Welcome to issue #24 of the AMEDD Historian! The Spanish-American War is the primary feature of this issue. Despite its short duration, the war would greatly influence America’s role in the next century. Similar to the Goldwater-Nichols Act following the invasion of Grenada in 1983, the relatively small conflict would significantly change the organization of the Army. Effects after the war for the Medical Department included a greater attention to public health and causes of tropical and communal diseases. Other changes included the creation of a Nurse Corps in 1901, further reliance upon contract dentists and the Dental Corps formation in 1911, and a growing food inspection role for veterinarians associated with the Army.

Dr. J. Edwin Nieves provides a glimpse into the problems of an unprepared force and disease with his article Spanish American War Soldiers in the Caribbean Front. Infection: The Real Enemy. Despite the acceptance of the germ theory of disease, sanitary practices were either forgotten from the Civil War or not up to healthy standards. Lewis Barger’s biographical study of Paul Straub covers the Medal of Honor recipient’s life and career in interesting detail. Straub is revealed to be a professional Soldier-physician with numerous examples of valor. (continued on page 21)

Spanish American War Soldiers in the Caribbean Front.
Infection: The Real Enemy
Dr. J. Edwin Nieves

Introduction
Throughout the history of armed conflict, wars have been associated with infectious diseases. Prior to World War I, infectious disease casualties typically outnumbered combat casualties nearly 5:1.

There are several reasons behind this. At the time, smallpox was the only available vaccination. Armies brought together individuals from different regions of a country, each bringing a set of co-morbidities or illnesses was an infectious disease risk. This was compounded by the mixing of this “uniformed” population with the local “receiving” civilian population where the actual conflict would take place. The battlefield usually had its own repertoire of health risk factors. Local weather conditions such as wind (or lack thereof), temperature, and local flora and fauna all contributed to the risk of disease. Lastly, armed conflict and the movement across long distances are stressful events which tend to lower individuals resistance to disease.

The last two major armed conflicts in which the risk of disease posed a greater danger than a bullet to the soldier were the Spanish American War (SAW) and the Boer rebellion. These were the last two conflicts where the six “war pestilences” (as Dr. Friedrich Prinzing would call them) were prevalent and accounted for a large number of deaths among both soldiers and civilians. Dr. Prinzing considered cholera, dysentery, plague, smallpox, typhoid, and typhus as the main “diseases that would follow in
the heels of belligerent armies and develop into serious epidemics. The work of Louis Pasteur to advance the “germ theory” – the notion that disease is caused by microorganisms present on the body – and Robert Koch’s work on tuberculosis and cholera leading to his postulates on “virulence” factors which would impact WWI medicine were known by most physicians by then, but several factors would interfere with the full incorporation of these principles into military medicine at the time.

Standards of care and competency levels varied widely depending on the physician’s background. A generation before medical specialization began, many SAW Army physicians where country doctors, general practitioners, who volunteered to serve with their state regiments. Most had no experience dealing with the public health, hygiene, and sanitation. The rapid mobilization and lack of command and control led to a fragmentation of services usually following state allegiances. This prevented the pooling and sharing of experience and resources. Army physicians had little authority over the line officers, many were unfamiliar with military organization and discipline and considered as “advisors” by many line officers. There had been a Department of Hygiene at the Infantry and Cavalry School at Ft. Leavenworth (predecessor of the Command and General Staff College) teaching military hygiene since at least 1893, but the few and relatively junior graduates would have little impact during the 1898 war. These factors would add up and have dire consequences for thousands of the volunteers that answered the call to arms to serve in the SAW.

**Spanish American War: Mobilization and Training Camps**

The US Army in the immediate period before the SAW was small, with approximately 25,000 regular soldiers. These were mostly deployed to pacify and protect the borders of the relatively new territories in the west and southwest Continental United States (CONUS). Their mission had remained largely unchanged for a decade. The conflict with Spain would be America’s first global engagement as the US engaged Spain in her colonies of Cuba, Puerto Rico, and the Philippines. There were simply not enough regular soldiers to campaign in both hemispheres. In April 1898 President McKinley called for 125,000 volunteers to bolster the numbers of men in uniform, and called for more volunteers in May 1898. Thousands answered the call and were grouped together in state regiments. Many of these men would know each other. Their officers were possibly their employers, store owners, or known in the town. They would be from the same town or general rural area and therefore, would in all likelihood have been exposed to the same diseases, an “infectious background.” However, instead of being trained in a series of local assembly points, these regiments were mustered in four major national camps to train, arm, and organize into divisional and corps commands. These were Camp Thomas, GA; Camp Alger, VA; Camp Meade, PA; and Camp “Cuba Libre” at Jacksonville, FL. Unfortunately, these volunteer regiments would arrive well in advance of any logistical planning.

**Camp Alger: Typhoid Fever**

Named after Secretary of War Russell Alger, Camp Alger was barely seven miles from the District of Columbia as the crow flies. Established in an unoccupied farm with a partially wooded area, this camp was only 1 mile from the Dunn-Loring railway yards (Fig 1). Its closeness to the capital city, the railway yards and water sources (several nearby creeks) made it an ideal site from a logistics and command & control point of view for the training and building up of an invasion force. However, the topography, soil composition, and the speed with which the regiments arrived would make this camp a hotbed for infections.

Units slated for the Caribbean front (Cuba and Puerto Rico) such as the 6th Massachusetts and the 8th Ohio Regiments were among the first to arrive to Camp Alger in late May 1898. They were followed in rapid succession by regiments from Michigan, New York, and others. These troops arrived in advance of the creation of any division or corps command structure. Although they would eventually form the 1st Division of II Corps, when they arrived there was no central command and control elements in place for camp settlement by unit. Regiments would pitch their tents on arrival on the best ground they could find. This led to the rapid and unplanned crowding of the site (Fig. 2). Nearly two months after the encampment of these troops, Lt. Col Charles Smart, deputy Army Surgeon General described the conditions as follows: “there was overcrowding of tents, overcrowding of men in the tents, dust, sun glare and fetid odors ... tents of the same companies in contact with other ... the odor pervaded company streets.”

The nearby water sources – shallow creeks and the existing farm well – were quickly polluted and could not be used. The soil was hard clay and made the digging of drainage and wells difficult. Sanitary “sinks” (pit latrines) tended to be shallow. Units encamped near the woods would sometimes not dig any. Garbage was dumped in shallow holes or “sinks” that were barely covered. The hard clay was prone to runoff and both the sanitary and garbage “sinks” would often wash throughout the camp during the frequent
summer rains. Summertime in the Virginia woods also meant flying insects. These would travel between these “sinks” and the kitchen and tents spreading disease.

Fig 1 Sketch map Camp Alger superimposed on current-day map. Image courtesy https://daleandmaps.wordpress.com
A collection of letters from Pvt. George King, 6th Massachusetts Volunteer Infantry Regiment, described conditions as “crowded, with a prevalent foul smell and water scarce.” Water “had to be brought from the nearby Accotink creek by hand.” In six weeks at Camp Alger he “boiled his clothes once” and bathed in the Accotink creek “once or twice a week” before moving to Charleston SC port for embarkation.

