The AMEDD Historian

Army Medical Department Center of History and Heritage, Fort Sam Houston, Texas Number 28, Winter 2019

Contents

Notes from the Chief

In this edition, *The AMEDD Historian*, covers a variety of topics related to Army Medicine. Drs. Sanders Marble and Dennis B. Worthen have written insightful articles exemplifying the maxim that "history is about people" in their features about Raymond Bliss and Andrew Craigie. Scott C. Woodard's article on "living history" demonstrates another way the Army Medical Department Center of History and Heritage tells the story of Army Medicine. In a reflection of the past, Tom Harper Kelly reminds us of the innovation demonstrated by soldiers in the European Theater battling trench foot. Archivist volunteer, Christopher Califa, highlights one of our unique research collection files on an Army Nurse stationed on a Navy ship during World War II. Finally, the newsletter is concludes with two book reviews. "Woody" Woodard digests a graphic novel covering a medic in Afghanistan and "Scotty" Knight reviews a book featuring combat medicine from the Second World War, Korea, and Vietnam. Lastly, thanks to Scott C. Woodard for serving as the guest editor for this edition. Please submit your original work and suggestions to improve your story - instructions are on the last page. Happy New Year!

Nolan A. (Andy) Watson
Acting Chief, ACHH

Award for Valor Feature

Sergeant David B. Bleak. US Army Medical Department Center of History and Heritage.

For conspicuous gallantry and intrepidity in action at the risk of his life above and beyond the call of duty, Sergeant David B. Bleak, Medical Company, 223d Infantry Regiment, 40th Infantry Division, distinguished himself by conspicuous gallantry and indomitable courage above and beyond the call of duty in action against the enemy in the vicinity of Minari-gol, Korea, on 14 June 1952. As a Medical Aidman, he volunteered to accompany a reconnaissance patrol committed to engage the enemy and capture a prisoner for interrogation. Forging up the rugged slope of the key terrain, the group was subjected to intense automatic weapons and small-arms fire and suffered several casualties. After administering to the wounded, he continued to advance with the patrol. Nearing the military crest of the hill, while attempting to cross the fire-swept area to attend the wounded, he came under hostile fire from a small group of the enemy concealed in a trench. Entering the trench he closed with the enemy, killed two with his bare hands, and a third with his trench knife. Moving from the emplacement, he saw a concussion grenade fall in front of a companion and quickly shifting his position, shielded the man from the impact of the blast. Later, while ministering to the wounded, he was struck by a hostile bullet but, despite the wound, he undertook to evacuate a wounded comrade. As he moved down the hill with his heavy burden, he was attacked by two enemy soldiers with fixed bayonets. Closing with the aggressors, he grabbed them and smacked their heads together, then carried his helpless comrade down the hill to safety. SGT Bleak's dauntless courage and intrepid actions reflect utmost credit upon himself and are in keeping with the honored traditions of the military service.

Raymond W. Bliss, The Surgeon General, June 1947-June 1951

Sanders Marble, PhD

Major General Raymond W. Bliss, Surgeon General 1 June 1947 - 31 May 1951. US Army Medical Department Center of History and Heritage.

In the aftermath of World War II (WWII), Raymond Bliss made key decisions that shaped Army Medical Department (AMEDD) policy for decades. His decisions about personnel policy made residencies, and thus medical centers, a center of gravity in the AMEDD. He also dealt with a large number of challenges to the AMEDD as the Department of Defense (DoD) was created and study groups looked at combining various Federal hospital and medical systems.

Bliss joined the Medical Reserve Corps in 1911 and attended the 1912-13 iteration of the Army Medical School. During World War I (WWI), he had two brief hospital assignments. He commanded the base hospital at Camp Wheeler, GA, a mobilization camp that had a peak population of 29,000. In October 1918 he was assigned as commander of General Hospital No. 35 overseeing the conversion of a leased hotel into a 1,000-bed general hospital. Except for one assignment as a camp surgeon and medical supply officer, from WWI until 1940 he was always working in hospitals or within hospital administration and policy. (After retirement Bliss noted he was never a field doctor.) He never had any professional military education. He was briefly a Military Observer in England in 1940, then commanded the Fort Sill post hospital. From February 1942 to June 1943, he was Surgeon of Eastern Defense Command (the organization established to defend the East Coast) and First Army, based in New York City. In that role, he oversaw troop mobilization and deployment as well as hospitalization. In June 1943 Norman Kirk, the new Surgeon General (and his Army Medical School roommate), picked Bliss to head the new Operations Service in the Office of the Surgeon General (OTSG). In that role he oversaw hospitalization for the bulk of WWII patients; led a campaign to simplify paperwork in hospitals; and headed plans, operations, training (of hospital units and personnel), hospital construction, and patient movement for all the general hospitals in the US. He maximized air evacuation from overseas, and spearheaded the establishment of convalescent hospitals to free up beds in general hospitals for the wounded.

In 1945 he became the second Deputy Surgeon General (DSG), and would establish a pattern of DSGs becoming Surgeon General (SG). As DSG he was involved in demobilizing the wartime AMEDD and establishing postwar plans. Kirk gave Bliss wide latitude. Bliss persuaded the Army (and Congress) to give physicians special pay of $100/month, and the Army approved specialty pay for Board-certified physicians. Bliss worked to get medical (plus dental, veterinary, and pharmacy) Reserve Officer Training Corps (ROTC) units restarted, and he worked to get medical schools to re-establish “affiliated reserve” units where the school provided the bulk of the professional staff and the Army would add administrators and enlisted men on mobilization.

His most important move was to start a residency program in the AMEDD in late 1945. (He also restarted internships, another recruitment effort.) Bliss argued that Army clinicians had to be on par with civilian clinicians – times had changed since Merritte Ireland focused on having generalists in the Medical Corps (MC) and sending as many as possible to Army schools. Now, Army doctors had to practice in the mainstream of American medicine, and that meant residency training. That would also keep the standard of treatment in the Army the same as in civilian life, and remove a complaint that non-Regular Army doctors had during WWII - that they knew more about medicine than the Regulars who were in command. Having the residencies in Army general hospitals was better than having them in civilian hospitals, since it increased

clinical capacity in Army hospitals for both wartime and peacetime, and was a recruiting and retention incentive. The residencies were quickly approved, and civilian specialists supplemented Army personnel as instructors since the MC lacked qualified personnel. Some Army physicians were also sent to civilian residency programs, and the Army doctors sent as instructors to the medical ROTC programs, were also put in residency programs at those medical schools.

In mid-1947 Bliss was sworn in as SG, and largely continued the policies he had begun as DSG. Using Ft. Leavenworth's *Military Review* to announce his priorities to the whole Army, he enunciated three:

Prevention, both psychological and physical
Therapy, for those cases that could not be prevented
Research, to support both prevention and therapy

He identified one means to accomplish all these, a clinically-advanced MC. (Passing mention was made to keeping hospitals, laboratories, and other facilities up to date for diagnosis, treatment, and research, but his concern was more people than facilities.) While manpower was a problem, Bliss argued to expand rather than curtail residencies, said cutting dependent and veteran care would hurt residencies, and argued that dependent care should not be cut since it was an implicit part of a soldier's overall compensation. (This was before the Dependents' Medical Care Act that made medical care, or insurance coverage, an explicit part of military compensation.)

