Public Health," *Journal of Laboratory and Clinical Medicine* 15 (1930): 865–73; Gillett, *The Army Medical Department, 1865–1917* (Washington, D.C., 1995), p. 325.
5. *Report of the Commission Appointed by the President to Investigate the Conduct of the War Department in the War with Spain*, Senate Doc. 221, 56th Cong., 1st sess., 1900, 8 vols., 1: 114, 265.
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14. George M. Sternberg, *Sanitary Lessons of the War and Other Papers* (Washington, D.C., 1912), pp. 8–11; *Annual Reports of the War Department for the Fiscal Year Ended June 30, 1898: Report of the Secretary of War, Miscellaneous Reports* (Washington, D.C., 1898), pp. 727–28, 731.

15. Budd, *Typhoid Fever*, p. 93; Gert H. Brieger, "Carl Joseph Eberth," in Charles Coulston Gillispie, ed., *Dictionary of Scientific Biography*, 16 vols. (New York, 1970–80), 4: 275–77.
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18. William Osler, *Principles and Practice of Medicine*, 3rd ed. (New York, 1898), p. 38.
19. Reed, Vaughan, and Shakespeare, *Report on Typhoid Fever*, 1: xv.
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21. Walter Reed, Victor C. Vaughan, and Edward O. Shakespeare, *Abstract of Report on the Origin and Spread of Typhoid Fever in U. S. Military Camps during the Spanish War of 1898* (Washington, 1900), p. 47. For eyewitness accounts of the fetid conditions of the latrines and the neglect of sanitation by officers and enlisted men in the national encampments, see *Conduct of the War Department*, 3: 261, 313–14, 547, 701–03; 4: 842, 848, 868, 968, 1043–44, 1088, 1091, 1137, 1142, 1334, 1357–58, 1459, 1525; 5: 1590, 1656, 2150; 7: 3304.
22. Ltr, Benjamin T. Kneeland to Rev. James R. Bowen, 1 Jul 1899, in J. R. Bowen, *Regimental History of the First New York Dragoons (Originally the 130th N. Y. Vol. Infantry) during Three Years of Active Service in the Great Civil War* (n.p., 1900), p. 304.
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24. *Conduct of the War Department*, 3: 78; 4: 1036, 1143; 5: 1817–19, 1823; 6: 3085.
25. Alfred A. Woodhull, *Notes on Military Hygiene for Officers of the Line: A Syllabus of Lectures Formerly Delivered at the U.S. Infantry and Cavalry School* (1890, rev. 3rd ed., New York, 1904), p. 121. By the time this edition of his lecture notes had been published, Woodhull had retired from the Army as a colonel. The Department of Military Hygiene had been established at Fort Leavenworth in 1888. See Timothy K. Nenninger, *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881–1918* (Westport, Conn., 1978), p. 28.
26. Alfred A. Woodhull, *Military Hygiene for Officers of the Line* (New York, 1909), p. 43.
27. *Conduct of the War Department*, 3: 713, 715, with the quoted words on p. 715.
28. *Ibid.*, p. 76.
29. *Ibid.*, 5: 1759, 1781, with the quotation on p. 1781; David A. Clary and Joseph W. A. Whitehorne, *The Inspectors General of the United States Army, 1777–1903* (Washington, D.C., 1987), pp. 371–72.
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31. *Conduct of the War Department*, 4: 915–16, 6: 3009–12.
32. Alfred A. Woodhull, "The Scope of Teaching that Should Be Followed in the Newly Established Chair of Hygiene and Sanitation in Our Military and Naval Schools, and the Practical Results to Be Expected Therefrom," *Journal of the Military Service Institution of the United States* 42 (1908): 157–92.
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34. Reed, Vaughan, and Shakespeare, *Abstract on Typhoid Fever*, p. 229.
35. *Conduct of the War Department*, 3: 326–27, 4: 1564, with the quotation at 4: 1564.
36. War Department General Orders No. 176, 19 Oct 1905, *General Orders and Circulars, War Department, 1905* (Washington, D.C., 1906); *Report of the Surgeon-General of the Army to the Secretary of War for the Fiscal Year Ending June 30, 1906* (Washington, D.C., 1906), p. 130.
37. Alfred A. Woodhull, "Military Hygiene," *Journal of the Military Service Institution of the United States* 36 (1905): 349–53, with the quotation on p. 352.

New History of Fort Riley, Kansas

William McKale, a museum specialist at the Fort Riley Regimental Museum, and William D. Young, a member of the adjunct history faculty at Johnson County Community College, Kansas, have coauthored a new history of Fort Riley, Kansas. Entitled *Fort Riley: Citadel of the Frontier West*, the book was issued earlier this year by the Kansas State Historical Society as part of its Kansas Forts Series.

A New Tool for Planning Significant Army Historical Projects

The Historical Projects Development Process (HPDP)

By Richard W. Stewart

What Is the HPDP?

Mandated by Chapter 2 of Army Regulation 870-5, the Historical Projects Development Process (HPDP) is a new tool to develop and approve specific historical and museum projects involving the Center of Military History for inclusion in the Army Historical Program. Proposals for printed works, exhibits, audiovisual presentations, and electronic products on historical subjects produced at or with the assistance of the Center of Military History will henceforth move through a logical chain of refinement and approval steps until they are accepted by the chief of military history and entered formally in one of the Army's Five-Year Historical Plans.

What Are the HPDP Criteria?

Any idea for a historical project can benefit from thoughtful analysis and refinement, but not every Army historical project needs to be approved using the HPDP. Each Army major command (MACOM) undoubtedly has its own list of current and future historical projects that it plans to produce using only internal assets. The final versions of those products will be created using MACOM funds alone. In such cases there is no need for the MACOM to submit a proposal through the HPDP for approval: it is its own business. However, should a MACOM seek from the Center of Military History assistance in completing that project, whether in the form of monetary or personnel resources, then the proposal needs to enter the HPDP and be approved by the chief of military history. For example, if a MACOM wishes CMH to assist in writing a historical publication or if it wishes to "co-imprint" a book with CMH, then it must gain approval for that project, using the HPDP.

