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Contents



3306	
Medical support for mecha- nized cavalry	3-7
Medical Air Evacuation Squadrons	8-9
Portable Surgical Hospitals	9- 10
Organizing Medical Command and Control	11- 13
Controlling the Hospitals	14- 15
Overhauling Field Medical Support	16- 18
SSG Joe Diaz collection	19
SP4 Ramiro Chavez in Vi- etnam	20- 22
Symbols of Organizations	23- 24

Welcome to the latest issue of the *AMEDD Historian*! In this issue we focus on organizing medical support, another of the Surgeon General's responsibilities. Read this edition to view how much of Army Medicine's structure developed from previous incarnations.

Organization includes brick-and-mortar hospitals from the earliest days to the present, command and control, and a variety of deployable medical units. Not all developments came from the Surgeon General's Office; some were developed in wartime as necessary expedients, sometime responsibility was delegated, especially to the Medical Field Service School, now the Medical Center of Excellence. Sometimes the impetus came from changes in the Army, and sometimes the AMEDD had to insert itself to make sure medical support was properly organized or clarify the chain of command.

Based on medic Ramiro Chavez's interview, we have an article on his time in Vietnam. His first time in combat was the action that resulted in a Medal of Honor for Chaplain Angelo Liteky. Later, Chavez describes his own actions that would be recognized with Silver Star and Bronze Star with "V" device medals. Newly available in our research collection is material from another medic in Vietnam, Joe Diaz.

(continued on last page)

Organizing the First Medical Field Units Sanders Marble, ACHH

From 27 July 1775, when "an Hospital" was authorized by the Continental Congress, the AMEDD operated in the field. Regiments (the basis of the Army until the early 20th Century) had medical personnel, and gradually there were some extra medical personnel for brick-and-mortar hospitals, administration, and other duties. But field units were improvised from whatever officers and men could be found.

By the late 1800s the Army was working to improve the quality of training. "Camps of instruction" were organized for all arms starting in 1887, which coincided with Congress establishing the Hospital Corps. The Hospital Corps was supposed to help professionalize AMEDD enlisted men, since medically-trained men could not be transferred back to line units, while promotion could be based on medically-specific promotion boards. Over the next few years further steps helped: in 1891 a manual for training the Hospital Corps was published, and the same year medical-only Camps of Instruction opened. These had a substantial cadre: three (or more) doctors, three hospital stewards, three acting stewards, a bugler, a tailor, and an artificer to mend equipment. Around 40 recruits were assigned to each camp for six months before proceeding to their first unit.

Through 1893 the medical camps were experimental, but they proved their value, and over their first five years they trained over 400 men. The number and location

Page 2 The AMEDD Historian

of the camps changed, but they were geographically spread, presumably to reduce travel costs.

The 1898 Spanish-American War had shown the AMEDD (and the whole Army) was not ready for even a medium-sized war. The Army had been scattered across hundreds of small posts and had little experience about thinking at regimental level, let alone larger. Numerous reforms included starting an Army War College and the Army wrote its first Field Service Regulations, roughly equivalent to today's operating concepts. The 1905 FSR called for exercises not with regiments but provisional brigades and even divisions. The divisions would be allarms formations, which drove changes around the Army.

In 1908 the AMEDD took its Camps of Instruction and organized them as provisional field units. Since they had been training soldiers for both hospital and ambulance work, the units were Ambulance and Field Hospital Companies. In 1910 FSR was revised, and now each division was supposed to have four ambulance



A Camp of Instruction at Washington Barracks, now Fort McNair. U.S. Army photo.

companies and four field hospitals, one of each per brigade. That year the divisions became the main operational unit, replacing the regiments – although most soldiers would not have seen any difference, since the bulk of the Army was still stationed at small, often remote, camps and forts.