The national security environment in which Bliss was working was extremely turbulent. A National Military Establishment was created in 1947, which became the DoD in 1949. With the central authority, there was some medical oversight of the services. Starting in December 1945 there were efforts to run military medicine economically, with such low-key starting points as joint medical procurement, standardization of paperwork, and joint utilization of hospitals – i.e. sending Army or Navy patients to the other services' hospitals, avoiding the WWII situation of three substantial hospitals (one Army, one Navy, and one Army Air Forces) on small islands. (Bliss, with his Navy counterpart, were personally sent on temporary duty to observe where hospitals could be closed because of redundancy.) There were several years of outside committees scrutinizing the AMEDD (and the Navy Bureau of Medicine and Surgery) requiring a great deal of work to explain what the AMEDD was doing and why it was doing it. One committee had no less than 22 subcommittees, each of which needed reports and AMEDD representatives. Bliss had to show the AMEDD was efficiently using its personnel, especially physicians, and he had Tables of Organization and Equipment reviewed to validate physician requirements, further cut hospital paperwork, substituted officers from the new Medical Service Corps for some MC officers in administrative positions (and the new Women's Medical Specialist Corps for some clinical positions), and he accepted some further joint utilization at the referral hospital level. However, the outside studies continued, including a proposal from the Joint Chiefs to have a single military medical service, advanced by Chairman of the Joint Chiefs of Staff Eisenhower. The outside meddling culminated with a proposal to merge the Continental United States military hospital system (minus one hospital per service) with the Veterans Affairs and Public Health Service (which then ran hospitals) in a single Federal Health Service. Bliss thought an AMEDD having field units with general medical officers (GMOs), but no general hospitals for Board-certified physicians, would be a second-rate service.

Despite a warning from Army Chief of Staff Omar Bradley to avoid political lobbying, Bliss oversaw a campaign of proxies contacting influential Congressmen. Bliss accepted gradual change, but would not accept radical change. He was content with unity of effort, but rejected a unified military medical service. It is not clear whether Bliss' campaign was decisive in stopping the proposal. Bliss repeatedly argued that the medical departments had to be different to support different forces in the field, thus limiting the extent of unification.

There were quite a number of other challenges during Bliss' tenure. The US Air Force (USAF) was established in 1947, with the Air Force Medical Service following in 1949. The USAF, with its atomic bombs, was the mainstay of defense, although President Truman argued for Universal Military Training (UMT). Instead of UMT, a draft was reestablished in 1948, although physicians were specifically excluded. (Nuclear weapons would establish a new field for the AMEDD, advising on civil defense planning.) Military operations were few, as most of the Army was in the occupation of Germany and Japan, although the Berlin blockade

crisis of 1948 caused the creation of the North Atlantic Treaty Organization (NATO) in 1949 and a renewed focus on readiness for field operations. Also in 1949, the Chinese Communists would win the Chinese Civil War, and the US established a small Korean Military Advisory Group. Geopolitics in the Far East were changing. However, Europe was seen as more important to American interests, and resources were focused on Europe rather than Japan and Korea.

Closer to home, the AMEDD budget (and manpower) shrank as President Truman used a 'remainder' method to budgeting. Truman was convinced national strength came from fiscal solvency, and equally convinced the military always asked for more money than they really needed. Thus, he placed them last in line for money: after estimating Federal revenues, civilian government programs were funded, with the military getting the remainder. By the spring of 1950, Bliss had to choose several general hospitals to mothball and chop both internships and residencies. He simply lacked the resources for even his signature programs. The summer of 1950 would be a particularly tight time for physicians, as residents would not have finished their programs while post-WWII GMOs would be leaving. (While Bliss did not want to interrupt the residencies, in an emergency he would. He saw both interns and residents as a reserve of deployable personnel.) Bliss could only work on reducing paperwork and contemplate reducing dependents access to Army healthcare.

The Korean War dominated the end of Bliss' tenure as SG. General hospitals that closed in June 1950 (the end of the fiscal year) re-opened a few months later to support the enlarged Army. While the AMEDD had significant problems in mobilizing personnel and units to Korea, those problems mirrored the rest of the Army, which lacked personnel, equipment, and training. The AMEDD would produce good results in Korea, including lowered died of wounds rates in hospitals, would deploy a first-generation artificial kidney to support both wounded soldiers and Korean Hemorrhagic Fever patients, and would introduce new vascular surgery techniques that saved limbs. All of these were facilitated by Bliss' program to improve the quality of medicine in Army hospitals. Bliss visited Japan in October 1950, and returned with Douglas MacArthur's blessing to send more helicopter units. Bliss also got a surgical research team to Korea in November 1950 where they tested antibiotics, burn therapy, bone pinning, and methadone use rather than morphine.

Bliss wanted to make a major change in the AMEDD that would set it on a different course for generations. Facing a variety of existential challenges to the organization, he fought them all off and stayed true to his intent. He refocused the AMEDD from the line Army towards training hospitals, although he was willing to (and did) strip them of their interns and residents for field service in an emergency. He provided the Army highly trained doctors, and the healthcare infrastructure to support those doctors. He could not predict how that would be sustainable in the long term, but believed it was a change that had to be made.

Sources:

Bliss biographical file, ACHH
Bliss oral history interview, ACHH
Speeches of Raymond Bliss, National Library of Medicine.
Albert Cowdrey, *The Medics' War: United States Army in the Korean War*. Washington DC: US Army Center of Military History, 1987.
Bliss, "Solving the Problems of the Postwar Medical Department," *Military Review* 28/5 (August 1948), 3-12.
Bliss, "The Army Medical Department Faces the Future," Bu*lletin of the U.S. Army Medical Department*, 8/1 (January 1948), 31-37.
George Armstrong, "The United States Army Medical Corps and Medical Education," *Journal of the Association of American Medical Colleges*, 23/5 (September 1948), 289-96.
Anon. "Proposed Postwar Medical Department Plan," *Bulletin of the U.S. Army Medical Department*, 5/1(January 1946), 43-47.

Living History: Is that Wool Uniform Hot?

Scott C. Woodard

In Dr. Carl Becker's Presidential Address to the American Historical Association in 1931, he touched on the idea that the academic historian's antiquated research may not influence the layman. He argued,

> The history that lies inert in unread books does no work in the world. The history that does work in the world, the history that influences the course of history, is living history, that pattern of remembered events, whether true or false, that enlarges and enriches the collective specious present, the specious present of Mr. Everyman.

The Army Medical Department Center of History and Heritage's (ACHH) "living history" program attempts to relay the true story of Army Medicine. This experience helps develop critical thinking skills and historical mindfulness in US Army soldiers through their senses.

Various means are used within education to enhance learning. Some students retain a remarkable amount of information from a seemingly photographic memory. Others find repetition enables the ideas and concepts to resonate within their mind. Many will confess a leaning toward the visual arts to make knowledge stick. Some are blessed with a perfect understanding through lecture. An accurate portrayal of an historic event or person can capture the intellect through visual, tactile, auditory, and olfactory means. Who can recall a childhood scene of the Holidays where you smell food cooking, hear the music playing, and feel the wrappings torn from gift boxes? It is through the medium of living history that education reaches a wide audience by stimulating the senses.

Volunteers living historians portray a Civil War field hospital (l-r) Paula Ussery, Scott Woodard, Dave Windsor, Karl Boller, and Jed Elrod. Photo courtesy of author.