To be considered under the HPDP, a project must meet the following criteria:

- Result in a deliverable historical product, whether printed work, exhibit, audiovisual presentation, or electronic product
- Require a minimum of 90 days (720 man-hours) to complete

- Exceed an overall funding level, including contracting costs, of \$20,000

In addition, a project subject to the Historical Projects Development Process will either involve both an Army field program or other external entity seeking CMH funding, co-production, or co-imprinting, along with a cooperating CMH division or, if originating at the Center, will involve more than one CMH division.

If a project meets these criteria, the action officer working on that project must complete a Historical Project Proposal Form, CMH Form 2R (Test). This form is designed to provide a cover sheet for the project proposal packet, a summary of the project, other data needed for its evaluation, and a record of approvals and disapprovals.

How the HPDP Works

Once completed, the Historical Project Proposal Form follows the proposed project through its approval process. The project undergoes a sequence of reviews, starting with the originating chain of command; moving next to the Center of Military History's strategic planner (DAMH-SPX); then to the Historical Projects Review Panel (HPRP), chaired by the Center's chief historian; and finally to the Army Historical Strategic Planning Committee (AHSPC), chaired by the chief of military history.

Upon receiving the proposal, the Center's strategic planner works with the initiating team leader, branch chief, or division chief at CMH or, for proposals generated outside the Center, with the historian of the originating major command or other entity to ensure the completeness and clarity of the information needed to evaluate the proposal. When all the facts are in order, the strategic planner passes the proposal to the HPRP for initial evaluation. That panel, which convenes quarterly with its core staff and annually at the MACOM Council meeting with its full membership, carefully assesses to what extent each proposal will benefit the Army Historical Program overall. It also evaluates the

relationship of each proposal to other current proposals and to projects that have already been approved. After ranking each proposal in priority order, the HPRP submits the proposals to the AHSPC for further review and final decision.

The AHSPC, consisting of senior representatives of the entire Army historical community, meets annually at the Center of Military History in conjunction with the Department of the Army Historical Advisory Committee (DAHAC). Once it approves a list of projects, the AHSPC estimates starting dates and resources. Projects approved by this committee are assigned a project number and are included in one of the Army's Five-Year Historical Plans. At this juncture, the HPDP journey is completed, even though the actual work to make the project a reality may be just beginning.

The Historical Projects Development Process was created to provide a framework to carefully estimate the resources and steps necessary to complete a project

before it is approved. Its review process is designed to guarantee that any project proposal involving substantial Center of Military History resources will receive full and careful consideration before it is approved and entered into the Army's long-range plan. The process also tries to ensure that an approved historical project will fill a clear and recognized need of the Army, so as to make the best use of our always scarce historical resources.

Copies of the Historical Project Proposal Form and the HPDP Users' Guide will soon be available on the CMH web page at <http://www.army.mil/cmh-pg/hpdp.htm>. I encourage all those in the Army historical community who are planning a historical project that meets the above criteria to take a look at the guide and the form and to consider nominating their proposal through the HPDP.

Dr. Richard W. Stewart is chief of the Histories Division at the Center of Military History.

Commemorative Publications

In commemoration of the Army's 225th birthday and the 50th anniversary of the outbreak of the Korean War, the Center of Military History will publish during June 2000 a compact history of the U.S. Army, the fourth in a series of Korean War poster maps, and three pamphlets relating to the first seven months of the Korean War.

The compact history, by David W. Hogan, Jr., is entitled *225 Years of Service: The U.S. Army, 1775-2000*. Prepared to be ready in time for the Army's 225th birthday on 14 June 2000, this booklet was designed to fit into the cargo pocket of a soldier's basic daily uniform.

The Center has published Korean War commemorative historical poster maps in each of the past three years. These maps, which are available from the Government Printing Office as indicated below, relate to the following periods:

Map 1: UN Defensive Phase, 27 June -15 September 1950, CMH Pub 19-1, GPO Stock No. 008-029-00334-1, \$7.00

Map 2: UN Offensive Phase, 16 September-2 November 1950, CMH Pub 19-2, GPO Stock No. 008-

029-00338-4, \$7.00

Map 3: CCF Intervention Phase, 3 November 1950-24 January 1951, CMH Pub 19-3, GPO Stock No. 008-029-00353-8, \$7.50

The fourth map, which will be CMH Pub 19-4, will cover two Korean War campaigns, First UN Counteroffensive and CCF Spring Offensive, 25 January-8 July 1951.

The Center also anticipates the publication in June 2000 of the first three of a projected five commemorative brochures on the actions of the U.S. Army in the Korean War. The three brochures will relate to the same periods of the war as do the first three commemorative poster maps. The titles and authors of these pamphlets are as follows:

The Outbreak, by William Joe Webb

The UN Offensive, by Stephen Gammons

The Chinese Intervention, by Richard W. Stewart

The Center anticipates that all of these commemorative issuances will be available to Army publication account holders from the Army Publications Distribution Center-St. Louis and to the public at the Government Printing Office.

Book Review

by **Robert B. Bruce**

Castiglione, 1796

Napoleon Repulses Wurmser's First Attack

by **Bernhard Voykowitsch**

Helmet Military Publications, 1998, 96 pp.

270 Austrian shillings (about \$21.00)

This book is an operational study of the Battle of Castiglione, fought on 5 August 1796 between the forces of France and Austria during the War of the First Coalition. Although Castiglione was a small engagement, it was part of Napoleon Bonaparte's brilliant first Italian campaign of 1796–97. Thus the battle assumes a special importance in illustrating the methods of one of history's great military leaders during his first campaign as an army commander. In spite of the importance of Napoleon's first Italian campaign, there are only a handful of books in English on the subject.¹ Therefore *Castiglione, 1796*, offers to provide fresh insights into this engagement in particular, and the campaign in general, in a format vaguely resembling that of the popular Osprey campaign series. Unfortunately, the author's reach exceeds his grasp, and rather than a solid campaign history, the book is a hodge-podge of loosely connected data and confusing narrative that bewilders rather than enlightens the reader.