Because 'Big Army' needed medical field units, the provisional medical units were formally established on 17 April 1911. They were still Ambulance and Field Hospital Companies (numbered 1 through 4)



Field Hospital No. 7 on the march, 1917. Courtesy National Library of Medicine

but only through 5 October 1911 when they were split into single-function units. That change was probably sped up by the poor performance of medical units in the summer of 1911. A 'Maneuver Division' had been formed to test the new organization and doctrine, and its medical support was mediocre. The Inspector General specifically called out the medical field units in their published report: "The necessity for a permanent organization for field hospitals and ambulance companies, properly trained and equipped, was most forcibly demonstrated when this division first met."

Thus the AMEDD had permanent field units, and has had them since. In 1914 the AMEDD started forming the next echelon of units, evacuation hospitals that would function behind the

division. Immediately, The Surgeon General warned that he lacked manpower and equipment to provide the full number of medical units the Army would need for mobilization, and the problem of field medical support took another turn.

Sources

Annual Reports of The Surgeon General, 1908-1914

Annual Reports of the War Department, 1911.

John B. Wilson, <u>Maneuver and Firepower: the evolution of divisions and separate brigades</u> (Washington, DC: Center of Military History, 1998).

Mary C. Gillett, The Army Medical Department 1865-1917 (Washington, DC: Center of Military History, 1995).

MAJ Charles Alden, "Instruction of the Hospital or Ambulance Corps in the United States and State Services," *Medical Age* 14 (1906) 449-456.

The Development of Medical Support for Mechanized Cavalry Grant Harward, ACHH

When the 1st Cavalry was mechanized in 1932, becoming the Army's first mechanized cavalry regiment, Major Merton Farlow, Medical Corps (MC), remembered, "At that time, in addition to a great deal of talk about the future and probable utility of mechanized cavalry itself, there was also some speculation on the part of some officers with the regiment as to how medical service could be rendered to a mechanized cavalry force. It was admitted that to render adequate medical service would probably be a difficult task." Providing medical support to mechanized cavalry represented an unprecedented challenge for the AMEDD. It had to be mobile to keep up, flexible for a wide range of missions, capable of evacuation and supply over long distances, and small enough to not encumber. Fortunately, the Medical Field Service School (MFSS) set up at Carlisle Barracks in 1920 was prepared to tackle this problem. The MFSS held an Advanced Course each fall to train field grade officers, who wrote research papers on important medical issues facing the Army, and mechanized cavalry prompted study. While student papers were not official, they were influential because the Ar-

my was smaller than today and officers who attended such centers had greater impact. The MFSS, in addition to training AMEDD personnel, operated like an AMEDD think tank. MFSS instructors and students had time to think about current problems and future challenges facing the Army, so the AMEDD tapped them for innovative solutions. The mechanized cavalry medical service during the inter-war years laid the foundation for the armored medical service in WWII.

Mechanized cavalry resulted from not creating an independent tank force. The Army had established the Tank Corps in France during WWI, but after the war military and civilian leaders almost immediately questioned the need for it. In 1919 the American Expeditionary Force Board on Organization produced a



7th Cavalry Brigade (Mechanized) on parade at West Point, 1939.

184-page report that only had two pages on tanks, describing them as an "infantry supporting weapon incapable of independent decisive action." Consequently, the National Defense Act of 1920 abolished the Tank Corps and assigned tanks to the Infantry Branch. The Chief of Infantry directed tank development until two things occurred. First, following cavalry maneuvers in 1927, Cavalry Branch adopted a new organization to make it smaller and more mobile. That was supposed to keep cavalry relevant, but unintentionally began a gradual process of mechanization and motorization that eliminated horses from the battlefield. The same year, the Secretary of War also observed maneuvers by the British Experimental Mechanized Force demonstrating improvements in the speed, range, and reliability of tanks. Even the Chief of Cavalry was impressed: "the role of tanks is no longer a special weapon for infantry, but that it is just as important to cavalry division, corps, and the Army." The U.S. created an Experimental Mechanized Force in 1928 to test armored vehicles and concepts. An eleven-man mechanization board recommended creating an independent Mechanized Force. While the Chief of Infantry opposed the idea because it threatened his monopoly over tanks, the timing was terrible.