Combining men from diverse areas of the country, each one with a separate “infectious background,” and the unsanitary conditions would make Camp Alger (and the other camps) ideal breeding grounds for typhoid fever. We know from Pvt. King’s letters that within days of arrival, soldiers began reporting “indigestion” and fever. They were sent to the medical tents. Most of them, would suffer from typhoid fever and not return to their units.

Typhoid fever is caused by the typhoid bacillus *salmonella typhi*. Identified as the infectious agent responsible for typhoid a few years before the SAW. Salmonella is typically transmitted by contact with fecal matter from a carrier or an infected individual. Infection with salmonella has a variable latent period, but 14 days is the typical incubation period. During this time the bacilli travels through the intestines and into the rest of the body. Some subjects do not develop the actual disease but become asymptomatic carriers. The typical symptomatic spectrum is that of a non-specific gastroenteritis. Diarrhea, fever and general malaise are the core symptoms of the initial infection. These progress gradually to more serious complications and can cause death. It is very possible that mild cases were confused with other febrile illnesses common to military encampments such as common enteric viral syndromes. Other soldiers developed a milder form or were simply carriers which helped spread the disease. The official tally for salmonella infections in Camp Alger ranged in the several hundreds but it will probably never be known for sure. There were probably many more cases as the clinical picture was easily confused with other infectious illnesses and many soldiers were shipped to the front prior to the development of typhoid or while in the initial stages of the disease.

Deploying

Soldiers from the 6th Massachusetts and 8th Ohio Regiments would travel to Newport News VA and/or Charleston SC to embark for the Caribbean, unsure about whether their final destination would be Cuba or Puerto Rico. The 6th Massachusetts embarked on USS *Yale* in Charleston SC. (The USS *Yale* was a hybrid transport and auxiliary cruiser, chartered by the US Navy a few months before.) The transport ships were not as we would expect them today. They were essentially cargo ships without any considerations for troop comfort or hygiene. The holds were used for the “storage” of soldiers, their horses, and other livestock necessary to sustain the invasion force and pull the wagon trains. We learn from Pvt. King’s letters that the soldiers mostly slept on the deck where they could find empty space, preferring the hard deck “on top” to the stifling heat of the holds. He describes the ship as “dirty” and with inadequate hygiene facilities. Soldiers lowered a bucket to get ocean water for personal hygiene when the ship was at anchor or conditions allowed. The USS *Yale* arrived in Cuban waters in a few days and stopped off the coast at Siboney where she waited. Leaders were deciding if the troops *Yale* carried would land in Cuba or would proceed further to south to

![Tent encampment at Camp Alger. Image courtesy https://daleandmaps.wordpress.com](https://daleandmaps.wordpress.com)
Puerto Rico.

The US landings in Cuba had taken place in the southern coast near Santiago about a couple of weeks before, in the villages of Siboney, Daiquirí, and Las Guasimas (Fig 4). These are marshy wet areas, endemic breeding grounds for the mosquito that carries yellow fever, primarily a viral illness transmitted by the *aedes aegyptii* prevalent in these wet areas. Within days of the invasion, US soldiers developed the fever, chills, prostration and yellow skin characteristic of the disease. The disease spread so quickly that by the time the *Yale* and her convoy appeared off the coast, the convoyed troops were held on the ships and prevented from coming ashore lest they also become infected. From the ship, Pvt. King could see the soldiers burning clothing and houses that were considered infected until “hardly any were left.” In fact, neither clothing nor houses transmitted the disease, but that was not understood. Less than a month later, only a quarter of the invasion force was still fit for duty. The Cuban expeditionary force had to be evacuated to rest and treatment camps in Long Island, NY.

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Fig. 3 USS *Yale* off the Cuban coast, probably Siboney, 1898. Photo US Navy Historical Center.

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Fig. 4 US soldiers in Daiquirí shortly after their landings. Photo Library of Congress
**Puerto Rico: Hookworm and Dengue Fever**

After it was decided that the troops already ashore could finish the Cuban campaign, and anxious to capture Puerto Rico before the war ended, Gen. Nelson Miles pushed his forces still afloat on to Puerto Rico. In a few days the *Yale* arrived off the village of Guanica where the troops would land. By then nearly 400 soldiers had developed typhoid fever while in transit and had been transferred to America’s first purpose-built hospital ship, the USS *Relief*.

Many men did not survive the disease, died in route and were buried at sea. Aboard the *Relief* a young Medical Corps officer, Lt. Bailey K Ashford, cared for them for a few weeks before joining General Schwan’s Independent Brigade on the march towards the city of Mayaguez. The campaign in Puerto Rico would be short and one of movement. The landing and battle grounds were largely dry, the vegetation dry scrub brush (Fig 5). Unlike the CONUS training camps and the Cuban campaign there would be no dramatic epidemics or large attrition due to illness. However, the island also had its infectious health risks for the US soldiers. Contrary to the wet marshy invasion and combat zones in Cuba, the south coast of Puerto Rico is very dry, especially in the summer months when the campaign took place. The heat and lack of water would be a more serious impact on readiness in the short run, with heat stroke a frequent occurrence during the marches across the dry southern coastal plain.

Soldiers would be exposed to other infectious threats such as hookworm (*necator americanus*). An intestinal parasite transmitted by drinking the water or walking barefoot on soil exposed to infected fecal matter, the pathogen had not been identified yet. The initial infection does not have a significant acute syndrome and its long term impact on the general health of the carrier takes years to develop. It is years before main clinical symptoms, anemia, lack of energy, and weight loss, develop. This clinical syndrome was called then “Puerto Rican anemia” by the Spanish soldiers. It is very likely that soldiers acquired hookworm during the invasion of Puerto Rico, but the lack of acute symptoms, short campaign, and prompt return to CONUS and demobilization meant that soldiers from the Puerto Rican campaign developed symptoms in later years and were unlikely to connect them with their service in Puerto Rico.