Bernhard Voykowitsch is not only the author of the book; he served as editor and publisher for the work as well. Add to this the fact that the author is an Austrian whose command of the English language is less than perfect, and you have a recipe for confusion, if not outright disaster. The text of this book contains so many typographical and grammatical errors, and is written in such convoluted prose, that it is a truly laborious chore to wade through. In a typical passage, Voykowitsch writes:

That Augereau in his boasting manner proposed the reckless persecution of the attack against Salo and Gavardo and offered with his division to contain the Austrian main force honours the personal bravery of this general but the responsible French

commander in chief couldn't act such lightheartedly: When Napoleon had himself convinced by the eagerness of his generals and of his troops it is this one decision during the Castiglione campaign which deserves the most admiration: to continue the main operation against Quosdanovich and to oppose only a covering force against Wurmser's presumed main force in full march on Montechiaro. This testifies his boldness, his will to conquer. (pp. 58–59)

The author is not a professional historian, a fact that he freely admits, nor is he an established author. Presumably to establish his credentials with the reader, he repeatedly boasts how close he lives to the Austrian *Kriegsarchiv* in Vienna. Unfortunately the author provides no citations for any of the material he presents, and so the reader is left to ponder from whence the information came.

The book is profusely illustrated with the author's photographs of the battlefield, as well as contemporary maps and illustrations of many of the French and Austrian commanders, but these are organized in a rather haphazard fashion that further adds to the reader's confusion. Perhaps the one solid portion of the entire book is the chapter containing Voykowitsch's biographical sketches of the French and Austrian commanders who took part in the campaign. The bios of the Austrian commanders, a woefully understudied subject, are particularly interesting, but even these lack analysis and depth. The reader interested in the Austrian army of the Napoleonic wars would be best advised to refer to Gunther Rothenburg's classic work on that army, *Napoleon's Great Adversaries: The Archduke Charles and the Austrian Army, 1792–1814* (Bloomington, 1982).

I cannot recommend *Castiglione, 1796*, to anyone interested in the subject. The writing is convoluted and amateurish and the information presented is of dubious value. The English-speaking reader interested in Napoleon's first Italian campaign would be far better served by reading either the older studies of this campaign or the pertinent section of David G. Chandler's *The Campaigns of Napoleon* (New York, 1966).

NOTES

1. Elijah Adlow, *Napoleon in Italy, 1796–1797* (Boston, 1948); Angus Heriot, *The French in Italy, 1796–1799* (London, 1957); William G. F. Jackson, *Attack in the West: Napoleon's First Campaign Re-read Today* (London, 1953).

Dr. Robert B. Bruce received his Ph.D. in history from Kansas State University in December 1999. He will assume his appointment as assistant professor of history at Sam Houston State University in Texas this summer. His article "To the Last Limits of Their Strength: The French Army and the Logistics of Attrition at the Battle of Verdun, 21 February–18 December 1916," appeared in the Summer 1998 issue of Army History (No. 45).

Book Review

by Conrad Crane

A Brotherhood of Valor

The Common Soldiers of the Stonewall Brigade, C.S.A., and the Iron Brigade, U.S.A.

by Jeffrey D. Wert

Simon and Schuster, 1999, 413 pp., \$25.00.

In his introduction to the Civil War diaries of Col. David Hunter Strother, editor Cecil Eby remarks, "In the English-speaking world perhaps the two subjects most written about have been William Shakespeare and the American Civil War." While some may argue to include other subjects in this category, it cannot be denied that the literature dealing with that seminal event in U.S. history is truly voluminous, and it is difficult for an author to produce something really new on the subject. Jeffrey D. Wert is a high school history teacher who has written four other Civil War books, and the jacket for this one promises "a visceral depiction of the Civil War from the perspective of the ordinary soldiers who fought it." Though Wert writes very well and has done extensive research, in the end this work fails to deliver on its promise of originality.

The author has chosen two of the most famous brigades of the war to compare, a pairing that presents considerable potential for analysis. The Stonewall Brigade was formed from Virginia regiments raised mainly in the Shenandoah Valley, while the Iron Brigade

was filled with soldiers from Wisconsin, Indiana, and Michigan. Wert offers perceptive views on the soldiers' backgrounds and initial motivations, preparing the reader for a comparison of their contrasting wartime experiences. Unfortunately, the book soon turns into a standard battle narrative, focusing primarily on commanders and tactical maneuvers at the unit level and bouncing back and forth between each brigade. While the combat descriptions are often exciting, similar coverage can be found in many other sources.

Wert does not really return to analysis until his concluding chapter, where he tries to come to grips with the factors that made these two brigades special. He gives most of the credit to two leaders of rare ability, Thomas J. Jackson and John Gibbon. The book does provide a useful study of their leadership, and it contains an extensive bibliography that should interest anyone researching these units. Though this work fails to live up to its promise or potential for groundbreaking analysis, it may appeal to novice readers who want to learn about these two famous brigades or to Civil War buffs looking for exciting battlefield narratives.

Lt. Col. Conrad Crane is a professor of history at the U.S. Military Academy. An air defense artillery officer, he holds a Ph.D. in history from Stanford University. His newest book, American Airpower Strategy in Korea, 1950–1953, was published by the University Press of Kansas earlier this year.

Book Review

by Anne W. Chapman

Melting Pot Soldiers: The Union's Ethnic Regiments

by William L. Burton

Second Edition, Fordham University Press, 1998
282 pp., cloth \$32.50, paper \$19.95

Melting Pot Soldiers is the fourth publication in the Fordham University series *The North's Civil War*. Other titles include *Diary of a Yankee Engineer: The Civil War Story of John H. Westervelt*, edited by Anita Palladino; *Abraham Lincoln, Constitutionalism, and Equal Rights in the Civil War Era* by Herman Belz; and *Liberty, Virtue, and Progress: Northerners and Their War for the Union* by Earl J. Hess. *Melting Pot Soldiers* was originally published by the Iowa State

University Press in 1988. Like the other works in the Fordham series, Burton's volume focuses on ideology and cultural values. In his preface to the second edition, Burton characterizes his work as an attempt to "offer a new frame of reference on ethnicity and the Civil War soldier." (p. ix) In short, his study offers a number of social insights, but the military historian will find little new regarding military operations.