At the end of 1929 the Great Depression hit America, devastating the economy and preventing the War Department from equipping the Mechanized Force established in 1930. The War Department's budget was slashed and military leaders deemed the Mechanized Force a "luxury" that the Army could no longer afford. In May 1931 then-Chief of Staff Douglas MacArthur disbanded the Mechanized Force. Instead, missions, not equipment, would dictate organization, so all branches would mechanized and use motor vehicles as far as practical. The tank's role expanded from just infantry support to include cavalry missions like reconnaissance, security, exploitation, and pursuit. To bypass congressional mandate, tanks in Cavalry Branch were called "combat cars." The machines were basically the same, but the roles of tanks and 'combat cars' were

Page 4 The AMEDD Historian

completely different. In October, the War Department limited Cavalry Branch's initial mechanization program to one mechanized cavalry regiment for testing. The next month, Mechanized Force's remnants arrived at Camp Knox outside Louisville, Kentucky. Camp Knox was large, had varied terrain, and was underused, making it perfect for testing mechanized cavalry. So, on New Year's Day 1932 Camp Knox was upgraded to Fort Knox and turned over to the mechanized cavalry, with 1st Cavalry coming from Fort Russell in Marfa, Texas in November. The next year, cavalrymen saluted farewell to horses and began training on armored vehicles.

Mechanization was the use of any mechanical means to enhance a combat unit's tactical effectiveness and mobility, but it became associated with the employment of self-propelled vehicles to carry soldiers, weapons, armor, and equipment into battle. Motorization, on the other hand, was the substitution of draft animals by motor transport in support units to provide greater operational mobility. Infantry tank regiments were broken up to support slow-moving infantry, so existing support services for infantry divisions were sufficient. Mechanized cavalry regiments operated independently, advanced forward rapidly, and often fought dispersed or widely separated, which presented a myriad of problems for support services.

The AMEDD's efforts understandably lagged behind the Cavalry Branch's experimentation. In February 1932, 1st Cavalry (Mechanized) consisted of a Headquarters and Headquarters Troop, a Machine Gun Troop, a Covering Squadron with a Scout Car Troop and an Armored Car Troop, and a Combat Car Squadron with two Combat Car Troops. Only after field testing and analysis would service units be added. Planners assumed, however, the mechanized cavalry regiment should have as small a service group as possible. The General Staff cautioned, "Our Cavalry Regiments (Mechanized) must be kept stripped—and if we make any errors they must be on the side of cutting out vehicles rather than adding a single one, no matter how very valuable the particular vehicle might be under certain considerations." By January 1934, cavalry planners had solidified 1st



The M1A1 combat car, with equipment and ammunition laid out.

Cavalry (Mechanized)'s organization, tactics, and doctrine. Mechanized cavalry would operate in small groups dispersed over a broad front with armored cars carrying out reconnaissance and two 'combat car' spearheads (supported by machine gunners and engineers) assaulting and enveloping the enemy. In May 1934, 1st Cavalry (Mechanized) participated in cavalry maneuvers at Fort Riley and impressed observers. With another horsed regiment slated to mechanize it was time to seriously examine support services for 7th Cavalry Brigade (Mechanized).

Cavalry planners added the bare minimum of medical support to the proposed mechanized cavalry brigade organization. A 1934 Command and General Staff College study suggested adding medical detachments to all the units in the mechanized cavalry brigade plus a Medical Squadron. Ambulances would provide first aid and evacuate causalities to a brigade collecting station where corps or army ambulances – possibly even "ambulance airplanes" because of the long distances involved – would take over evacuation to corps or army hospitals. The study concluded, "The brigade has no hospital facilities, and due to its great mobility it is considered that is should not have any." In April 1935, the War Department approved a new organization for 1st Cavalry (Mechanized) that now included a medical detachment. Until the brigade received another regiment, the medical squadron remained notional.