Dengue fever, another mosquito-borne viral illness transmitted by the same mosquito that carries the yellow fever, the *aedes aegyptii*, would be the most prevalent febrile illness in the Puerto Rican campaign. Very similar to yellow fever in terms of incubation and transmission cycle, dengue has a more moderate course and thus caused less morbidity and mortality. Dengue fever is less likely to cause the prostration and medical complications seen in yellow fever, yet it can cause malaise, fever, and dehydration. Dengue fever was more prevalent on those 1st Division soldiers going up the lush center of the island where the forests, rivers, and creeks afforded the mosquitoes a breeding ground.
Conclusion

The Spanish American War in the Caribbean was short lived. The Cuban and Puerto Rican land campaigns lasted approximately six weeks. There were less than 300 soldiers killed in action in both campaigns combined. Most of these occurred in the Cuban campaign. However, the casualties from infectious disease were in the thousands. Most were due to typhoid fever acquired in the training and staging camps in CONUS. Shortly after the war President McKinley created the Dodge Commission, the Army followed suit creating the “Typhoid Board,” headed by Cpt Walter Reed. They estimated the number of typhoid cases in the training camps at over 20,000, nearly 1,600 deaths attributable to the disease. Given the non-specific early clinical presentation of the disease, and the presence of so many other febrile illnesses in the camps, it is very likely that many typhoid deaths were attributed to other causes. Typhoid cases continued to recur and relapse, and new cases developed during the SAW Caribbean campaigns. Yellow fever, hookworm, and dengue fever would also contribute to the casualty list in the thousands of volunteer soldiers that served in the islands. Much was learned from this “splendid little war” in terms of field sanitation, prevention, and coordination of medical care.

Typhoid fever vaccination and more reliable clinical evaluation and laboratory diagnostic testing decreased the number – and improved the prognosis – of the disease. Maj. Reed’s yellow fever vector eradication in Cuba and Lt. Ashford’s hookworm identification and treatment in Puerto Rico had an immediate impact in reducing infectious disease casualties in the U.S. garrisons. Educating commanders would be a long-term solution: in 1905 a military hygiene course was introduced in West Point making line officers aware of the importance of prevention and management of infectious illnesses.

Sources
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Paul Straub
By Lewis Barger, ACHH

Few people today recognize the name Paul Straub, and available information is fragmentary and difficult to find, but in his day Straub was well known within the Army Medical Department, a friend of J Franklin Bell (Chief of Staff of the Army 1906-1910), and the Army doctor most recently awarded the Medal of Honor.

Paul Frederick Straub was born on July 3, 1865 in the Black Forest village of Vöhrenbach, in what was then the Grand Duchy of Baden, and now is southwestern Germany. His family immigrated to the United States in 1872, settling in Mount Pleasant, Iowa and in 1886 Straub received a medical degree from the University of Iowa. He spent a few months serving as a physician at the Kansas State Insane Asylum and the Iowa State Hospital for the Insane, then returned to Germany, receiving a second medical degree from the University of Berlin in 1892. European medical educations were generally superior to those in America at that time, and Straub’s degree from the University of Berlin would have placed him in the top tier of American doctors. In November 1892 Straub applied to join the Army and was appointed as a 1st Lieutenant, Assistant Surgeon. He was posted to the Cavalry and Light Artillery School at Fort Riley, Kansas, serving as one of three assistants to the school surgeon, Major Henry S. Turrill.

In 1894, Straub was ordered to San Carlos, AZ and was promoted to Captain in 1897. In 1898, Straub was sent to the Philippines during the Spanish-American War. He was commended for “fearless and meritorious conduct” by Lieutenant Colonel J.W. French, commanding the 23rd Infantry, for actions on August 5, 1898 in the lines in front of Manila when Straub provided medical care to five men “under a heavy fire of musketry and artillery.” A board later recommended that Straub receive a brevet promotion to Major, but no action was taken.

As the Spanish-American War ended and the Philippine Insurrection began, the Army created two volunteer regiments by recruiting from regular regiments returning to the United States to continue the fight and Straub accepted a commission as Major, U.S. Volunteers and Surgeon for the 36th Infantry Regiment, commanded by J. Franklin Bell, himself newly promoted as a Colonel of Volunteers. Bell, who began the Spanish-American War as a first lieutenant in the Regular Army would be Chief of Staff of the Army a mere eight years later.

Twice in the next months, Bell commended Straub for heroism and recommended brevet promotion. The first occasion mentioned two separate examples on the 9th of September, 1899, near Potrero, Luzon “for gallantry in action with insurgents” and a month later on the 9th of October, 1899 near Florida Blanca, Luzon when “Straub captured a lieutenant with his arms.” Bell, who wrote this commendation on August 1, 1900, may have confused the action at Florida Blanca with Straub’s heroism on December 21, 1899 at Alos, Zambales Province, Luzon, for which Straub ultimately would receive the Medal of Honor.

Bell, Straub, and Lieutenants William C. Read and Peogram Whitworth were mounted on horses ahead of a column of the 36th Infantry when they came under fire. Beside the road was a ravine, with insurgents on the other side less than 100 yards away. Bell cautioned his lieutenants and Major Straub to take cover behind the crest of the ravine while he rode back to bring up his troops. Read, caught up in the excitement, rode through the ravine and up the other side, followed closely by Straub and Whitworth. Ignoring, or perhaps not hearing Bell’s orders to take cover, they returned fire with...
their pistols, fully exposed on their mounts on top the ravine’s crest. Read was wounded before he emptied his pistol, and Straub leapt from his mount, caught Read and dragged him back to a protected position in the ravine where they were quickly joined by Whitworth. Bell returned shortly with the infantry, driving off the insurgents while Straub dressed Read’s wound.

After the battle, Bell recommended all three officers for the Medal of Honor, but again, no action was taken. Thrice Straub had been recommended for recognition and reward with no effect. Straub continued to serve as the 36th Infantry’s surgeon until March 16, 1901 when he mustered out of the volunteers when the regiment was inactivated and returned to his regular Army rank of captain. It is unclear where Straub was assigned following his stint with the 36th, but in November 1903 an article in the New York Times reports his being ordered to Fort Leavenworth to sit on the board conducting competitive examinations for medical corps officers. Following his service on the board, he remained at Fort Leavenworth, serving as an assistant instructor in the Department of Hygiene headed by the formidable Lieutenant Colonel John van Rensselaer Hoff.

Bell, meanwhile, had been promoted to Brigadier General of Volunteers, leaving the 36th Infantry for higher command in the ongoing fight against the Philippine rebels and winning acclaim as a counterinsurgency fighter – in 1901 he was promoted directly from Captain to Brigadier General in the Regular Army in recognition of his accomplishments. In July 1903 he was assigned as the commandant of the Infantry and Cavalry School and Staff at Fort Leavenworth, five months before Straub’s arrival. The instructors at the Infantry and Cavalry School were some of the finest junior officers in the Army. Some of Straub’s fellow officers at the school included Lieutenant Colonel William W. Wotherspoon, later Major General and 6th Chief of Staff of the Army (April – November 1914), Captain Malin Craig, later General and 14th Chief of Staff of the Army (October 1935 – August 1939), 1LT Daniel van Voorhis (later Lieutenant General and a co-founder of Armor Branch), and Major Eben Swift, later Major General and first commander of the 82d Division.