Melting Pot Soldiers comes strongly to several conclusions. First, most immigrant volunteers served in units that were not definably ethnic. Second, most foreign-born soldiers did not differ fundamentally, as heroes or as victims, from their American-born contemporaries. That is, their ethnicity was just one facet of their character, not an overwhelming, driving force. In addition, immigrants to the United States, who had come primarily from Western Europe, were by 1861 deeply involved in the North's political system at the local, state, and national levels. Given that involvement and the thoroughly politicized recruitment of regiments during the war, ethnic politicians, like their native-born counterparts, actively "plunged into regimental politics as a path to post-war careers." (p. x) Burton believes that such activity and motivation should not diminish the immigrant leaders' contributions to the war effort. Another central theme of *Melting Pot Soldiers* is the argument that the war promoted assimilation and "Americanization," a paradox given the study's focus on separate regiments.

Burton's vehicle is to examine, in turn, the political situations in a number of states and major cities of the North on the eve of the war. Everywhere, he found that communities of ethnic Americans exercised major political influence. Irish Americans enjoyed a compelling voice in Democratic party affairs. German Americans and other ethnic groups participated in both major political parties, which vigorously competed for their support. To buttress his argument, Burton offers profiles of successful foreign-born politicians, especially those drawn from the German exiles from the failed 1848 revolutions and the Irish who had fled the economic woes of their native island. Burton also examines the relationships of ethnic groups to the larger society to help understand the emergence of ethnic regiments.

Melting Pot Soldiers was ambitiously researched in both primary and secondary sources. The author tapped letters, diaries, telegrams, and other unpublished materials, as well as contemporary newspapers, held

by library and historical society collections from Massachusetts to Missouri, including materials at the U.S. Army Military History Institute. These sources allowed him to supersede the monumental, earlier work on the subject, Ella Lonn's *Foreigners in the Union Army and Navy* (Baton Rouge, 1951).

In contrast to Lonn, Burton repeatedly comes down on the side of "assimilation" of ethnic groups. He criticizes those historians of ethnic groups who seem to divide the total population between members of their subject group and everybody else, known as "Americans." Burton's approach is thoughtful and his subjects are interesting, but he does not, to my mind, put to rest the "assimilation versus pluralism" debate. Indeed, his chapter headings—"The German Regiments," "The Irish Regiments," "The Others"—show how difficult it is to break from the traditional mold. Burton's volume is well written, and historians of the social milieu of the Civil War years will find it useful. The strictly military historian will perhaps find the photographs of ethnic regiments, drawn from a number of public repositories, of the greatest value.

Dr. Anne W. Chapman is a research historian at the U.S. Army Training and Doctrine Command Military History Office.

Book Review by Burton Wright III

***Flame On! U.S. Incendiary Weapons, 1918–1945*
by John W. Mountcastle
White Mane Press, 1999, 206 pp., \$ 29.95**

Flame has been one of the most effective weapons in war over the course of human history. When humans first discovered fire, they found something that could both save and destroy them. Over the centuries, mankind has increasingly come to understand both the benefits and the dangers of combustion.

In war, flame weapons have been used frequently, but never before had they shown the power and capability they demonstrated beginning in World War I. The use of flammable materials played a significant role in U.S. military operations in the twentieth century. A new book, *Flame On! U.S. Incendiary Weapons, 1918–1945*, relates the history of the development and

use of incendiary and flame weapons by the U.S. Army.

The book was written by someone who should know the subject. Retired Brig. Gen. John W. Mountcastle was the chief of military history for the U.S. Army from 1994 to 1998. The breadth of his research on flame weapons makes it clear that the author spent a considerable amount of time crafting this book, both in his graduate years and during his subsequent military service. As the reader delves into the book, he or she begins to appreciate the ups and downs of flame-weapon development and how these weapons achieved a prominent place in World War II.

The book's early chapters are also good, especially the one dealing with flame weapons in World War I. Many may be surprised to learn that flame weapons were used in the Great War as early as the Battle of Verdun. I, for one, was ignorant of the extensive use of flame-throwers in that war and was particularly interested in the Chemical Warfare Service's attempts to develop its own. There are few books that cover the use of flame in World War I, and most of the books dealing with chemicals cover the use of lethal agents only from 1915 on.

The balance of General Mountcastle's book covers the use of flame and incendiary weapons during World War II. In this conflict considerable use of flame weapons was the norm. Most of the episodes involving these types of weapons were grim, but there are occasionally some funny stories relating to research and development.

One of the most humorous stories about the development of new incendiary weapons involved the bat bomb project. Bats are nocturnal creatures that seek dark places like the eaves of houses. The Chemical Warfare Service experimented with attaching small incendiary bombs to bats in an effort to set fire to wooden structures. Army planners anticipated that American bombers would drop the bats over Japan, that they would find their way into all sorts of highly flammable Japanese structures, and that the incendiary devices attached to the bats would set fire to these buildings.

The Twentieth Air Force was looking for a method to destroy the highly decentralized Japanese war industry. As American strategic bombing took its toll, war production in both Germany and Japan increasingly turned into what amounted to "cottage industries," with work often conducted in individual

homes. The bat bombs, it was hoped, might help in the destruction of this system. Unfortunately, the bats did not take well to being ejected from Army aircraft. Hence, the bat bomb idea was relegated, as the author relates, to the "not adaptable for operational use" file.

One of the most interesting chapters in this book concerns the use of incendiaries against both Germany and Japan. Since the war, a spirited debate has arisen over American use of flame weapons against civilian targets in those countries. General Mountcastle's chapters, "The Aerial Bombardment of Germany" and "Target Japan," provide the reader all the information he or she needs to make an informed decision on whether these weapons should have been used. The author appears to take no sides in the controversy, leaving the reader to evaluate the issue.

I believe it was necessary to use these weapons, and General Mountcastle provides the rationale in *Flame On!* His arguments are valid for the time. Hindsight is always clearer than foresight, but you can judge the actions of military decision-makers only in the context of what they knew at the time. It's always easy to second-guess, when you know the historical outcome.

If the reader looks in the back of book to the references, he or she will recognize that the author has clearly spent a considerable amount of time looking through the available primary source material. One can thus rest assured that this is an accurate history. The writing style, meanwhile, keeps your attention as you read about some highly technical situations.

If you read the three volumes that deal with the Chemical Warfare Service in the CMH series on the history of the U.S. Army in World War II, you will find much of the same information found in *Flame On!* This book, however, takes a narrow focus on just flame and incendiary weapons. This enables the reader to digest the story in chronological order without a discussion of any other nonincendiary weapons intruding. In *Flame On!* you see a coherent story, which is well written, and you can judge for yourself. I conclude that the Chemical Warfare Service performed its mission well and provided weapons that helped to win the war. No more could have been asked of it.