Obviously, mechanized cavalry needed motorized medical support. The existing Medical Squadron contained 13 officers, 207 enlisted men, 211 animals, 18 wagons, and 17 motor vehicles and was organized into a Headquarters Troop, Collecting Troop, Ambulance Troop (partially motorized), Hospital Troop, and Veterinary Troop. This "mixed" Medical Squadron with both animal drawn and motor transport was designed to satisfy the needs of all the various types of cavalry regiments: horse, partially motorized, or motorized. In his 1935 MFSS Advanced Course paper Major Adolphus McDaniel, MC, argued the "mixed" Medical Squad-

ron was unbalanced and instead there should be two types of Medical Squadron, either wholly animal drawn or fully motorized, depending on the cavalry unit supported. Without any horses the Veterinary Troop became superfluous except for meat and food inspection, so only one veterinary officer and one veterinary enlisted man should be retained. McDaniel also suggested the Medical Squadron combine the Collecting and Ambulance Troops. A mechanized cavalry division was far in the future, so until then brigade relied on a single regimental medical detachment.

However the regimental medical detachment was too small. It had three officers, including one dentist, 15 enlisted men, an ambulance, two half-tracks, a truck, and a motorcycle with a side car. It had jettisoned 14 veterinary enlisted men, leaving just 18 medical personnel to care for 799 other soldiers in the mechanized cavalry regiment. In his 1935 MFSS Advanced Course paper Major Levy Johnson, MC, argued there were too few enlisted men in the regimental medical detachment, especially considering the nature of mechanized cavalry operations. Horse cavalry regiments could advance 30 miles in a day's march, but mechanized cavalry regiments could conceivably race 150 to 250 miles a day greatly spreading out units and extending its depth. Casualties could be spread over dozens or scores of miles: "A more difficult situation as a problem for the medical service is hard to imagine." The Armored Car Troop, with its reconnaissance missions into hostile territory, was sure to face all manner of threats, producing "isolated and widely separated losses. Information concerning such losses might from the medical point of view, easily be fatally late in reaching the main body." Yet after filling regimental surgeon, assistant regimental surgeon, regimental dental surgeon, seriously wounded department assistants, slightly wounded department assistants, chauffeurs, and other necessary positions the Medical Detachment only had four aid men to carry out first aid, collection, and evacuation of the wounded. Moreover, since the two half-tracks (with two aid men each) were assigned to trail the two Combat Car Squadrons, the Armored Car and Machine Gun Troops lacked dedicated aid men. Johnson recommended

adding seven more enlisted men for a total of 25, allowing four aid men to be assigned to each half-track and two aid men to be assigned to the Machine Gun Troop. He also emphasized the necessity of "thorough instruction of the individual [mechanized cavalryman] in the use and application of first aid measures" and extra first aid supplies in each vehicle for the crew to use because medical personnel could not be everywhere. Medical planners began studying using aircraft to evacuate mechanized cavalry casualties to hospitals in the rear.

The AMEDD seriously considered air evacuation, but another 1935 MFSS Advanced Course paper demonstrates how far theory had to go before wounded could be evacuated by air in large numbers. Major Ernest Harrison, MC,



These early half-tracks were unarmored, unlike the M3 half-track that was widely used in WWII.

predicted that in a couple of years most evacuation would be by motor transport and in a couple of decades practically all evacuation would be done by air transport. His futurist depiction included fleets of large and small aircraft with medical treatment compartments operating from forward landing strips but was light on practical details and ignored the challenges of navigation (especially in the dark), weather, and enemy air activity. The realities of aircraft technology limited air evacuation as a solution.

Despite budgetary limitations and resistance to "dehorsing" the cavalry, Cavalry Branch moved forward with turning 7th Cavalry Brigade (Mechanized) into a real unit. The first major employment of mechanized cavalry with other arms took place during Second Army's maneuvers in Michigan. Temporarily augmented with another motorized artillery battalion, a motorized infantry battalion, service units, and a squadron of observation aircraft, 7th Cavalry Brigade (Mechanized) confirmed its tactical doctrine worked and motorized infantry could keep pace to carry out double envelopments. In September, 13th Cavalry transferred from Fort Riley to Fort Knox to be mechanized. After considering the summer maneuvers, observers recommended adding motorized infantry, aircraft, engineers, signals, ordnance, and quartermaster troops to 7th Cavalry Brigade (Mechanized). Cavalry planners neglected to add a medical detachment.