The ACHH utilizes the Army Medical Department Living History Company to enhance professional military education. Throughout the Army and popular culture, reenactments or historical interpretations have told the story of the Army. One of the largest gatherings of period military living historians is hosted by the US Army Heritage and Education Center in Carlisle Barracks, Pennsylvania in an annual living history event entitled "Army Heritage Days." Here living historians and reenactors portray a chronological timeline of history. The Army Medical Department Regiment has a Historic Uniform Program consisting of selections of medical uniforms from all conflicts of the US Army. Normally purposed for military ceremonies and heritage events such as noncommissioned officer inductions and historical commemorations, the uniforms may be loaned to all Active, Reserve, and National Guard medical activities.

Ceremonies are just one facet of highlighting the continual evolution of Army Medicine. Period reproduction uniforms are utilized in conducting leadership professional development, enhancing tours of the Army Medical Museum, or bringing life to history in the classroom whether in or out of doors. You can organize a learning environment utilizing the senses or become an active participant in telling the story of Army Medicine. Customers and volunteers are welcomed!

Shades of Valley Forge: Ad Hoc Preventive Measures against Trench Foot in the European Theater of Operations

Tom Harper Kelly

In late December 1944, Lieutenant A. Preston Price of the 1st Infantry Division was visited at his foxhole in Belgium by an old Citadel classmate serving in an adjacent company, Lieutenant Jack Lewis. Price's unit was suffering many casualties from trench foot. Lewis complained, as usual, that he could not feel his toes. Price watched as Lewis, unaware that he had a severe case of trench foot, pulled of his combat boot and removed his sock and "several of his toes come with the cloth, leaving several naked toe bones exposed."

Cold Injury, Ground Type

"Cold Injury, Ground Type" or "trench foot", plagued Army Ground Forces during the Second World War especially during the winter of 1944-1945 in the European Theater of Operations ("ETO"). Trench foot is a contracting of the blood vessels and reduction of oxygen supply to the tissues in the feet caused by the feet being wet for a prolonged period. The symptoms of trench foot are numbness followed by swelling; then by intense pain; and, in some cases, by tissue death, with gangrene. During the Second World War, the treatment was long, recovery slow, and sufferers were prone to recurrence.

20 February 1945, German Prisoners taken in the drive south of Colmar carry a wounded American soldier with them as they are marched out of the battle area. US Army Signal Corps.

As early as November, 1944, falling temperatures and autumn rains contributed to rising trench foot rates that reached crisis levels even before the Battle of the Bulge. The German counteroffensive in the Ardennes, and the brutal winter conditions during the winter of 1944-1945 further exacerbated the trench foot problem in the American armies. By late December 1944, stateside newspapers were reporting that trench foot was "as effective as bullets in knocking men out of battle" and that almost 18,000 men had been affected by the condition. In total, during the months of November and December 1944 there were approximately 23,000 losses to trench foot in the American armies, almost all combat infantrymen. By late January more stories appeared in the American press describing the lack of proper clothing and equipment for American soldiers on the frontlines including one from a reporter in the field with the 75th Infantry Division wrote that "The American doughboy, asked to fight the war under terrible winter conditions, is not equipped to meet it." The January 29, 1945 issue of *Newsweek* included a story titled "Shades of Valley Forge" detailing the failings of the Army Quartermaster Corps, specifically, "[t]he regulation shoes do not keep out the cold and dampness . . . The resulting trench foot may lead to gangrene and amputation." Meanwhile General Eisenhower's headquarters rebuffed such reports as "isolated cases."

"The Men Devised Many Ingenious Ways to Cope"

On January 30, 1945, an older but otherwise non-descript infantry replacement arrived at the headquarters of L Company, 310th Infantry Regiment, 78th Infantry Division near Kozen, Germany. While several senior officers knew that the soldier, ostensibly a private, was in fact Major Arthur Goodfriend an editor of the Army newspaper *The Stars and Stripes*, Goodfriend's identity was intentionally concealed so that he could learn first-hand how the front-line soldier withstood winter warfare conditions.

6 January 1945, 83rd Division (K Company, 3rd Battalion, 331st Infantry Regiment) infantrymen warm themselves around a fire in Fays, Belgium. US Army Signal Corps.

The men of the company he joined did not embody the Army's propaganda that the American soldier was "the best equipped soldier in the world" as they huddled around a woodstove in a forward command post wearing only field jackets (their heavy and clumsy overcoats long since discarded), many with gloves "out at the fingers" some wearing socks over or inside of them in order to prevent frostbite. Goodfriend noted that as a matter of necessity "the men devised many ingenious ways to cope with this problem and as a newcomer I received much expert advice." The veteran soldiers Goodfriend joined were quick to advise him to keep his feet dry and warm, but after his first day on the line he found that it was impossible to keep either his socks or combat boots dry and that the general consensus seemed to be that the Army's combat boots were "rotten". Even the battalion commander told Goodfriend that he believed "The men who made the combat boot should be put in jail" because the boots soaked up moisture so easily.

The veterans told Goodfriend to put on two or three pairs of socks so long as they did not make his boots fit too tightly and decrease circulation, but with the caveat that "most of our shoes are too tight anyway and when they fill up with water they get even smaller." They also recommended that he stick a felt or cardboard pad into his overshoes, which Goodfriend had not discarded unlike most combat troops, and Goodfriend noticed that the men "grabbed the high thick felt and leather boots worn by some of the Germans" littered around the area. According to Goodfriend, to the G.I. "rightly or wrongly the equipment he saw on Germans was generally rated as better than his own" and the "premature announcement of large quantities or winter equipment in the rear, on the ocean, or in preparation back in the United States had depressed the front-line soldier's morale and weakened his respect for the Army."

31 January 1945, Metz, France. SSG Orville Koehler of Hamilton, Ohio, 9th Armored Division, inspects a new issue of shoe-pak footgear. He is holding a felt innersole for one shoe. US Army Signal Corps.

"Lousy" Footwear

Due to failures in planning by the Office of the Quartermaster General, field commanders on the Continent, the Chief Quartermaster of the ETO, American combat troops were not properly supplied with uniforms and footwear for winter campaigning when they needed them most despite frantic efforts to rush supplies to the front. In the final analysis, bluntly stated in the official history of the Quartermaster, "[t]o a large extent, the special cold climate clothing and equipment arrived in the ETO too late to be really useful during the coldest winter months."

The combat divisions of the American armies fighting in ETO during the winter of 1944-45 were issued a variety of footwear, all flawed and none a panacea for trench foot. Type II and Type III service shoes, ankle height boots that were meant to be worn with canvas leggings,

which when wet from snow would freeze, tighten, and restrict blood flow to the feet. The critical difference between these boots was that the Type II had a smooth-surfaced leather whereas the Type III shoe had a flesh-side-out or "reversed upper" leather. Some soldiers, like those in the 78th Division observed by Major Goodfriend, were equipped with the new "combat boot" which was approximately 10 inches high and had a flesh-side-out bottom, like the Type III service shoe, but had a smooth-surfaced leather cuff with two buckles that dispensed with the need for leggings. To waterproof the soldiers' boots the Army supplied dubbin or dubbing, a wax and oil mixture. However, in one battalion commander's estimation (later confirmed by the General Board of the ETO), "all the dubbin in the world" could not keep moisture out of the combat boots his troops were issued and, worse still, it shut out air making the soldiers' feet perspire more and their feet colder.