All in all, *Flame On!* is worth the time and effort to read. Since flame weapons have rarely been used in quantity since World War II, the chronological focus of the book is apt. But you get more for your money

than is advertised by the title. In an epilogue, General Mountcastle goes on to cover the Army's use of flame weapons up to the present day and includes photographs to show recent developments. This provides a good finishing touch to a most interesting and useful history.

Dr. Burton Wright III is the historian at the U.S. Army Chemical School at Fort Leonard Wood, Mo. A retired Army Reserve lieutenant colonel, Dr. Wright served on active duty in Korea with the 2d Battalion, 17th Infantry. He has taught military science at Missouri Western State College and history at Troy State University, Alabama.

Book Review

by Harold E. Raugh, Jr.

The Intrepid Guerrillas of North Luzon

by Bernard Norling

University Press of Kentucky, 1999, 284 pp., \$25.00.

After the fall of Bataan on 9 April 1942 and the surrender of Corregidor less than a month later, the majority of U.S. Army and Philippine Army soldiers serving in the Philippine archipelago became prisoners of war. Frequently, however, when commanders ordered their units to surrender, either the units as a whole or individual officers and soldiers refused. Other commanders ordered their units to disband and disperse; a few units, serving on detached missions or in isolated locations away from their parent units, decided to continue organized resistance. In time, a disparate group of anti-Japanese military elements and individuals in North Luzon emerged from the chaos of defeat and organized themselves into a relatively effective 20,000-man guerrilla force.

This interesting book focuses on the World War II activities of Troop C, 26th Cavalry, Philippine Scouts, which later expanded to become the guerrilla Cagayan-Apayao Forces (CAF) in two provinces at the northern end of Luzon. Shortly after the Japanese landed at Lingayen Gulf on 22 December 1941, this troop was deployed to assist in the defense of nearby Baguio, the summer capital of the Philippines located high in the mountains some 125 miles north of Manila. Baguio was an early objective of the Japanese, who captured

it on 24 December. This cut off the troop from the main American-led force. After a few weeks of desultory fighting near Baguio, Troop C trekked 125 miles farther northeast to Tuguegarao, where the Japanese had established an airfield.

Under the command of Capt. Ralph Praeger, Troop C thereafter engaged in active hostilities against the Japanese. Its 12 January 1942 raid on Tuguegarao was generally a success, although American commanders greatly exaggerated its results to lift the sagging morale of their forces in the Philippines. To minimize casualties and the risk of being compromised and captured, the troop thereafter reduced in frequency and scale its ambushes and other combat patrols. However, troop members continued to conduct reconnaissance patrols and otherwise gather information about the enemy, and they sent reports to higher headquarters twice daily. This book chronicles in rich detail the daily operations, trials, and tribulations of Troop C soldiers and their guerrilla counterparts, until the Japanese captured Praeger on 30 August 1943 and the Cagayan-Apayao Forces disintegrated. That guerrilla outfit's contribution to eventual Allied victory was noteworthy and commendable.

Author Bernard Norling, an emeritus professor of history at the University of Notre Dame, is no stranger to the saga of U.S. Army guerrilla operations in the Philippines. Norling is the co-author of three earlier books written with U.S. Army officers who participated in Philippine guerrilla operations. He joined with Samuel Grashio in writing *Return to Freedom* (Tulsa, 1982), with Ray Hunt to produce *Behind Japanese Lines* (Lexington, Ky., 1986), and with Robert Lapham on *Lapham's Raiders* (Lexington, Ky., 1996). Unfortunately, it appears that Norling's association with Grashio, Hunt, and Lapham tainted his perspective toward other guerrilla elements and leaders, especially Col. Russell Volckmann, the eventual commander of U.S. Army Forces in the Philippines, North Luzon, who consolidated all the guerrilla units there under his command.

While commenting upon the quality of guerrilla-acquired intelligence, the author notes insightfully that "the same scrutiny and studied skepticism should be accorded postwar statements by guerrillas about their own wartime activities and about each other. Rivalries among them were keen, and memories have dimmed markedly in the ensuing half century." (p. 62) There is more than a touch of irony here, since Norling must

admit that “most of what is known about the day-to-day existence and activities of the Praeger organization comes from a single source: ‘Operations of Troop C, 26th Cavalry Philippine Scouts in Northern Luzon: The First Two Years,’ which Jones [the troop’s executive officer] wrote entirely from memory in 1946.” (p. ix) Norling uses this document extensively and uncritically. Norling does assess the two diaries of Col. John P. Horan, who commanded at Camp John Hay in Baguio, one apparently written contemporaneously in 1941–42 and the second retrospectively in 1960. Yet while Norling questions the trustworthiness of Horan’s 1960 diary (pp. 36–37, 83–84), he nonetheless uses it when it bolsters his own perspectives. Norling’s frequent use of unconfirmed individual sources to support his assertions, some of which are at odds with official Army histories, is disturbing.

In spite of these concerns about sources and documentation, *The Intrepid Guerrillas of North Luzon* is important and timely in that it again draws attention to the small group of stalwart American soldiers who refused to surrender at Bataan or Corregidor and to their intrepid Filipino allies who for years harassed and fought the Japanese invaders. The actions and achievements of these American and Filipino guerrillas give meaning to the words “sacrifice” and “valor” and serve as an inspiration to contemporary readers.

Lt. Col. Harold E. Raugh, Jr., U.S. Army, Retired, served in Berlin, South Korea, the Middle East, and Croatia during a twenty-year career as an infantry officer. He also taught history at the U.S. Military Academy and holds a Ph.D. from U.C.L.A. Colonel Raugh is the author of Wavell in the Middle East, 1939–1941: A Study in Generalship (London, 1993).