Page 6 The AMEDD Historian

There was also no progress on improving the regimental medical detachment, so Major Farlow's 1936 MFSS Advanced Course research paper again addressed the issue. Based on a lecture at the MFSS and his own experience with the 1st Cavalry (Mechanized), he argued "the fact that casualties, under certain conditions, are supposed to be left with the civilian population is in itself an admission of failure." To make cavalry regiments leaner and meaner, Cavalry Branch had cut support units, including medical, into the bone. Cavalry Branch regulations allowed casualties to be left with civilians if combat units needed to keep advancing. Farlow believed adding more aid men and litter bearers would allow the regimental medical detachment to properly collect wounded men. Additionally, Farlow argued the medical detachment lacked the necessary vehicles to keep up with combat units, especially a mechanized evacuation vehicle with sufficient room to treat six casualties. He believed there should be five officers and 23 enlisted men and four such vehicles (with driver and three aid men) assigned to the two Combat Car Squadrons, Machine Gun Troop, and Service Troop. With no room for medics in armored vehicles, cavalrymen would evacuate wounded to the specialized evacuation vehicles where medics would take over. Once enough wounded had been collected, evacuation vehicles would transport them to an ambulance center where the doctors were located. From the ambulance center ambulances would evacuate casualties directly to a divisional hospital because there would be no brigade collecting station.

In 1937 Cavalry Branch sought a mechanized cavalry division, and a horse cavalry division to create a mixed cavalry corps. Staffing was slow, and in May 1939 it was rejected but another mechanized cavalry brigade was a possibility. In September 1939, after German panzer divisions invaded Poland, Cavalry Branch once again lobbied the War Department for a mechanized cavalry division using the German panzer division as a proof of concept. In December 1939, Infantry Branch established the Provisional Tank Brigade at Fort Benning, belatedly beginning its own experiments with a large mechanized formation.

While the mechanized cavalry division was in doubt, the AMEDD finally designed a proper medical service for the mechanized cavalry brigade. Major Paul Hawley, MC, an instructor at the MFSS, took up the challenge. A WWI veteran, former medical inspector of the Philippine Department, and Army War College graduate, he was an accomplished and influential medical officer who later served as the command surgeon of the European Theater of Operations during WWII. Hawley's 1940 study synthesized previous MFSS research. He again identified mobility as the biggest challenge. The tried and tested WWI evacuation scheme was based on combatant arms and support services having roughly the same mobility and no exposed flanks, but mechanized cavalry was much more mobile than traditional support elements and its rapidity created vulnerable lines of communication. "After pondering these problems for almost a year, I am convinced that the present doctrine of evacuation must be modified if a satisfactory medical service is to be provided for any force that is considerably more mobile than the echelon upon which it depends ultimately for supply and evacuation." Hawley argued the "most critical link in the entire chain of evacuation" was getting the casualty from place of injury to an aid station. Therefore, the mechanized cavalry brigade needed mobile aid stations, stripped to the most essential equipment, to keep pace with mechanized cavalry units. With limited equipment, these mobile aid station needed to evacuate casualties as soon as possible after stabilizing them. Each Combat Car Squadron should have a medical detachment of one officer and five enlisted men with two or three ambulances. The ambulances would leap-frog as the squadron aid station until full, then evacuate casualties to the brigade hospital station. The Machinegun Troop would have similar support. The Armored Car Troop would have to transport wounded in its own vehicles because it could not be burdened with more. The regimental medical detachment would be responsible for the regimental aid station that had more equipment and supplies. Both regimental medical detachments should have five officers and 45 enlisted men with eight ambulances, two trucks, and three motorcycles, twice previous estimates. Finally, the brigade medical troop would focus on supply and hospitalization. The brigade hospital station needed to be completely mobile because Hawley expected it would be required to move so often there would be no time to waste unpacking and repacking equipment, setting up and taking down tents, or loading and unloading wounded. He suggested using large "metropolitan" ambulances as mobile hospitals because they could carry the necessary equipment, although only two litter cases. The brigade medical troop had to evacuate its casualties because higher medical echelons might not know where it was as it moved with the rest of the mechanized cavalry brigade. Hawley's study greatly influenced the organization and doctrine of the medical service for armored divisions.