In the fall of 1905 Straub was sent on temporary duty to the Isthmian Canal Commission in Panama and returning from there reported for duty at the Surgeon General’s Office in Washington, D.C. The following spring Bell was named the fourth Chief of the Army General Staff and also reported to Washington. In the summer of 1906 COL Valery Havard in the Surgeon General’s Office requested that the War Department review Straub’s personnel file, and the commendations he had received in the Philippines, to determine if he merited award of the Medal of Honor. The review took only eight days and on the 27th of July, 1906, the Acting Secretary of War directed that Straub be awarded a Medal of Honor “for most distinguished gallantry in action at Alos, Province of Zambales, Island of Luzon, December 21, 1899. On this occasion Major Straub [Straub had been promoted the previous March], who was then surgeon of the 36th Regiment, United States Volunteer Infantry, voluntarily exposed himself to a hot fire from the enemy in repelling, with pistol fire, an insurgent attack, and, at great risk of his own life, went under fire to the rescue of a wounded officer and carried him to a place of safety.” Straub was presented with his medal on October 6th, 1906 in a small ceremony in the President’s private study with the Surgeons General, the Judge Advocate General, and Army Chief of Staff, Major General Bell, his former commander, in attendance.

In 1909 Straub wrote an article for The Military Surgeon titled “Medical Service in the Campaign” based on his experience in the Philippines which he expanded (to 179 pages of text) and published the following year as “Medical Service in the Campaign: A Handbook for Medical Officers in the Field.” It served as a textbook for medical officers who would have to plan and execute medical support during World War I and in 1917 COL Champe McCulloch cited Straub’s textbook as one of four works in the history of the Medical Department that made significant contributions to educating medical officers about their duties in the field.

In 1910 Straub was reassigned to the General Staff a month before Bell was replaced by Major General Leonard Wood. He traveled to Texas as Chief Sanitary Inspector of the Maneuver Division, a new formation for the Army, which resulted in another article for The Military Surgeon, “The Training of Sanitary Troops.” In 1912 Straub departed the General Staff. His follow on assignment is unknown, although at some point he was posted to Chicago, because it was from there that he was reassigned in 1917 to be the Department Surgeon, Northeast Department in Boston. He had been promoted to Lieutenant Colonel in May 1913 and to Colonel in May 1917, but he would not see service overseas during the World War. Straub turned 52 that year, a little old to go campaigning, and possibly also a little too German.
In February 1919 Straub was given one last job, as Librarian of The Surgeon General’s Library and head of the Library’s History Section, which was responsible for working on the history of the Great War prior to the establishment of a History Division in the Surgeon General’s Office the following year. In May Straub retired for disability to Los Angeles, and although he spent only a few months in the Library, he was remarked upon favorably by Fielding Garrison: “I can recall some military chiefs – Billings, Merrill, Walter Reed, McCaw and particularly Straub, whom I liked very much.”

In retirement, Straub practiced medicine until 1927, and died there after a short illness in 1937 leaving behind his widow and three sons. As Straub’s contemporaries retired and expired, the institutional memory of Straub faded as well, until a few years ago when a new AMEDD Medal of Honor display was being developed and our office was researching the backgrounds of our Medal of Honor recipients. Straub’s file was limited to his citation and a scanty obituary. It is hoped that this article will to some extent correct that shortcoming, providing some detail about the life of a hero who served the nation and the Army.

The Dawn of Khaki
by Chuck Franson & Paula Ussery, AMEDD Museum

As the 19th Century drew to a close, the U.S. Army began a period of swift and dramatic change to its uniforms. The number of changes during the 1890s is quite astonishing. For officers, leggings, epaulets and sword knots were changed, as well as cravats, shoulder knots and the “fatigue blouse [coat] for marches, and ordinary wear.” Enlisted uniforms also changed during this decade. Since the American Civil War in the 1860s, enlisted soldiers had fought in dark blue wool uniforms regardless of location or season. By 1898 though, experiences fighting against Native Americans in the American Southwest and against the Spanish in Cuba and the Philippine Islands, highlighted the need for a lighter and cooler field uniform.

The 1898 and 1899 Uniform Regulations document the transition between the dark blue wool uniform and the light brown or khaki uniform. The 1898 regulations call for a “blouse [coat] of dark-blue flannel, lined with suitable lining,” and permit (with approval by the chief of the department) the wearing of a sack coat and trousers of bleached cotton duck “in extreme southern latitudes.” The 1899 regulations call for both a “blouse [coat] of dark-blue wool flannel” for enlisted personnel for “general wear and field service,” but also authorize “for field service, a blouse of cotton drilling or khaki, light brown color, conforming to pattern.”

These cotton uniforms were inspired by the British uniforms worn in India and Africa and provided a degree of camouflage in dry and dusty surroundings. The new uniform was unlined. The first example had epaulets, standing collar, pocket flaps and peaked cuffs, all trimmed in branch of service color, which was emerald green for the Medical Department. It fastened in front with five gilt buttons, and was worn with trousers of the same khaki shade.

This coat lasted for less than one year before it was revised. Among the revisions was the elimination of the branch colored facings. Eliminating the branch color meant the uniform was faster, easier, and cheaper to manufacture and issue. Other changes included the design of the pockets and the style of the col-
lar. Eventually the khaki uniform evolved into the Olive Drab uniform worn during the World War I era.

The AMEDD Museum is fortunate to have an early khaki uniform in its artifact collection. The museum’s example was purchased and worn by Hospital Steward William H. Osborne. Osborne enlisted as a Hospital Private in May of 1898 with Company H, 6th Pennsylvania Volunteers, and served as an Acting Hospital Steward with the 2nd Division, Second Army Corps, at Camp Alger, VA. He was discharged in October 1898, due to the brevity of hostilities.

Osborne’s coat varies somewhat from the standard due to the fact that it was made by a commercial tailor in Washington D.C. It lacks green pocket flaps although it does have green epaulets, peaked cuffs and collar. The standing collar is adorned with gilt “U.S.V.” (United States Volunteers) which was very popular during the Spanish American War, but which was not authorized. The rank on the sleeves indicates Hospital Steward, rather than Acting Hospital Steward. Interestingly enough William Osborne was an electrician in civilian life.

New ACHH Archival Donations:
World War I-era photo album with pictures of “Officers of Base Hospital number 8, France” and “Medical and Surgical Staff Base Hospital number 8.” German photographs are also present.
A selection (16) of AMEDD related Army Regulations, circulars, and guides
Photographs, documents, and a military narrative belonging to Houston J. Banton who served as a Medical Corps officer in Nicaragua during the 1920s.
Six semi-monthly WWI-era newsletters from U.S. Army General Hospital Number 17.
A selection (20) of WWII-era Army field and training manuals and medical publications.

Additions to the AMEDD Museum Archives:
Documents and plans for U.S. Hospital Ship Frances Y. Slanger
Black and white photographs and published newsletters and journals belonging to Adolphe J. Schoepflin
Certificates and one class panoramic photograph of the Army Medical Service Non-Commissioned Officers Course, Class 1 belonging to Robert English, Jr.
1918 Manual of Splints & Appliances for the Use of the Medical Department of the United States Army. The manual is stamped with Base Hospital No. 51, March 13, 1919.
1918 booklet, The Training Camp for Nurses at Vassar College.
World War I-era pamphlets relating to disabled, blinded, and crippled soldiers and an unidentified postcard photograph.
Documents and photographs from Max Knickbocker.