Book Review

by M. Wade Markel

The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941–1945

by Peter R. Mansoor

University Press of Kansas, 1999, 346 pp., \$35

Lt. Col. Peter Mansoor has joined the growing number of historians who have come to realize that the Allies won the Second World War after all. While

it has always been clear to such thoughtful historians as Richard Overy and Gerhard Weinberg that there was more to Allied victory than sheer weight of numbers, the dominant view seemed to be that the Allies triumphed in spite of their ground combat forces. Martin van Creveld and others of the “maneuver warfare” school exalted the German *Wehrmacht* as the paragon of military effectiveness. But at least since the appearance in 1988 of several significant essays in the third volume of *Military Effectiveness*, edited by Williamson Murray and Allan Millett, American historians have increasingly questioned this hagiography; indeed, the trend has grown so strong that it can hardly be called revisionist any longer. Brig. Gen. John Brown and retired Lt. Cols. Keith Bonn and Michael Doubler have written spirited, if somewhat flawed, defenses of U.S. Army doctrine and combat capability.¹ Mansoor’s *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941–1945*, is at the same time both the latest and the best of the post-revisionist work.

Mansoor focuses on sustainability and continuity. He argues that the ability of Army of the United States (AUS) divisions to sustain themselves allowed them to generate combat effectiveness superior to their German counterparts. In so doing, he takes a highly critical look at the “90-division gamble,” so often cited as evidence of superior American strategic foresight. Mansoor makes a convincing case that the “gamble” resulted more by accident; according to him, a slightly more effective mobilization would have produced more military manpower, which, combined with an increased allocation of soldiers from a “bloated” Army Service Forces, would have enabled America to field more divisions. This would have permitted commanders to pull units out of the line to conduct literally life-saving reconstitution and retraining.

Since they did not do so, American divisions in the European Theater of Operations remained almost continuously committed to combat, which, Mansoor argues, necessitated the much maligned individual replacement system. Mansoor concedes that, initially, the commitment to combat of untrained, inexperienced soldiers did in fact lead to a tragically short life expectancy. Commanders quickly learned, however, to ensure that their soldiers had a modicum of training before sending them up on the line. In fact, because divisions were able to maintain themselves indefinitely,

their accumulation of experience, combined with outstanding combat support, eventually allowed them to master their vaunted German opponents.

In many respects, this book is the best of the genre, as befits the most recent addition. Mansoor's empirical approach is convincing. By following divisions through their life cycle, he is able to avoid problems of selectivity. He has exhaustively mined U.S. Army sources, making the most of archival and oral history collections at the U.S. Army Military History Institute and supplementing them superbly with veterans' reminiscences he has assiduously collected. Better still, he includes contemporary German evaluations of their opponents, which, incidentally, were far more favorable than their postwar reminiscences.

This book will by no means settle the controversy over American ground combat effectiveness, however. Colonel Mansoor rests his argument on a comparison of American and German infantry divisions, a comparison that is not as conclusive as might first appear. American divisions were considerably more robust than their German counterparts, especially by the end of the war. While the latter possessed a vast advantage in the number and quality of machine guns, American divisions had more of just about everything else, especially artillery and tanks. After the German Ardennes counteroffensive sputtered to a halt, one German general observed that the typical U.S. infantry division, with its habitually attached tank battalion, possessed more and better tanks than the typical Panzer division. While Mansoor convincingly demonstrates that the skill with which American commanders employed these assets confounded their enemies, the implication persists that U.S. combat effectiveness depended on material superiority.

Thus both the value and the limitations of *The GI Offensive in Europe* lie in its "presentist" perspective. It requires no great imaginative leap for the reader to discern a suspicion of the austere logistical constraints placed upon today's "Army of Excellence" in Mansoor's criticism of McNair's decision to "pool" resources at the theater-army level. That doesn't make him wrong, but the reader should consider carefully whether the conditions that made "pooling" unwise in 1944 still apply today. Likewise, his criticism of the "90-division gamble" undoubtedly reflects a soldier's resentment of America's proclivity to operate on the thinnest of margins in terms of ground power. Mansoor

sees only the casualties that might have been avoided had ground power occupied a higher position in America's strategic planning, and he makes only token acknowledgment of the symmetry of the nation's forces which depended, in part, on maintaining only a relatively small ground combat component. The book touches directly upon questions the Army is currently considering, ranging from issues of logistical support and manning to the debate over independent brigades, and it merits reading not solely by students of history but by our military policy makers as well.

NOTES

1. John S. Brown, *Draftee Division: The 88th Infantry Division in World War II* (Lexington, Ky., 1986); Keith E. Bonn, *When the Odds Were Even: The Vosges Mountains Campaign, October 1944–January 1945* (Novato, Calif., 1994); Michael D. Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944–1945* (Lawrence, Kans., 1994).

Maj. M. Wade Markel teaches military history at the U.S. Military Academy. He is a doctoral candidate at Harvard University and is preparing a dissertation on the effects of Army officer personnel policy on tactical leadership between 1939 and 1992.

Book Review by Fred L. Borch III

***Honor Bound: American Prisoners of War in Southeast Asia, 1961–1973*
by Stuart I. Rochester and Frederick Kiley
Second edition, Naval Institute Press, 1999
706 pp., \$36.95**

Honor Bound is truly the definitive work on the American prisoner-of-war experience in Southeast Asia. No book could have been more thoroughly researched or provided more detail on American men (and women) held captive by the North Vietnamese, Viet Cong, Pathet Lao, and Communist Chinese between 1961 and 1973. The authors, Stuart Rochester, a professional historian with the Office of the Secretary of Defense, and Fred Kiley, a retired Air Force officer who teaches at the Air Force Academy, wrote *Honor*

Bound as part of their official duties. The Department of Defense sanctioned their research and writing not only assured them virtually unlimited access to official prisoner-of-war records, both classified and unclassified, but also facilitated their access to the soldiers, sailors, airmen, marines, and civilians held as prisoners of war during the Vietnam conflict. The Historical Office of the Office of the Secretary of Defense published the first edition of this book in 1998.

Despite the tremendous volume of factual information in *Honor Bound*, the book is never tedious or boring. On the contrary, it is both riveting and compelling. Riveting because the dispassionate writing in *Honor Bound* has the opposite effect on the reader; the stories it tells of terrible suffering and incredible courage will catch hold of the reader's emotions and not let go. Compelling because what Rochester and Kiley have written exerts a powerful and irresistible impact on the reader. Thus, for example, while many who read this book know that retired vice admiral and one-time vice presidential candidate James Stockdale was horribly brutalized by the North Vietnamese, the pages of *Honor Bound* leave no doubt why Stockdale was awarded the Medal of Honor after more than seven years as a prisoner of war. Stockdale's experiences and those of men like John McCain, Bud Day, Nick Rowe, and others are simply electrifying.