In July 1940, after almost a decade with mechanization divided between Infantry and Cavalry Branches, the War Department created the Armored Force. It controlled tactical and technical developments of all

mechanized units. The Armored Force initially consisted of I Armored Corps, assigned 1st and 2d Armored Divisions (built from 7th Cavalry Brigade (Mechanized) and the Provisional Tank Brigade respectively), and 70th Tank Battalion (Medium). Each armored division included a medical battalion. The Armored Force's medical service was based on MFSS research and studies.

The chapter on armored medical support was updated in May 1942. It began by emphasizing the Armored Force' speed and lack of hospitals below corps level. A Division Surgeon advised on matters relating to sanitation and medical service, oversaw medical training, and maintained liaison with forward medical units. The Medical Battalion (Armored) consisted of a Headquarters and Headquarters Company with 13 officers and 90 enlisted men and three Medical Companies (Armored) each with a Headquarter Platoon, Litter Platoon, Ambulance Platoon, and Treatment Platoon totaling 11 officers and 122 enlisted men, a half track, 31 trucks, and two trailers. The Treatment Platoon even had trucks mounted with a special operating room body instead of tents to unpack and repack. Establishing battalion aid stations in the rear before an attack was deemed "impracticable" and squads were supposed to "advance along the axis and establish at the rallying point, where they will take over casualties removed from the armored vehicles." This plan basically matched Hawley's MFSS study. The only other major addition was a heavy emphasis on radios and radio nets.

The MFSS significantly influenced the development of the medical service for mechanized cavalry, and thus armored, units. MFSS Advanced Course research papers offered medical planners new ideas that influenced the development of medical doctrine for mechanized cavalry. Inter-war assumptions about the rapid speed, great distances, and high tempo of mechanized cavalry operations – seemingly all confirmed by German panzers at the beginning of WWII – convinced the AMEDD to not assign hospitals to 7th Cavalry Brigade (Mechanized). The AMEDD also believed it needed specialized mobile aid stations to keep up with mechanized units. No one knew exactly how many casualties an armored division would take while on campaign, so only the test of battle would prove if the medical service for armored units was equal to the task.

A longer version of this article is due to be published in <u>Armor Magazine</u>. Photos are U.S. Army images.

Sources

Maj. Merton A. Farlow, MC "What Should Constitute the Medical Service of a Mechanized Cavalry?" MFSS Advanced Course 1936.

Timothy K. Nenninger, "Organizational Milestones in the Development of American Armor, 1920-40," in *Camp Colt to Deserter Storm: The History of U.S. Armored Forces*, Eds. George F. Hofmann and Donn A. Starry (Lexington: The University Press of Kentucky, 1999).

George F. Hofmann, *Through Mobility We Conquer: The Mechanization of U.S. Cavalry* (Lexington: University Press of Kentucky, 2006).

Robert S. Cameron, Mobility, Shock, and Firepower: The Emergence of the U.S. Army's Armor Branch, 1917-1945 (Washington, D.C.: Center of Military History, 2008).

Cpt. John K. Christmas, "Supply and Evacuation of Mechanized Forces Applied Particularly to the Cavalry Brigade (Mechanized)," CGSC Research Study 1934.

Maj. Adolphus A. McDaniel, MC, "The Medical Service of the Cavalry Division with Emphasis on the Medical Squadron as Now Organized Being Able to Adequately Evacuate and Hospitalize the Casualties of a Cavalry Division," MFSS Advanced Course 1935.

Maj. Levy S. Johnson, MC, "The Problem of Evacuation for a Mechanized Cavalry Regiment," MFSS Advanced Course 1935.

Maj. Ernest F. Harrison, MC, "Air Evacuation," MFSS Advanced Course 1935.

Major Paul R. Hawley, MC, "The Evacuation and Hospitalization of a Mechanized Brigade on the March in Hostile Territory, and in

Major Paul R. Hawley, MC, "The Evacuation and Hospitalization of a Mechanized Brigade on the March in Hostile Territory, and in Combat," MFSS Study 1940.