Books:
Gray, Henry. Anatomy, Descriptive and Surgical. By Henry Gray, ... . The Drawings by H. V. Carter, ... . The Dissections Jointly by the Author and Dr. Carter. Philadelphia: Blanchard and Lea, 1862.

Donors:
MG (Ret) Steve Jones
On The Job Flight Nurse Training
By Diane Burke Fessler

Army nurses volunteered for flight nurse training at Bowman Field, Kentucky, when the School of Air Evacuation was formed in November 1942. Before the classes began, the need for nurses was so great that two Medical Air Evacuation Squadrons were activated for overseas duty; the 801st MAES to the Pacific, and the 802d MAES to North Africa. In 1990 three nurses related their experiences as wartime flight nurses in interviews with the author. They each returned from their first overseas assignments to attend the school at Bowman Field.

Margaret Richey Raffa, Chief Nurse of the 801st MAES

We were the first flight nurse squadron to go to the Pacific, landing in New Caledonia in February 1943. We enjoyed the temperature and flowers, which are equally beautiful there all year, but conditions were very primitive. The river behind our tents was our washing machine, and we hung clothes to dry from the trees. There were twenty-four nurses, and millions of mosquitoes, all living in one tent. One night during the first week, the tent blew down during a typhoon, and our foot lockers almost floated away.

C-47s flew to the front with cargo and ammunition, and the nurses rode on top of the cargo. We often had troops going to the forward areas, which was sad for us. They would get into long discussions, feeling that they would probably never come back. The worst part is, some of them didn’t.

When we went to Guadalcanal, the plane wouldn’t fly directly over the island but flew along the beach, staying low to avoid being spotted by the Japanese. This was emotionally trying for us, not knowing what the landing field would be like. There were no ambulances. The most seriously wounded patients would be on litters, with other wounded in different vehicles. We took off quickly because the Japanese were strafing the field. Our casualties were still in rather bad shape, having had only first aid treatment. They had shrapnel and bullet wounds and injuries from hand grenades, often of the chest, abdomen, or head. It presented quite a problem, since there were no doctors on board, and we had to rely on our own initiative. We always had to be alert for symptoms of shock and hemorrhage, and from the time we took off until we landed, we had our hands full with these mutilated bodies. One nurse might have twenty-four patients, most of them on litters, for a five-hour flight, and in those days we didn’t have the enlisted medical technicians. We felt a tremendous responsibility.

Some patients were taken to the hospital in New Hebrides and later evacuated to the States, but there were general hospitals in New Caledonia where these patients received good enough care to be returned to duty. We took the boys back up to the front lines a month or two after we’d brought them out wounded.

The problems were constant. For instance, after we reached 8,000 feet there was a lack of oxygen, and often we climbed to 10,000 feet because of weather conditions. Then we had to give oxygen to patients continuously. Small oxygen tanks were all we had room for, and patients shared them. We did use alcohol on the tanks between patients, but it wasn’t very sanitary. A lot of the planes didn’t have heaters, and at 10,000 feet, even in the South Pacific, it was cold.

Sometimes we had to make forced landings because of maintenance or weather or fuel shortages, and this caused big problems for the commanding officers of the airstrips where we landed. Most of the time these fields were under attack by the Japanese, and we’d often have to head for foxholes, with the war being fought right above us. One time I was go-
ing to stand at the edge of a foxhole to watch as they went after a Japanese plane. A GI decided to head for the same place and hit my feet, knocking me over. I decided to stay down after that.

We were moved to New Hebrides at the end of 1943, and I flew into Bougainville right after the Seabees put down the landing strip, within two miles of the front line. There were fighter escorts accompanying us into the field, and as we flew over the battle, we could see the mortars and firing. Smoke screens were visible, the artillery was a little too close for comfort, and it was raining. With all this going on the troops heard that air evac was coming in that day, and those who weren’t at the front line were down at the strip to watch us come in.

In addition to the wounded and injured, we had mental patients, who were emotionally shocked and upset. They came on the plane dazed. In handling these boys we had help from the ambulatory patients who knew the condition of these patients, their buddies.

*A native Texan, Margaret Richey Raffa returned to Bowman Field, Ky, in March 1944, where she then went through the School of Air Evac. She retired as a Lt. Col. after 27 years of military service.*

**Dorothy Shikoski McCarthy, 801st Medical Air Evacuation Squadron**

*A native of Wisconsin, “Shy” joined the ANC in 1942.*

Our flight had left a planeload of patients off and we were returning to Noumea, New Caledonia. It was April 27, 1943, in the evening, and there was dense fog. The pilot was circling and circling, trying to get close to the island and we almost crashed into the side of a mountain. I looked out the window and felt I could have touched the mountain. It was really scary. We knew we were going to ditch in the water, so everyone was ready.

When the plane hit the water, we inflated the rafts and got out. The plane stayed afloat just a very few minutes, then sank. A spare engine was stowed in the back of the plane, and when we hit the water it came forward and crushed the navigator in his seat. He went down with the plane.

There was a New Zealander camp on top of the mountain, and they came to help. My leg was broken and I’d injured my back, so I had to be carried up the mountain, where we stayed the night. The next day an ambulance arrived and took us back to the base.

When we first arrived in New Caledonia, the “brass” didn’t know what to do with us, until we convinced them we were there to fly. We were very eager. After the crash, when they asked me if I wanted to go back to the States to recuperate, I refused. They put a walking cast on me, and I was back at work in six weeks. I even went to dances in it.

Flying to the front lines, we had the most severely wounded patients; there are several I remember after all these years. One young man lost his arms, legs, and eyesight, and his cheeks were wired together. There were many patients whose minds had been affected by the strains of island fighting.

Natives were the only sign of civilization where we were, and when we first arrived, the river was the only place we could wash ourselves. At one time we all had diarrhea, and the latrine was several tents away. We had to run past all the other tents, maybe eight or nine times a day, and the guys would yell out, “There she goes again.”

We had been sent overseas with no flight training, so when we returned in April 1944, they made us take the course in Kentucky. The instructors became very tired of our correcting their lessons because we knew what it was really like.
Dorothy Lonergan Jouvenat 802d Medical Air Evacuation Squadron

We were all volunteers, very eager and excited to be in the program, but our training was mostly calisthenics and filling out papers for wills and allotments. We didn’t get actual flight training until returning from overseas. Twenty-five of us made up the 802nd MAES, and in January 1943 were sent to North Africa by ship.

At first we were told there would be a Red Cross symbol on our plane while we had patients aboard, but the Geneva Convention forbade that because we carried supplies and cargo when we went to pick up patients. We began flying out of Algiers, as close as possible to the fighting, close enough to hear the guns. Sometimes we had fighter planes as escorts. Patients were in ambulances or on the ground in litters waiting for us, and their wounds were only hours old. While the cargo was off-loaded and the plane was set up for the patients, the nurse assessed the patients.