While much of *Honor Bound's* narrative focuses on the experiences of individual combat captives—and this is more than enough reason to read the book—what really makes the study important is the overview it presents of the prisoner-of-war experience in Southeast Asia. For example, Rochester and Kiley demonstrate conclusively that those Americans held in Laos and South Vietnam suffered more, and had markedly lower rates of survival, than those Americans held in Hanoi. The authors show that it was better to be held by the North Vietnamese than to suffer the “peculiar blend of bondage and vagabondage” (p. 478) that was the lot of prisoners of war held in South Vietnam. But it was worse still to be held prisoner by the Pathet Lao, whose poor treatment of American captives, combined with the hostile environment of Laos, made survival there difficult at best.

Similarly, *Honor Bound* shows that American civilians taken prisoner in Southeast Asia suffered the same deprivations and brutal mistreatment as their military colleagues. Thus, for example, civilian pilot

Ernest Brace, taken prisoner by the Pathet Lao in 1965, became “the longest-held civilian prisoner of war and the longest-held survivor, civilian or military, to return from Laos.” (p. 283) To ensure that the reader may understand the full ramifications of life as a prisoner of war, *Honor Bound* includes a series of line drawings (before p. 147) illustrating how the North Vietnamese tortured Americans in their custody.

Part of the “big picture” of the prisoner-of-war experience in Southeast Asia which Rochester and Kiley might have explained more fully was the evolution of American and South Vietnamese thinking about the legal status of prisoners of war. Early in the Vietnam conflict, American officers expressed little interest in prisoners of war or in the laws of war relating to combat captives. This was because the South Vietnamese took the view that the Viet Cong were bandits deserving prosecution and punishment as criminals. The decision to afford prisoner-of-war status to enemy combat captives came only after large numbers of Americans began to be captured too. Recognizing that captured Americans would not survive unless they obtained the protections of the Geneva Convention on prisoners of war, Army lawyers like Col. George Prugh, the staff judge advocate for the U.S. Military Assistance Command, Vietnam, from 1964 to 1966, led efforts to persuade the South Vietnamese that their conflict with the Viet Cong and North Vietnamese was no longer simply an internal civil disorder.

As a direct result of Prugh's work, the military, and later the government, of South Vietnam acceded to the American view that the insurgency was an armed conflict of an international character and agreed to afford the benefits of the 1949 Geneva Prisoners of War Convention to all captured Viet Cong and North Vietnamese soldiers. This was a public relations coup for the South Vietnamese, which also enhanced the chances for survival of U.S. servicemen held by the Viet Cong and North Vietnamese. While the enemy never officially acknowledged the applicability of the Geneva Convention and the treatment of American prisoners of war continued to be brutal, the survival rate of American military captives improved. Gone were the days when an American adviser was beheaded and his head displayed on a pole by the Viet Cong. On the contrary, the more humane treatment afforded Viet Cong and North Vietnamese Army prisoners exerted

constant pressure on the enemy to reciprocate, and the American prisoners of war who came home in 1973 survived, at least in part, because of a policy change sought by the Army's lawyers.

While *Honor Bound* might have benefited from more legal history, that arguably is specialized information that goes beyond the scope of the monograph. In any event, Rochester and Kiley do examine, in the first eighty-five pages of their study, the experiences of French (and American!) prisoners of war held by the Viet Minh from 1946 to 1954, as well as the fate of prisoners held by the Viet Cong from 1961 to 1964. Consequently, the reader receives a fully adequate historical setting for the 500 pages that follow.

Honor Bound has received rave reviews in the *Washington Post* and other widely read newspapers and journals. I have seen only one criticism of note, which is worth mentioning if only to demonstrate its foolish character. After conceding that the book "contains just about any detail that a careful researcher could want," the reviewer in the respected *Journal of Military History* complained that Rochester and Kiley failed to include information about deserters who, after absenting themselves from the American forces, remained in South Vietnam after hostilities ended.¹ Certainly, it would have been interesting to learn what happened to the unknown number of Americans who intentionally went "missing in action." But to criticize *Honor Bound* for failing to examine this issue is misplaced. The clear focus of *Honor Bound* is on prisoners of war—those held as combat captives against their will—and not on turncoats.

The three appendixes in *Honor Bound* are also worth mentioning. The first provides useful comparative data on prisoner-of-war numbers in World Wars I and II, Korea, Vietnam, and the Persian Gulf War. Appendix 2 provides the locations of all prisoner-of-war camps in North Vietnam. While these are both valuable, Appendix 3 is a treasure: a twenty-page alphabetical list of all U.S. personnel captured between 1961 and 1973. The list includes data on the time each spent as a prisoner and, where determined, whether the prisoner of war died in captivity, escaped, or was eventually released. While reading *Honor Bound*, I referred frequently to this appendix, for I often wanted to know what would eventually happen to the person I was learning about.

As Jim Stockdale writes in his Afterword to this edition of *Honor Bound*, the American prisoner-of-war experience in Southeast Asia was a "grim, sustained, and bloody struggle." (p. 593) The irony is that while hundreds of thousands of American men and women could not prevail against the North Vietnamese and their allies, the prisoners of war won their battle through sheer determination. As the story of their fight, *Honor Bound* belongs in every library and on the bookshelf of everyone interested in the triumph of the human spirit and the war in Vietnam.

NOTES

1. *Journal of Military History* 63 (October 1999): 1043–44, with the quoted words on p. 1043.

Col. Fred L. Borch III is the staff judge advocate of the U.S. Army Signal Center, Fort Gordon, Ga. He holds law degrees from the University of North Carolina at Chapel Hill and the University of Brussels in Belgium. The Office of the Judge Advocate General and the Center of Military History plan to copublish his book-length manuscript, "Judge Advocates in Combat: Army Lawyers in Military Operations from Vietnam to Haiti."