All of the aforementioned types of boots were meant to be worn with canvas or rubber overshoes in winter conditions, however, overshoes were of marginal utility in combat operations. They were cumbersome and, more importantly, were an extra pair of boots that a soldier needed to carry. Therefore, overshoes were routinely lost or abandoned. A soldier in the 90th Infantry Division noted that overshoes were discarded because they "filled with water and made running or walking an exhaustive labor." An 84th Infantry Division soldier, "gave up on the overshoes. You couldn't run in those things—they were too heavy" and a soldier in the 26th Infantry Division left his overshoes along the side of a road because "they had not kept my feet dry and had rubbed my heels raw with blisters." Some soldiers stuffed straw or newspapers inside their overshoes which served two purposes, it insulated the feet and improved the fit of the boots in the overshoes. Others, rather than discard their overshoes, threw out their boots. James H. Langford, a rifleman in the 99th Infantry Division, recalled that during the first days of the Battle of the Bulge "The overshoes were too small to fit over my shoes and I could not keep [my] feet in condition with just the shoes" and so Langford improvised, "I had on a pair of four-buckle overshoes and three or four pairs of socks in order to keep my feet warm and dry." Another 99th Division soldier, William F. McCurdie, recalled that a sergeant in his platoon likewise did not wear boots, but rather seven pairs of socks inside of his overshoes.

The shoepac, a high moccasin type boot with rubber foot and leather top and issued with felt insoles, was considered the best form of footgear for preventing trench foot in the ETO. However, during the harshest winter months of 1944-1945 the shoepac was only issued in large numbers to infantry troops of the 7th Army in the Vosges Mountains of France. The 7th Army, unlike the other American armies in Northwest Europe, had drawn its winter supplies through Mediterranean Theater supply channels. Having learned hard lessons during the winter of 1943-1944, in which 1:4 casualties during the period of December 4, 1943 – February 19, 1944 were a result of trench foot, quartermasters in the Mediterranean proactively requisitioned large numbers of shoepacs. The shoepac was still imperfect, the leather tops were not waterproof, their rubber soles wore out quickly, and the rubber bottoms failed to ventilate the foot which caused excess sweating and a condition known as "shoepac foot." Robert J. McDonnell, a rifleman in the 79th Infantry Division, recalled that when wearing shoepacs his feet "sweat so much that after a good hike you could remove your socks and wring the sweat out." Also, the felt innersoles dampened easily and were hard to dry. To combat this, soldiers in the 100th Infantry Division made replacements from discarded cardboard 10-in-1 ration boxes.

20 January 1945. Gerimont, Belgium. Taking the well-known 'ten minute break' are, L-R: Sgt. Albert L. Soli, Westwood, Calif., Pvt. Jimmy Ferguson, Granby, MO., and T/Sgt. Robert Kircher Maplewood, N.J. Pvt. Ferguson is displaying his 'booties' which are used to replace shoes and socks when they get wet. These 'booties' or shoe-pacs as they are sometimes called, are a new winter innovation, and when not worn, are carried by the men inside their shirts for warmth. US Army Signal Corps. From the collection of The National WWII Museum.

The issues with the footwear issued to American soldiers in ETO during the winter of 1944-1945 were

20 January 1945, Gerimont, Belgium. These are "booties" which are worn to replace shoes and socks when they get wet. They are made from salvaged and captured blankets by the 216th and 540th Quartermaster Battalions. US Army Signal Corps.

legion, but perhaps the most eloquent summation of the Chief Surgeon of the ETO, Major General Paul R. Hawley, who reported in late 1944, "The plain truth is that the footwear furnished U.S. troops is, in general, lousy."

The 30th Infantry Division's Blanket "Booties"

The 30th Infantry Division may have created the most ingenious expedient item to combat trench foot. The 30th Infantry Division did not receive specialized winter equipment like mittens, heavy jackets, snow capes, and shoepacs in large quantities until after its part in the Battle of the Bulge was over. The division's history notes that in the bitter cold the infantrymen were "hardest hit by weather as well as bullets" and that "[t]he main reason why many line-company soldiers kept fighting was to get themselves houses within which to bed down." Colonel Branner P. Purdue, the commander of the 120th Infantry Regiment which along with the rest of the division was heavily engaged in reducing the Bulge salient, arranged to have "booties" made from salvaged and captured blankets to provide warm footwear for his troops. Each pair of booties was cut in the approximate shape and size of the combat boot and sewn three layers thick, but were compact enough to be carried inside a soldier's shirt until they were needed. By the middle of January 1945 enough booties had been made to provide them to every soldier in the regiment, and to each new replacement upon their arrival.

Captain Murray Pulver, a company commander in the 120th Infantry, recalled that "the booties inside of our overshoes made very warm footwear." To Gus Rouff, a mortarman in the 120th Infantry, there was "no doubt they saved many of us from getting trench feet." Rouff carried his booties inside of his shirt until periods of inactivity when he could remove his wet combat boots to dry, and wear his booties inside of his overshoes. Captain Pulver wore his booties inside of his overshoes during an attack, a decision that saved him from serious injury when a German grenade landed under his right foot and exploded. Pulver's overshoe was blown to pieces, but the extra thickness of the booty had absorbed much of the force of the explosion and left Pulver with only a bruise on his foot.

The 30th Infantry Division's booties received substantial attention in *The Stars and Stripes* and *Newsweek*. Other units, like the 8th, 78th, and 44th Infantry Divisions, appear to have produced their own booties based off of Col. Purdue's example, and the Medical Department's history of the European Theater acknowledged that the wearing of blanket booties inside of overshoes was one of the best forms of protection developed against trench foot in part because the toes and feet were allowed free movement typically lacking in other footwear.

Too Little, Too Late

While it is difficult to evenly apportion blame unpreparedness of the American armies in the ETO during the winter of 1944-1945, but it is much easier to quantify the effect of the resultant trench foot epidemic. From October 1944 to April 1945, approximately three American infantry divisions in Europe were hospitalized for trench foot, amounting to 9.25% of the total number of casualties during the entire Continental campaign.

Ironically, by the time supplies of winter footwear arrived in sufficient quantities to equip all combat troops and the Army's trench foot prevention education campaign began in earnest the fighting waned, temperatures rose, and the trench foot rate plummeted. While merely a footnote in the Battle of the Bulge epoch, the ad hoc methods of preventing trench foot demonstrate how despite material shortages of critical winter

uniform items, unit commanders and individual soldiers maintained combat effectiveness in one of the worst winters in recent history.