We evacuated all nationalities, and when we had POWs, they were accompanied by armed guards. While in Anzio, Italy, some days we evacuated one thousand patients, flying two missions a day. The 802nd had ten invasions to its credit, covering the North African, Sicilian, Italian, and Southern France campaigns, going to the German border.

We started out wearing makeshift uniforms, because we wore slacks that nothing matched. Several of us had uniforms made out of our overseas coats or capes. As the members of our first group of flight nurses were transferred back to the States, other nurses arrived to take their places, and all of these new girls wore regulation uniforms and had their wings.

Dorothy Lonergan Jouvenat served as an Air Force nurse several years after WWII, including at Dharahn AB, Saudi Arabia.

Sources

2LT Aleda E. Lutz, 802d Medical Air Evacuation Squadron, checking on patients before take-off, 4 April 1943.
2LT Lutz joined the Army in November 1941 and was one of the first flight nurses. She flew almost 200 missions, and was killed when the plane she was on crashed. She received the Distinguished Flying Cross “For outstanding proficiency and selfless devotion to duty” and in April 1945 an Army hospital ship was named for her.
In 1990 the Veterans’ Administration Medical Center in her home town of Saginaw, MI, was named for her.
August to September 1985: The Ranch and Santa Barbara, California

My favorite times being with POTUS was at Rancho del Cielo, literally ‘the ranch in the sky.’ It was the Reagans’ personal 688-acre ranch a few miles northwest of Santa Barbara, CA. President and Mrs. Reagan routinely rode horses each morning on The Ranch accompanied by John R. Barletta, a veteran USSS agent, and their longtime riding companion. They were also accompanied on these rides by other members of the USSS detail; a military aide; members of the WHCA; a White House physician; and me, or another WHMU medic.

In the afternoons, President Reagan enjoyed a variety of chores including clearing brush, trimming trees, and mending fences. Dennis LeBlanc and Barney Barnett, former California Highway Patrol Officers, who had been on then-Governor Reagan’s protective detail years earlier, would come to The Ranch prior to President and Mrs. Reagan’s arrival. Dennis and Barney would help Lee Clearwater, the permanent ranch caretaker, prepare for their stay and help President Reagan with his chores. Dennis and Barney stayed at Rancho del Cielo in a temporary metal building similar to, and near, the temporary building used to house the WHMU physician and military aide throughout the duration of each of The Reagan’s visits. At times, the physician, and the ‘duty medic’ might join in helping President Reagan, Dennis, and Barney with some of the chores.

We all have fond memories of being at The Ranch. One of mine is of President Reagan’s humor. During afternoon chores, the military aide and the duty medic would ride in a white pickup truck; the aide would carry ‘the football,’ the briefcase containing essential security documents POTUS may need; and the duty medic carried the water in addition to their medical bag. When he needed a break for water, the President and everyone helping him, along with his USSS security detail, would gather around. We all had many laughs from his jokes, and, in being the gentleman he always was, he was also careful to ask “if there were any girls there” before beginning a joke. Another memory is of President Reagan coming to the military aide’s and doctor’s ‘hootch’ after an afternoon of chores. Upon entering the sitting room, he would take a seat in a chair, stretch out his legs, and put his dusty boots up on a log he had cut to use as a foot rest. He would enjoy a cold drink, tell stories, and answer questions about his time in Hollywood, during World War II, being a spokesman for General Electric, and in hosting Death Valley Days and General Electric Theater on television. He would only leave when Mrs. Reagan called him to dinner.

A WHMU physician and military aide stayed on The Ranch while two medics stayed with the White House staff and press at a local hotel in Santa Barbara. The medics alternated days at Rancho del Cielo and in Santa Barbara. At the hotel each morning, we conferred with the advance staff regarding any changes in the...
President’s schedule and conducted ‘sick call’ for the staff and press members who might need our care. In the evenings, we would go downtown and enjoy dinner at many of the great restaurants. One of the perks we had was by showing our White House identification, we could get into the movie theater free. The theater was located on State Street, the main shopping and entertainment center of Santa Barbara. Many celebrities lived in the area. While standing in line at the theater one evening, I found myself struck by how tall the man standing in front of me was. He was none other than the 6’4” actor John Larroquette who starred in the television series, Night Court. During dinner at a local steak house, my companions and I noticed a man eating alone in a nearby booth. It was the wonderful character actor Jack Elam. We did not want to disturb him, but being fans on our way out of the restaurant, we stopped by his booth to tell Jack how much we enjoyed his acting. He was somewhat surprised and very much appreciated us recognizing him. Despite all of his numerous portrayals as villains in movies and on television, we found him to be a warm, engaging, delightfully funny man. Meeting Jack Elam is a very special memory for me. Phyllis Diller and her husband sometimes stayed at the same hotel where the White House staff resided. She was a funny, friendly, delightful lady who was considerably prettier in person than her make-up (or make-down) onstage persona.

Approximately halfway through each stay at The Ranch, a political event would be scheduled for President Reagan to attend in Los Angeles. Most of these events were fundraisers, and President and Mrs. Reagan would stay in the presidential suite atop the south tower of the Century Plaza Hotel. (The USSS unsuccessfully tried to block the construction of the 35-story, 490-foot-tall Fox Plaza building located near the 32-story Century Plaza Hotel Tower, due to its height. The USSS believed that someone inside, or on top of, the Fox Plaza could be a possible threat by looking down into the presidential suite.) While in Los Angeles, the WHMU physician and medic would coordinate appointments for President Reagan to be seen by his allergist and his audiologist. (Both POTUS and VPOTUS were allergic to bees and had to receive specially made desensitization immunizations regularly.) President Reagan was the first person in the country to be fitted with small hearing aids that, when inserted into his ear canals, could barely be seen. He kept a device the size of a credit card in his coat pocket to control the hearing aids. He could set the hearing aids to block out background noise during receptions, so he could concentrate on listening to what someone near him was saying without interference. On one occasion, I brought two audiologists to see POTUS in the presidential suite. Doctor Smith (physician to the president) was with me, and as he and one of the audiologists conducted a portable hearing test on President Reagan as he sat at his desk, I watched the other audiologist conduct tests on the President’s miniature hearing aids in a machine the size of, and similar to, a stereo speaker. An audiogram was produced on each hearing aid and for POTUS’ testing. When Dr. Smith and the second audiologist completed POTUS’ audiogram, they joined the other hearing specialist to review the results. President Reagan came over to where I was standing in the study and asked me how I was doing. I replied I was fine, and he asked me if I knew who the statue was sitting atop a cabinet next to me which contained a television. I replied it was a statue of Buddha, and President Reagan asked me if I noticed anything peculiar about Buddha. I told him I did not, and the President asked me to, “Look at his eyes.” When I looked at the statue again, I instantly noticed that Buddha’s eyes looked real. They seemed to follow my movements around the room similar to what I had seen from some wall paintings and pictures. I said, “Oh, yes, I can see what you mean, Mister President!” President Reagan then replied with a laugh, “Yes, he and I have had some hellacious staring contests!” We all had a good laugh!