Book Review

by Stephen A. Bourque

The Eyes of Orion

Five Lieutenants in the Persian Gulf War

by Alex Vernon; Neal Creighton, Jr.; Greg

Downey; Rob Holmes; and Dave Trybula

Kent State University Press, 1999, 330 pp., \$35.00

While reading *The Eyes of Orion: Five Lieutenants in the Persian Gulf War*, my mind often wandered back to my own platoon experience over twenty-five years ago. I remember that when seemingly overwhelmed with the task of keeping my M114 reconnaissance vehicles and M551 Sheridans operating in the New Mexican desert, some senior officer would invariably wander over. Observing my frustration, he would often proclaim with absolute certainty, "Hang in there, lieutenant. This is the best job you will ever have in the Army." Years later, as a battalion executive officer,

I found myself dispensing the same, usually unwanted, advice to my platoon leaders, now trying to keep their M1 tanks running in the wilds of Fort Riley. Alex Vernon and his fellow officers remind us what platoon command is actually like.

The Eyes of Orion is a chronological narrative of the Persian Gulf War from the lieutenant's point of view. Neal Creighton, Jr., and Alex Vernon, two of the lieutenants, spell out in an introduction the essential thesis of the manuscript, that the achievement of quick victory with few casualties "should not be allowed to erase the memory of the risks and fears we faced." (p. xxiv) They describe the challenges and concerns of those who fought at the head of small groups of soldiers, a perspective often lost in other commentaries on this short war.

These five young officers—Vernon, Creighton, Greg Downey, Rob Holmes, and Dave Trybula—each led platoons in the mechanized 24th Infantry Division's 2^d Brigade. Four had just graduated from West Point in 1989, and they commanded tank platoons. The "old man" of the group, First Lieutenant Downey, was a year older than the others and had graduated from the University of Nebraska at Kearney. Because of his seniority, he commanded the scout platoon of the 1st Battalion, 64th Armor. All but one of these young officers (Trybula) left the Army within a few years of Operation DESERT STORM. Their observations, therefore, provide us with a window on the world of small unit combat that is untainted by later promotions and assignments.

While relying essentially on their personal notes and observations, the authors judiciously use other primary and secondary sources to place their own activities within the context of the 24th Division's

operations. It is their recollections that give us a front row seat at the small unit level of the war. Before they left Fort Stewart, the authors worried because their platoons would be deploying to the Gulf with some tanks with turrets that could not turn or with inoperable fuel systems, as well as some scout vehicles that could not shoot. They were short of ammunition and spare parts for their vehicles, always a concern for armor lieutenants. In contrast with the approach taken in senior officers' memoirs, these lieutenants questioned their materiel readiness. With a new battalion commander and four new company commanders, they also considered their leadership suspect. Most of the platoon leaders had little gunnery or tactical training. As a group, the authors were well aware of their "not insignificant vulnerabilities and limitations." (p. 32)

Vernon and his comrades provide us an excellent window into the early stages of DESERT SHIELD. They describe the difficulties of navigating at night with a compass before the arrival of the global positioning system (GPS), the living conditions in the desert heat before the large logistical buildup, and what they perceived as wholly inadequate defensive positions that invited Iraqi assault. The lieutenants inform us that they did not have maps and that they frequently had no idea where they were in Arabia. Unlike some veterans, they remember getting sick and suffering from diarrhea. They describe their response to the threat of Iraqi chemical warfare and the oppressiveness of training in chemical protective equipment with the concomitant loss of almost a gallon of bodily fluid an hour in the heat of the day. They allow the reader to watch as engines "blow" and vehicles disappear into the maintenance collection point.

Above all, the authors give us an invaluable record

Cold War Archives Conference

The Department of Defense and the Library of Congress will cosponsor a conference on "Cold War Archives in the Decade of Openness" to be held on 28–29 June 2000 at the Library of Congress. The conference will highlight the library's collection of microfilmed Cold War documents that derive from a collaborative program involving the Department of Defense and the archives of Central European nations. The chief military archivists of Poland, Hungary, and Romania will review their nations' archival policies, and representatives of American research institutions will discuss the significance of the microfilmed collection.

Further information about the conference, including a conference program, is available at http://www.pims.org/projects/military_archive_conf.html. Inquiries may be directed to Helen Fedor at the Library of Congress or to Alfred Goldberg, the Defense Department historian. Ms. Fedor may be reached by telephone at 202-707-3704 or by e-mail at hfed@loc.gov. Dr. Goldberg may be contacted at 703-588-7890 or goldberga@odam.osd.mil.

of the personal side of the war. Unlike the impression that often emerges from official histories and senior leaders' memoirs, they record that not all leaders were competent, not all sergeants proficient, and not all soldiers magnificent. They describe the effects on soldiers of mail delays and discuss the soldiers' fixation on the strange insects that wandered around in the desert heat. Most poignantly, they remind us of their fears before battle and their thoughts and longing for their loved ones back home.

Of course, the book also gives us a glimpse into platoon-level combat. The authors' rendition of the assault on Jalibah Airfield is a superb description of a brigade attack. Far better than most accounts, it describes the tension within the turret and the fear, confusion, and adrenaline rush that took place during the assault. The young authors comment on the horror of discovering that Americans had killed other Americans in the heat of battle and on the sight of body bags loaded onto a medical evacuation helicopter.

Finally it is homecoming time, and we watch the lieutenants' return as conquering heroes. Once the fanfare is over, however, their mood changes. They find that the post-Gulf War Army no longer provides them the focus and job satisfaction they crave. They describe at some length their personal angst in deciding to leave the military and to seek some other calling with "the same sense of purpose the army once had" for them. (p. 269)

Two aspects of this book annoyed me. The narrative often reads like a collage, and in these sections I was unsure which lieutenant was telling the story. I will admit, however, that Alex Vernon has made a

valiant effort to delineate sections written by individual authors. Second, I found that the level of moralizing, agonizing, and introspection at the end of the book detracted from its essence.

These minor criticisms aside, this book is essential to understanding small-unit armor operations at the end of the twentieth century. Nothing yet written about the Persian Gulf War gives us the insights that these young officers have provided. Theirs are comments and observations unaffected by subsequent advancement and reassignment in the Army. Certainly, no book so well written provides the reader such a personal view of small unit action in the Persian Gulf War.

The Eyes of Orion is an essential story of modern combat that should find its way to the shelves of both military historians and the general public. It is fun to read and full of fascinating observations and insights. It should also be required reading for senior commanders to remind them of what goes on in the world of their platoon leaders. These are not, despite what those junior leaders may have been told, the best jobs they will ever have.

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