Sources

Arthur Preston Price, *The Last Kilometer: Marching to Victory in Europe with the Big Red One: 1944-1945,* (Annapolis, MD: Naval Institute Press, 2002)

Graham A. Cosmas and Albert E. Cowdrey, *Medical Service in the European Theater of Operations*, (Washington, D.C.: Center of Military History, 1992)

"Trench Foot Quelled in European Theatre," *Daily Boston Globe*, December 27, 1944

Jack Bell, "Thousands of Doughboys Hobbling on Frozen Feet," *Los Angeles Times*, January 27, 1945

"Shades of Valley Forge," *Newsweek*, January 25, 1945

"Ill-Clothed Yanks at Front Declared 'Isolated' Cases," *Daily Boston Globe*, January 26, 1945

Arthur Goodfriend, "Battle in the Snow," Infantry Journal, May, 1946

Tom F. Whayne and Michael E. Debakey, *Cold Injury, Ground Type*, (US Army Medical Department, Office of the Surgeon General, Department of the Army, Washington, DC, 1958)

Eudora Ramsay Richardson and Sherman Allan, *Quartermaster Supply in the European Theater of Operations in World War II*. Vol. III. (Camp Lee, VA: Quartermaster School, 1948)

Ed Cunningham, "U.S. Soldiers on the Western Front Learn to Fight Weather the Hard Way," *YANK*, March 2, 1945

Report, General Board, United States Forces, European Theater, Medical Section Study No. 94, *subject: Trench Foot*

Headquarters Communications Zone, European Theater of Operations, Office of the Quartermaster, *Quartermaster Field Observation Report No.7*, December 1944

Harold P. Leinbaugh and John D. Campbell, *The Men of Company K: the Autobiography of a World War II Rifle Company* (New York, NY: William Morrow and Company, Inc., 1985)

Dale Lindhugh, *Show Me the Hero: an Iowa Draftee Joins the 90th Infantry Division during WW II in Europe* (Bloomington, IN: AuthorHouse, 2009)

Bruce E. Egger and Lee MacMillan Otts, *G Company's War: Two Personal Accounts of the Campaigns in Europe, 1944-1945*. Edited by Paul Roley (Tuscaloosa, AL: University of Alabama Press, 1998)

Michael Seaman, "These are the Frosty Lessons of Winter Warfare," *The Stars and Stripes*, February 3, 1945, London edition, Warweek

Jim Langford, "Experiences of an Infantry Squad." CHECKERBOARD 99th Infantry Division Association

William F. McMurdie, *Hey, Mac: A Combat Infantryman's Story*, (Cameron, MO: American Home School Pub., 2000)

John Boyd Coates and S. B. Bays. *Cold Injury, Ground Type*, (Washington, D.C.: Off. of the Surgeon General, Dep. of the Army, 1958)

Robert J. McDonnell, *Dogface: My Experiences as a Combat Infantryman in WWII* (New York, NY: M2 Press, 2011)

Charles B. Kelleher, "Inner-Soles Cut From Cardboard Boxes Aids War on Trench Foot," *Century Sentinel*." Vol. II, No. 72, February 17, 1945

Hewitt, Robert L. Hewitt, *Work Horse of the Western Front: the Story of the 30th Infantry Division*, (Washington, D.C.: Infantry Journal Press, 1946)

Russ Jones, "Sleighs Carry Front Supplies," *The Stars and Stripes*, January 15, 1945, London

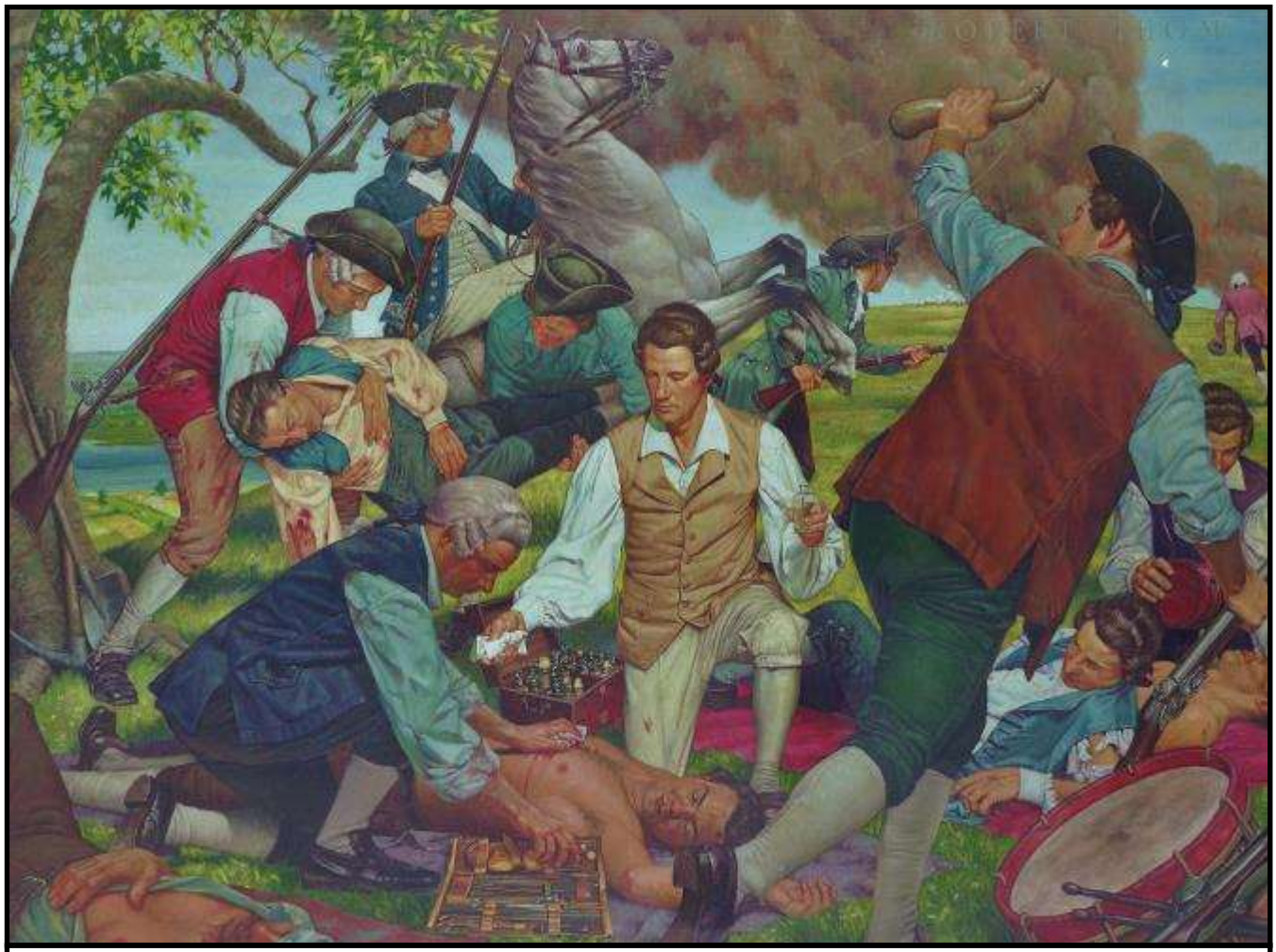
Gus Rouff*, From Holland to the Rhine : A World War Two Account*, (N.p.,: CreateSpace Independent Publishing Platform, 2013)

Murray S. Pulver, *The Longest Year*, (Freeman, S.D.: Pine Hill Press)

Laurence Critchell, *Four Stars of Hell* (New York: Berkley Books, 1987)

Andrew Craigie: America's First Apothecary General

Dennis B. Worthen, PhD



Andrew Craigie (center) kneels with a vial held firmly in his left hand, a medicine chest at his right. This is one of the Robert Thom paintings from the *Great Moments in Pharmacy* series. Originally commissioned by Parke Davis the collection was donated to the American Pharmacists Association Foundation in 2009. Printed with the permission of the American Pharmacists Association Foundation © 2009.

"Without such a one I know not how you could either procure sufficient Medicine for your Department or dispense them when got." With this statement Director-General and Chief Physician John Morgan emphasized the importance of Andrew Craigie's appointment as Apothecary General of the Continental Army in 1776.