FM 8-5 War Department Medical Field Manual: Mobile Units of the Medical Department, Changes No. 1, 1942.

Page 8 The AMEDD Historian

Medical Air Evacuation Squadrons

Before WWII the Army knew that air evacuation would move patients faster. That could provide both improved patient care and reduce the logistical burden in combat theaters – the estimate was it took six soldiers and ten tons of supplies to care for one patient in an overseas theater. However, while the AMEDD had thought about large-scale air evacuation, experimented a little bit in the 1920s and 30s, and watched European experience, there were other priorities in the U.S. buildup for war. Air evacuation units were designed, Medical Air Ambulance Squadron authorized in November 1941 and an Air Ambulance Battalion in May 1942 that had a mix of transport aircraft for operational and strategic evacuation and liaison aircraft like Cessnas for tactical evacuation. But circumstances changed and these organizations changed rapidly. Eventually the Medical Air Evacuation Squadron (MAES) was standardized in early 1943.

There were no aircraft to devote solely to medical evacuation, and since litter racks could be easily mounted in ordinary transport aircraft, the squadrons were mainly personnel. The key choice was for flight surgeons to select those patients it would be safe to fly, then nurses and enlisted men would accompany them. Thus a 'flight' had one doctor, six nurses, and six medical technicians. There were not enough flight surgeons to have them accompany every group of patients, and nurses not only had more medical training than medics, they were considered good for patient morale – not insignificant when most Americans had not flown in an airplane.

Air evacuation was needed in operational theaters before MAES were organized, and aircraft were moving patients in North Africa and the South Pacific in late 1942. The Army organized an Air Evacuation School at Bowman Field outside Louisville KY in early 1943, but created the first MAES before students could graduate. The first graduation was in February 1943, with the Air Surgeon (as the senior medical officer of the Army Air Forces was titled) had his own flight surgeon wings adapted with an N (for nurse) for

the honor graduate. Eventually 31 MAES were formed, and the Bowman Field school graduated 1079 nurses (and 558 enlisted men, once they started receiving formal training).

An air evacuation system was developed because the pistonengined aircraft had moderate range. A network of airfields had been arranged to ferry aircraft from the U.S. to combat theaters, with hospitals at the larger bases, and the medical evacuation flights could use the same network to return. If a patient deteriorated and needed to recover before further evacuation, they could receive hospital care until ready again.

The results were excellent. 1,172,648 patients were documented (with some flown before the MAES existed to keep records) and the death rate was only 4/100,000 including aviation accidents. This was largely because the patients were carefully selected for air evacuation; if they were unstable, they would be held in the combat theater until they were safe to evacuate. This was recognition not just of the limited skills of the nurses and enlisted men, but the limited equipment they had: oxygen bottles, plasma, chemical heating pads, bandages and splints, and food were the main interventions.

The AMEDD identified the gap, but operational requirements de-



(Above) Interior of a C46 showing the webbing litter straps that were developed to save space. (U.S. Army image) (Below) 2LT Ruth Gardiner, a flight nurse who died in an aviation accident in Alaska. The Army memorialized Gardiner General Hospital for her in 1943. (U.S. Army image)



manded deployment of untrained units. Once the units were fielded, they made a strategic impact by moving patients back instead of needing further medical resources forward.

Sources

Judith Barger, Beyond the Call of Duty: Army Flight Nursing in World War II (Kent OH: Kent State Univ. Press, 2013).

Mae Mills Links and Hubert A. Coleman, <u>Medical Support of the Army Air Forces in WWII</u>. (Washington, D.C.: Office of the Surgeon General, USAF, 1955).

Melanie Benter, "Military Flight Nurses, World War II to Korea," unpublished research paper.

Frederick R. Guilford and Burton J. Soboroff, "Air Evacuation: An Historical Review," *Journal of Aviation Medicine*, December 1947: 601-16.

Robert Futtrell, <u>Development of Aeromedical Evacuation in the USAF, 1901-1960</u> (Air University: USAF Historical Division, 1960).