At one fundraising event in the Century Plaza Hotel, I was stationed between two rooms adjacent to the main ballroom where the President would speak. One room was allocated for those donating to the Republican Party in amounts of less than $5,000, and the other room was for donors giving more. President and Mrs. Reagan would visit both rooms for a ‘grip and grin’ (photo opportunity) with selected donors prior to making their way into the ballroom for his remarks. A USSS agent caring an Uzi submachine gun in a small attaché case stood across from me. We both wore suits, radio ear pieces, microphones on our shirtsleeves, and carried identical cases; however, mine contained only medical equipment. To enter the area, and then be directed by a member of the advance team to the appropriate room, guests had to pass through a magnetometer operated by uniformed agents of the USSS. That night I was impressed to see many well-known actors and friends of President and Mrs. Reagan. They included Efrem Zimbalist, Jr., of the 77 Sunset Strip and The F.B.I television series; Western movie actors Joel McCrea and Randolph Scott; and Jimmy Stewart. (On one occasion, I accompanied President and Mrs. Reagan while they dined with Jimmy Stewart, and his wife, Gloria, at their home in Beverly Hills. Like Bob and Delores Hope, the Stewarts were very nice people!) As I stood my post,
I looked directly out of the door everyone had to enter after passing through the magnetometer. I was caught off guard by this strikingly beautiful, tall blonde woman with very well-endowed breasts made more prominent to me because she was turned sideways after passing through the screening. As she stepped aside, I could then see her escort, and I recognized it was Sylvester Stallone and Brigitte Nielsen! Her 6’1” height towered over the 5”10” Sly, who I believed was wearing elevator shoes.

November 16 to 21, 1985

President Reagan and Soviet leader General Secretary Mikhail Gorbachev met for their first summit in Geneva, Switzerland. “Doveryay, no proveryay” ... “trust, but verify”.

Earlier in the year, I was chosen to conduct the pre-advance survey for their first summit which would have worldwide coverage by thousands of journalists. The WHMU would be responsible for the care of President and Mrs. Reagan, their traveling staff, cabinet members, the traveling White House press, members of the USSS and military supporting the summit, and other governmental advisors and negotiators from the State Department in attendance. The Swiss hosted our planning meetings in Geneva and U.S. Consulate staff liaised for us. The medical facilities in Geneva were state-of-the-art and everyone seemed accommodating. The plan was for President Reagan to host General Secretary Gorbachev on the first day, November 19th, in a tête-à-tête at the Maison de Saussure, an 18th Century chateau that sits on the shore of Lake Geneva. That night Secretary General and Mrs. Gorbachev would host a dinner at the Villa Rose, an ornate stone villa on the grounds of the Russian Consulate where the Gorbachevs would stay. On the second day, the meeting would be held at the Soviet Consulate and that night President and Mrs. Reagan would host a dinner at Maison de Saussure.

I was scheduled to arrive in Geneva a week before the summit, but I arrived a day late due to our USAF C-5 aircraft losing an engine over the Atlantic Ocean shortly after takeoff from Dover Air Force Base. The pilots safely returned to Dover for repairs which took several hours. Finally, after arriving in Geneva a day late, I hurriedly conducted my final advance survey of the main hospital. There I was surprised by the hospital administrator offering to provide us a ‘cardiomobile’ ambulance staffed with highly-qualified physicians and drivers for the duration of POTUS’ visit. The ambulance would only cost us $40,000! Such a ‘deal’ was not mentioned to me during our pre-advance survey months earlier. I had never known of anyone from the White House having to pay for any type of services provided by any host country. I did not want to obligate the WHMO to pay for a Swiss ambulance, so I declined the offer; we would make our own arrangements for an ambulance. With a lot of anxiety, a short timeline until President Reagan’s arrival, and no clear options, I told my predicament to Major Mark ‘Pete’ Peterson, the Marine Corps military aide to POTUS, accompanying the advance team. Pete made some telephone calls, and the next day a USAF C-130 cargo plane landed in Geneva with an ambulance and four corpsmen from the army hospital in Frankfurt, Germany. The USSS agents took control of the ambulance and housed and cared for the corpsmen who were thrilled to be a part of supporting President Reagan during the summit with General Secretary Gorbachev. They received USSS and POTUS souvenirs, and the corpsmen and their commander, received thank you letters from the WHMU for their outstanding, short-notice assistance. A couple of days into the visit I received a call from the hospital administrator informing me we could have the cardiomobile at ‘no cost’ for the remainder of the summit. I quickly declined once again!

On November 19 we all anxiously awaited the arrival of General Secretary Gorbachev at Maison de Saussure for the meeting. The air was cold as I stood outside the mansion along the driveway across from the main entrance. Behind me were hundreds of press personnel from all over the world standing on bleachers with cameras at the ready. As the black ZIL limousine pulled up the driveway, President Reagan, wearing no overcoat, came out of the mansion and descended the stairs to greet General Secretary Gorbachev. The ZIL stopped and General Secretary Gorbachev got out of the car wearing a fedora and overcoat. As he removed his hat, President Reagan extended his hand, as did the General Secretary to the President; for a brief moment before their hands touched, there was no sound. As they shook hands, there was another deafening cacophony of camera shutters opening and closing!

That evening we traveled by motorcade to the Soviet Consulate where General Secretary Gorbachev, and his wife, Raisa, hosted the Reagans, and members of their senior staff, to dinner in Villa Rose. As we followed the principals into the villa, there was some confusion by the Soviet staff as to who was supposed to be in POTUS’ group for the meeting and dinner, and who was not. After a few awkward moments, everything was resolved, and the appropriate senior staff stayed in the villa for the dinner while the rest of us were escort-
ed across the driveway to a garage. We were still somewhat confused, but as the doors opened, we saw a table the length of the garage that held an elaborate dinner for us to share with our Soviet hosts. It was the first, and only time, I had chilled cucumber juice to drink for dinner in addition to ice water. The Soviets drank vodka.

On November 20, during the second day of meetings, the two principals and their staffs took a break for lunch. Per protocol, I trailed the group down a ramp from their second-floor meeting rooms. As General Secretary Gorbachev stood at the foot of the ramp waiting for President Reagan to enter his limousine and for the motorcade to depart, I realized I was blocked by the General Secretary! I did not want to be left at the Soviet Consulate, since once the door closed on the President’s limo, the motorcade was not waiting for anyone! I made my decision to duck behind Gorbachev to get to my car despite my move being viewed by the world’s press perched across the driveway. Just as I got even with him, the General Secretary turned to go inside as President Reagan and the motorcade were departing. He bumped into me! I was stunned and frozen still, and all I could think of was that he was guarded by a very large, menacing KGB agent! General Secretary Gorbachev immediately realized my dilemma, smiled at me, stood back, slightly bowed at his waist with his right arm extended pointing toward the motorcade, and said, “Спасибо (spa-see-ba)” which means “Please” in English. I nodded, quickly smiled a “thank you” of my own and dashed to my assigned staff car. Luckily, Robert C. “Bud” McFarland, the National Security Advisor, had also seen my dilemma, and had the door open for me to safely jump into the backseat! As I settled into the seat and let out a big sigh of relief, he smiled and asked, “Did you and Gorby have a nice chat?”