Andrew Craigie (1754-1819) was born in Boston on February 22, the fourth child and second son of Captain Andrew Craigie and Elizabeth Gardner Craigie. The senior Craigie is believed to have been a native of the Orkney Islands who had been shipwrecked at Nantucket. In any event, that island was where he married Elizabeth Gardner in 1737, before moving to Boston. The Gardner's had been among the earliest settlers of the Cape Ann and Nantucket areas.

In 1763 the younger Craigie was enrolled in the Boston Latin School. Founded in 1635, a year before the founding of Harvard, the Boston Latin School had a long history of teaching Latin, Greek, and the humanities. A number of individuals involved in the fight for independence, including Samuel Adams and John Hancock, attended the school during the same period as Craigie, so it is not unlikely that he formed links with those who would later take an active role in the Revolutionary War. No record of further education or training in pharmacy or medicine has been found for Craigie.

On April 8, 1775, the Congress of Massachusetts approved the establishment of an army to protect the colony, and on April 30 the Committee on Safety appointed Craigie "to take care of the medical stores,

and to deliver them out as ordered by this committee." Craigie treated the wounded at the Battle of Bunker Hill on June 17, 1775.

On July 4, 1775, he was appointed Medical Commissary and Apothecary. As far as historians known, this was the first time that the role of the apothecary was recognized in an American military institution. In 1777, as part of the reorganization of the Medical Department of the Colonial Army, the role of the Apothecary General was clearly stated: "That there be one apothecary general for each district, whose duty it shall be to receive, prepare and deliver medicines, and other articles of his department to the hospitals and army." As pointed out by historian David Cowen, the interpretation of the terms *receive*, *prepare*, and *deliver* was that the apothecary was to procure, manufacture or compound, and distribute the necessary medicines and medicine chests. This was considered to be the "first time in American history of pharmacy that the professional duties of the apothecary were clearly defined."

On May 1, 1778, Craigie recommended the establishment of a principal store in Carlisle, Pennsylvania, "where all the medicines shall be prepared and the chests completed. … I would have an issuing store at a convenient distance from the army, from which the hospital and regimental chests might occasionally be replenished." This recommendation was put into operation with the establishment of the laboratory and stores for the military hospitals at Carlisle. The recommendation included the proposal that an apothecary would be assigned to each completed chest and that the surgeon and physician general of the army also be attended by an apothecary with a chest.

Medical supplies grew scarce during the early phase of the Revolution, when items could no longer be obtained from England. Initially, the Continental Army obtained its supplies from colonial apothecaries and druggists. During the first half of 1776, for example, the Marshall brothers of Philadelphia provided 20 medicine chests to troops from Pennsylvania, New Jersey, Virginia, and North Carolina. The medications of the day were predominately botanical, and the therapies largely consisted of cathartics and emetics. Peruvian or Jesuits' bark (i.e., cinchona bark) was used for all fevers, malarial and other, and was among the most essential medications. The typical medicine chest contained a supply of bulk botanicals and chemicals; simple preparations such as spirits, ointments, and plasters; the pharmaceutical equipment

Revolutionary Army medical chest containers were filled with calomel, tartar emetic, Epsom salts, opium, and Peruvian bark. Photo provided by the American Institute of the History of Pharmacy.

required for compounding and vessels in which to place the medicines; and surgical instruments and dressings.

In 1778 the first American formulary, the Lititz Pharmacopoeia, was developed to standardize medications available in military hospitals. The original Latin title of the formulary translates as the *Formulary of simple and yet efficacious remedies for use of the military hospital, belonging to the army of the Federated States of America. Especially adapted to our present poverty and straightened circumstances, caused by the ferocious inhumanity of the enemy, and the cruel war unexpectedly brought upon our fatherland.* Dr. William Brown, who was appointed Physician General of the Middle Department in 1778, is recognized as the author. The Pharmacopoeia contained

84 formulas for internal use and 16 for external use. While there is no direct evidence, the formulary most likely had an influence on Craigie and his laboratory in Carlisle, just 50 miles from Lititz, Pennsylvania, where Brown was serving. Brown and Craigie were well acquainted, as shown by a series of letters from Brown inviting Craigie to become a partner in a wholesale drug business in Alexandria, Virginia.

Although Andrew Craigie was still involved in the Army's pharmaceutical matters as late as August 1785, he had been officially mustered out of the Army in November 1783. His friendships with the leaders of the revolutionary period persisted. When Alexander Hamilton succeeded in establishing the first Bank of the United States, Craigie was named Director. When Henry Knox formed the Order of Cincinnati for officers who served for the duration of the war, Craigie joined, as did many others, including Presidents George Washington and James Monroe, and nine signers of the Declaration of Independence along with many others who served in Congress and early government positions.

Craigie took up trade as a wholesale apothecary in New York after the war, but he gave the practice up by 1789 because of mounting financial losses. He was also heavily involved in land and money speculation. He participated in the failed Scioto Affair with William Duer, an assistant to Alexander Hamilton. The participants in this venture bought up warrants to 5 million acres in Ohio, planning to sell them to French immigrants.

In 1791 Craigie purchased the Vassal Mansion in Cambridge, Massachusetts, which had been Washington's headquarters during the siege of Boston. He was active in Boston society, and in January 1793 he married the much younger Elizabeth Shaw. The two soon became estranged, and there were no children. At the end of his life, Craigie had lost his wealth and lived as a virtual hermit in his mansion, avoiding creditors and venturing forth only on Sundays for worship services at Christ Church. Craigie died of a stroke in his home on September 19, 1819 and was buried in Cambridge.

In 1959 the Association of Military Surgeons of the United States established the Andrew Craigie Award to honor the legacy of the first Apothecary General of the United States. Until 2010, The Craigie Award was given annually to a pharmacist in recognition of career accomplishments in service of the advancement of pharmacy within the federal government.

Craigie took center stage in the significant developments in American pharmacy that were a concomitant of the political and social upheaval of the American Revolution. First there was the recognition of the separation of pharmacy from medicine. It was Craigie who undertook the responsibility to "receive, prepare, and deliver medicines" in Massachusetts. It was Craigie who headed and successfully carried out the role of Apothecary General, the establishment of that office being a recognition that pharmacy had a special role in military medicine. It was under Craigie that the laboratory was established at Carlisle and the large-scale manufacture and distribution of pharmaceuticals was proven to be feasible and effective.

Based on the article originally published in the *Journal of the American Pharmaceutical Association (JAPhA)* now the *Journl of the American Pharmacists Association* 42(5): 2002 and printed with permission.

From the Archives

The Angel of the USS *Mercy*

Christopher Califa, Archives Volunteer

"5:30 am- there goes General Quarters and just when we were sleeping soundly- The Japs have No respect for ones [sic] beauty sleep- who knows better than the G.I.s in this war?"

So many years after World War II, Captain Mildred Lamars' words echo endlessly amongst the hushed shelves of the Army Medical Department Museum's archival wing. The "Japs" in this case are referring to the combatants of the ongoing Battle of Okinawa, where thousands upon thousands of Americans, Okinawans, and Japanese would perish in the fighting. Offshore from the carnage of Okinawa, sat the USS *Mercy*, with Captain Lamar who awaited the inevitable outcome of the fighting on the island, the flood of wounded, and dying.

Mildred Lamar's career is unique amongst her compatriots in the Army Nurse Corps, having been attached to a US Navy Hospital Ship, the USS *Mercy*, and sent to aid the wounded and sick in the Pacific Theater of the Second World War. In spite of the dangers that came with serving on a vessel deployed to the Pacific Theater, Lamar retained records of the ships' lively crew, soldiers and sailors alike. She kept spirits up with a vessel wide newspaper, "The Running Light" and organized numerous ad hoc musicals to remind the crews of home.

The seasoned nurse had stayed with the Army and later transferred to the newly established U.S. Air Force as a Flight Nurse. While the documents are dog eared, faded with time, and the pictures are weathered and torn, they offer insight into the life of a Soldier whose service spanned two evolutionary decades in the US military.

The documents and photographs of Mildred Lamar are located inside AMEDD Museum and are accessible to the studious and curious alike. The museum accepts donations in the form of personal documents, photographs, books, and duplicates of units/organizational files regardless of format type. If you, or your unit, are interested in donating, or would like more information about this collection, please contact the archives staff at 210-808-3297, DSN 471-3297 or usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil

Photos courtesy of US Army Medical Department Center of History and Heritage.

From the Archives

New ACHH Archival Donations:

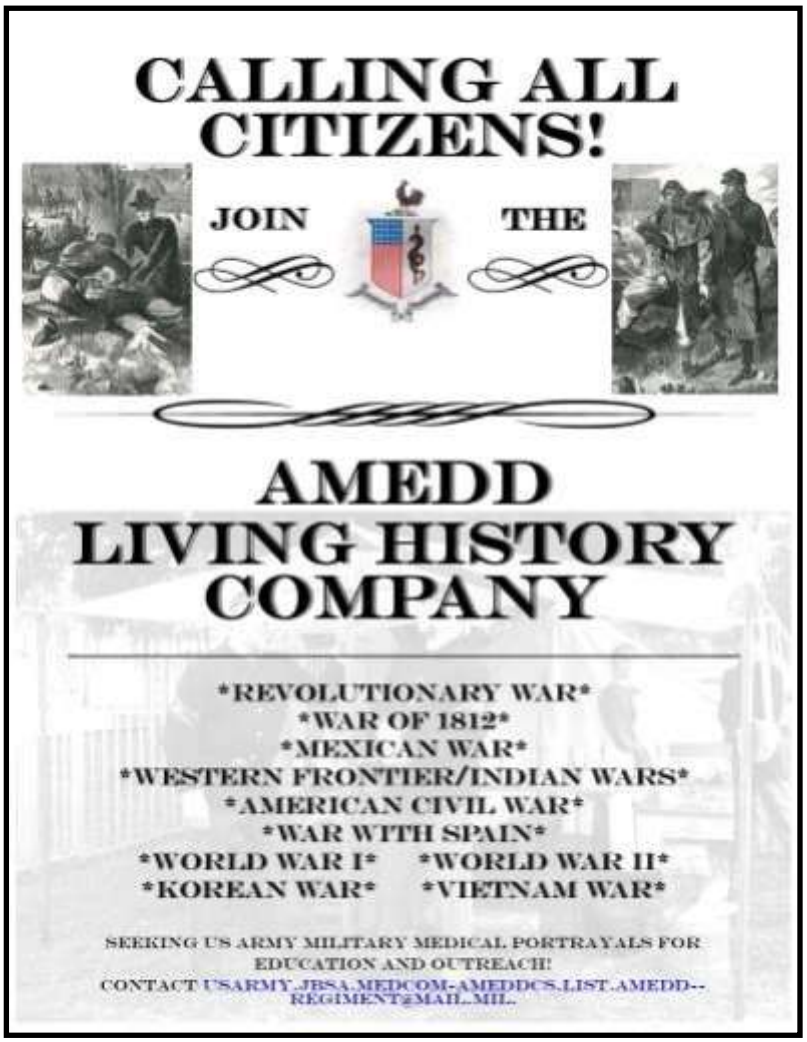
Two photograph albums that belonged to Allie Knott Waverly, Army Nurse Corps. They contain black and white family photographs and images of Fort Sam Houston and San Antonio during the World War I era.

Over one thousand 35mm film negatives belonging to Dr. Clark A. Metz, Veterinary Corps that were taken between 1942-1943 during his service with the Persian Gulf Command.

Correspondence, photographs, maps, and memorabilia that relate to Major Harrison Briggs Webster's military service as the Regimental Surgeon for the 47th Infantry, 4th Division during World War I. Included in the collection are 16 typed letters written by Webster to his wife, mother, and father between 23 June 1918 and 27 August 1918 that record his experiences in France. Also included are two portrait photographs, one identification card, and four panoramic photographs.

Additions to the AMEDD Museum Archives:

The collection consists primarily of correspondence (letters and "V-Mail") written by William Allan Lewis to his fiancé Jean between July 1943 and July 1945. Additionally, the collection holds some official records kept by Allan including the 2nd Medical Battalion's unit history, his separation paperwork, and a few items from the post-war years. It also has unofficial records like a diary with entries from July to December 1943, a copy of an issue of Stars and Stripes from March 1945, and a scrapbook containing photographs, telegrams, official records, newspaper clippings, foreign currency, and cards. Finally, there are some assorted photographs of Allan and Jean from the war.



Book Reviews

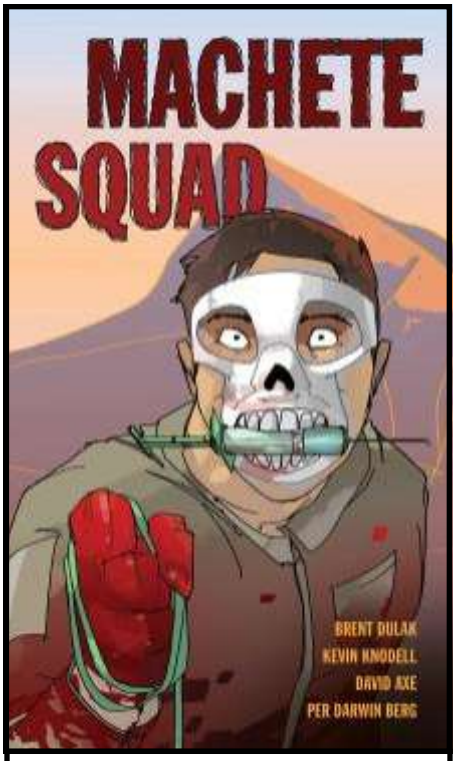
Machete Squad by Brent Dulak, Kevin Knodell and David Axe. Naval Institute Press, Annapolis, MD, 2018, illustrations by Per Darwin Berg, 160 pages, $18.95.

I must admit, it's been a while. Machete Squad is a graphic novel from the Dead Reckoning arm of the Naval Institute Press. I have not "read" this type of literature since my 12-year old self anxiously flipped the pages of my Sgt. Rock comic book in 1982. Brent Dulak's autobiographical work tells the story of an Army medic on his third combat deployment. The first two missions were in Iraq; this is Afghanistan. But, the horror of an experience as a young medic in Iraq still haunts the noncommissioned officer in charge of other medics at Sperwan Ghar in Kandahar Provence.

Dulak does not hold back. His experience of self-doubt, frustration, and poor leadership make the story real. Just like the language used reflects the vernacular of infantry medics, this non-fictional work accurately depicts one of the stories of Army Medicine in the longest war in United States' history – warts and all. While casualties are expected, the children and friends are the hardest to process. Soldier antics in the aid station are displayed. The challenge of professional filler system personnel are detailed. The effects of unpreparedness are laid out with the consequences.