On 1 April 1973, U.S. Army Health Services Command was established, bringing the small hospitals and clinics (which had been under command of the post commanders, and thence Continental Army Command) and the General Hospitals and Medical Centers (which had answered to The Surgeon General) under one command. This shoulder-sleeve insignia was approved for HSC on 31 January 1973.

In October 1993, U.S. Army Medical Command (Provisional) was created, combining HSC with other medical elements, notably U.S. Army Medical Research and Development Command, the Army Medical Material Agency, and the Army Environmental Hygiene Agency. The next year MEDCOM replaced HSC, which existed until Saturday 1 October 1994. On Sunday, 2 October 1994, U.S. Army Medical Command was fully operational, and the shoulder-sleeve insignia was re-designated for MEDCOM.
Veterinarians serving with the U.S. Army during the Spanish-American War had many issues to work through. The leading challenge was that they were not actually “in” the Army, and were serving (with exception of veterinary sergeants) in a quasi-contractor status. These veterinarians had no promotion potential, retirement, or disability benefits. At the start of the Spanish American War in 1898, 14 veterinary surgeons were authorized for 10 cavalry regiments, and a veterinary sergeant was authorized for each field artillery battery. The small number and the non-permanent status (the Veterinary Corps was not established until 3 June 1916) was not enough to adequately support the growing force.

Equine inspection and care

One veterinary problem with huge consequences was the purchase of many unfit horses for military service. Preparing for the conflict and recognizing the need of equine power to move the Army, approximately 38,000 horses and mules were purchased for 4 million dollars. Without a trained veterinarian to determine the animal’s health, mistakes were made. Many of the animals were not “fit for duty”, often resulting in appalling animal losses.

These high losses captured the attention of the national press and forced some leaders to see the need for veterinarians to be involved in the purchase process. However, not everyone agreed. As late as 1900, during a Senate debate concerning improving Army veterinarian benefits, a senator argued that the cavalry captain of the troop had more experience and ability to determine a horse’s condition than young veterinarians coming out of college. When veterinarians were utilized in greater numbers on purchasing tours in the western United States, the quality of the animals procured greatly improved.

Another benefit of veterinary supervision was the prevention of disease. Just as troops for the war were gathered at congested areas, so were the horses. Glanders, a very contagious respiratory disease, was unfortunately spread by armies during the Civil War. During the Spanish-American War many of the glanders-infected horses were quarantined. As such, many of the horses and mules staged at Tampa, Florida for the war were deemed unfit by veterinarians and were not shipped to the battle sites. Also, the Florida courts banned the animals from being shipped out of the staging camps. Although the quarantine was effective, it was enacted late in the battle plan and units such as the 1st Volunteer Cavalry, also known as the “Rough Riders,” went to war without their steeds and mule supply trains.

Food Safety/Inspection

Although the Spanish-American War was a short conflict, it had a number of scandals. A larger debacle than the equine issue was “Embalmed Beef.” This controversy played an important part in the establishment of the Army’s veterinary food inspection service. Soldiers in Army camps in the southern United States, Cuba, and Puerto Rico alleged their beef rations were preserved with harmful chemicals, rendering the meat unpalatable and making them sick. The U.S. press ran numerous scurrilous stories featuring the claims.
As the news spread, President William McKinley appointed a commission chaired by Major General (ret.) Grenville Dodge, to investigate the War Department’s conduct during the war with Spain, including the allegations of embalmed beef used for subsistence. The Dodge Commission Report determined the refrigerated and canned beef was generally wholesome and met the quality standards of the day. The commission found no evidence of chemically tainted beef, but indicated that the beef occasionally may not have been optimally stored, issued, and prepared. The commission also noted that, over time, refrigerated beef can have surface mold growth, but with trimming, the meat underneath is still satisfactory. Although these findings were scientifically accurate, witnesses seeing the mold-covered refrigerated beef concluded the food was aesthetically unacceptable and unfit for consumption.

The damage was done, but there was a partial solution. Since Subsistence Department personnel often relied on the beef suppliers’ quality inspectors for contract compliance, there was a conflict of interest. The inspectors had to be free of company control. Also, the standards had to rise. The Army’s food inspection gap was initially filled by hiring a US Department of Agriculture veterinarian, who was appointed as meat inspector for the U.S. Army Subsistence Department, to perform receipt meat inspection in 1901. By 1906 the Army had six veterinary food inspectors.

Looking ahead

The Spanish–American War would bring significant changes for Army veterinarians at the close of the war as they were relied upon to resolve food inspection issues and to provide equine health care and monitoring. The country’s veterinary associations were changing as well. The United States Veterinary Medical Association (USVMA), which was formed during the Civil War, its name mirroring preservation of the country was re-named during the Spanish–American War as the now unified American Veterinary Medical Association (AVMA).

The need for veterinarians as a permanent part of the Army continued to be realized after the war. There were over 60 civilian veterinarians working for the Army in the Philippines from 1899-1902. Their status steadily improved in the coming years receiving uniforms, better pay, and in some cases, commissions as veterinary surgeons.

Sources
The Textbook of Military Veterinary Services, San Antonio, TX: Borden Institute, 2019
While Army uniform changes have been fairly constant in recent years, blue was the standard color for much of the 19th Century. Chuck Franson and Paula Ussery describe the “new” uniform for AMEDD personnel in the Spanish-American War. A brief article describing Army veterinary personnel during the war is also in this issue.

Departing from 1898, Diane Burke Fessler shares interviews and experiences of flight nurses in the 801st and 802d Medical Air Evacuation Squadrons (MAES) during World War II. Combining the Oval Office and Hollywood, excerpts of MAJ Jimmie Keller’s memoirs relay his time as a Physician Assistant on the White House Medical Unit from 1984 to 1988.

Please let us know your thoughts. We would like to hear your comments and are always seeking new articles for publication. If you are at Fort Sam Houston please stop by the AMEDD Museum!

In addition to this publication, please visit our websites with attached social media feeds:

History: http://history.amedd.army.mil/
The AMEDD Regiment: http://ameddregiment.amedd.army.mil/

These websites serve as great resources for the history of Army Medicine. Peruse our documents online, exploring valorous awards and medical advances as well as interesting biographical information.

Nolan A. (Andy) Watson
Acting Chief, ACHH
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

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