The graphics enhance the conversation and set the scenes. The green hue given to images of night operations allows the reader to easily connect to being there. The combat scenes even contain the green flakes seen through night vision goggles when dust and particulates fill the field of view. Important clues to Sergeant Dulak's mindset are presented in brown-gray flashbacks. Shared patrolling with the Afghan National Police (ANP) reveals the frustration in dealing with the local population whose earlier American "guests" were not practicing the art of counter-insurgency that produced allies. One particular mission involved the security and hand-over of a school built by the United States for local students. Civil Affairs built it, the Taliban ran everyone out, and now the ANP used it as a staging area – "A monument to good intentions."

Dealing with combat trauma - feeling the broken body, smelling the blood, viewing the horror in the eyes of your friends - takes its toll on the "Doc." However by the end of the tour, 9-line medevac requests go off as planned and medical intervention is quick and effective. At the end of a hard day, the seasoned medic states, "It's going to be okay." Upon returning home, Dulak is followed by the ghosts of combat. The inevitable question arises in a bar, "So what's it like to have PTSD?" The small voice of our new generation of combat-experienced medics replies, "It's always expecting something to explode or for someone to try and shoot you, or for someone you care about to [ ] die. And then being disappointed when nothing happens."



Naval Institute Press.

I loved reading this medic's story. The afterward is the gem and serves as closure. The reader meets the real medic behind the caricature. Machete 7 shares, "So this is less a word-by-word account of a deployment to Afghanistan and more of an emotional documentary." Roger that. It's going to be okay.

Scott C. Woodard

Book Reviews

The Agony of Heroes: Medical Care for America's Besieged Legions from Bataan to Khe Sanh, by Thomas S. Helling. Yardley: Westholme Publishing, 2019. 457 pages, $35.00.

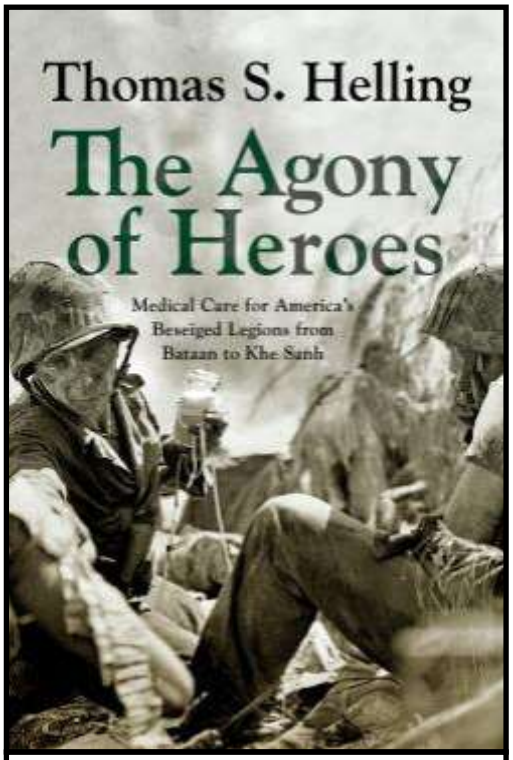
The author, a former U.S. Army Medical Corps officer and current Professor of Surgery at the University of Mississippi Medical Center, has produced a ground-breaking account of American military medicine as practiced at five venues - Bataan, Anzio, Bastogne, Chosin, and Khe Sanh. American personnel besieged at these locations provided medical care under the most adverse conditions. These conditions included enemy fire, terrain features that impacted military operations, extreme climate and weather-related impediments, catastrophic shortages of medical supplies and subsistence, and obstacles to the evacuation of the sick and wounded.

The author has exhaustively mined a multitude of available resources to portray the immediate care of the wounded through the accounts of individual Army and Navy doctors, nurses, and enlisted medics. Some accounts are excerpted from previously published sources; others are not. In all accounts, battlefield medicine was practiced under horrific conditions in which the casualty numbers and the complexities of patient care taxed the allocated medical resources. In some cases operational planning, to include planning for medical support, was inadequate. However, tactical developments could not have been reasonably predicted in all cases.

The Bataan peninsula became home to thousands of military personnel, civilian employees, and untold numbers of destitute refugees. Food supplies were rapidly consumed and malnutrition sapped the strength and resilience of the survivors. It was a devastating picture of wounds and disease in the makeshift hospitals of Bataan.

The amphibious landing in Anzio was part of a larger plan to advance and seize Rome. A combination of enemy fire and adverse weather conditions significantly contributed to wounds and non-battle injuries. Projected casualty numbers were vastly underestimated. Evacuation hospitals were as close to the front as clearing stations. Anzio became a "blood bath" in which medical personnel worked under unimaginable conditions. Six Army nurses were killed in action.

Soldiers were pinned down in Bastogne by the German attack in the Ardennes. Medical resources proved totally inadequate and personnel labored in makeshift facilities, soon short of needed supplies. Brutal weather conditions exacerbated the misery. Desperately needed supplies were delivered by air. Surgeons were flown into Bastogne by glider to meet urgent needs.



Westholme Publishing.

Chosin saw the 1950 epic withdrawal of the First Marine Division and elements of the 7th Infantry Division from the North Korean reservoir of that name. This action was conducted under horrendous winter weather conditions on harsh terrain, while subject to constant artillery, mortar, rifle and machine gun fire from the Chinese People's Liberation Army.

In the 1968 the siege of Khe Sanh, a battalion-size fire base manned by U.S. Marines was surrounded by the North Vietnamese Army (NVA). The hills overlooking Khe Sanh were home to hordes of these well-dug-in NVA aiming to overrun the base. Medical assets were soon over-taxed.

Helling suggests the common theme in all the accounts is the struggle of fortitude against hopelessness and courage against despair. The professionalism of personnel, officer and enlisted, is constantly apparent. The author has presented an incredibly graphic and detailed account of the actions of the Army and Navy medical personnel associated with each of the sieges. Maps and photographs, though not abundant, are included. End notes are exhaustive, as is the bibliography. Dr. Helling is to be commended for authoring a major contribution to the literature of American military medicine.

G. Alan Knight

Have you hear our podcast series, *Army Medicine History*?

Click on the pictures below to hyperlink to the DVIDS site. Podcasts are also available through your favorite podcast platform. Let us know what you want to hear!

HYPERL I NK

HYPERL I NK

Writing for *The AMEDD Historian*

We are seeking contributions! We believe variety is the way to attract a variety of audiences, so we can use:

- Photos of historical interest, with an explanatory caption
- Photos of artifacts, with an explanation
- Documents (either scanned or transcribed), with an explanation to provide context
- Articles of varying length (500 word minimum), with sources listed if not footnotes/endnotes
- Book reviews and news of books about AMEDD history

Material can be submitted to **usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil**
Please contact us about technical specifications.

The opinions expressed in The AMEDD Historian are those of the authors, not the Department of Defense or its constituent elements. The bulletin's contents do not necessarily reflect official Army positions and do not supersede information in other official Army publications or Army regulations.

AMEDD Center of History and Heritage

Acting Director, Mr. Nolan Watson

AMEDD Museum 210-221-6358

History Branch 210-221-6958

Research Collection 210-808-3296

http://history.amedd.army.mil/ http://ameddregiment.amedd.army.mil/ http://ameddmuseum.amedd.army.mil/index.html