Portable Surgical Hospitals: the field-expedient hospital

In June 1942 the command surgeon in the South West Pacific had a problem. It was a vast area, with many small American bases needing medical support – but he only had large hospitals. Thus COL Percy Carroll decided to carve "portable hospitals" from the larger ones. These would be simple 25-bed low-acuity hospitals for those small bases.

The mission changed almost immediately. By August the Allies were counterattacking, and would need forward casualty care. Carroll reconceptualized the portable hospitals into portable surgical hospitals, still 25 beds but now without nurses (by law, the Army Nurse Corps was allfemale at this time, and the Army and American public were reluctant to put women in harm's way) and with minimal equipment so they could man-pack it. The units would have four doctors (three surgeons and one anesthesiologist, although most had only on-the-job training) and twentyfive enlisted men. Thinking about the arduous jungle conditions where they could be operating, and the hand-carry situations, Carroll required the doctors be no more than 35 years old, and the



PSH training in Australia, with the personnel carrying all the equipment. Courtesy National Library of Medicine.

enlisted men no more than 30. With approximately 1250 pounds of unit equipment, everyone would have 33 pounds to carry plus their personal equipment. The unit would not have some equipment that would be considered standard in a hospital (let alone a surgical hospital), such as X-ray machines, but they certainly increased the forward surgical capabilities.

By October 1942 the PSH were in action, after that limited four-month training window that at least showed the need to cut back on equipment – some units had started with 2300 pounds of gear. At first, they were used as intended: they augmented forward medical units at division, regiment, and even battalion level, as the situation demanded. In their first campaign, at Buna in New Guinea, PSH were as close as 100 yards from the firing line, although more commonly they were 500 or more yards back. At times, PSH operated in bunkers and even issued weapons to the ambulatory patients due to the risk of Japanese infiltrators. PSH were routinely used in GEN Douglas MacArthur's island-hopping campaign in the South West Pacific. Their small size made them very useful: they could support a small taskforce, they did not need much space in a beachhead, and their limited weight and cube made it easier to fit them in ships. Late in the war, the rule of thumb was two PSH per division in a landing force.

PSH were used very flexibly: they provided forward surgical care, they worked on transport ships or LSTs as floating hospitals; they augmented other hospitals; they worked as miniature evacuation hospitals. PSH saw many non-surgical patients, from soldiers accidentally drinking insect repellant to schistosomiasis.

Page 10 The AMEDD Historian

By mid-1943 the Army had accepted PSH as a standard unit, strengthened with four more enlisted men, and now with vehicles and trailers so they stopped being man-portable. About the same time, surgical teams from an Auxiliary Surgical Group were deployed to the Pacific. These could be used in some similar ways to PSH; they could augment hospitals or clearing companies, but the six-man teams were neither as robust nor were they self-contained units, so PSH stayed very useful. By the end of the Pacific War, when operations were on larger islands with space for larger hospitals, the PSH were being used as large surgical teams, carried by trucks instead of man-packed and attached to medical companies to support regiments. They really needed the larger units for logistical support. Personnel were selected with less care; when PSH were sent to the China-Burma-India Theater there were few trained surgeons but plenty of pediatricians, obstetricians, and general practitioners.

PSH also performed the original Portable Hospital mission, as small low-acuity hospitals at bases. For that they were augmented with nurses and equipment. Over time the units added equipment if they were not constantly moving, or if trucks were available; 'portable' was supposed to be possible, but not always desirable.

When the war ended, the Army considered how to provide forward surgery. The PSH was considered, but senior officers from the Pacific theater had mixed opinions, and the Army standardized the Mobile Army Surgical Hospital and surgical teams.

PSH at Buna, New Guinea. *Above*: patients waiting on improvised bamboo litters. *Right*: administering plasma to a casualty.

Images courtesy Library of Congress.

Sources

Mary Ellen Condon-Rall and Albert E. Cowdrey. Medical Service in the War Against Japan. Washington DC:

Center of Military History, 1998.

Anon. "The Portable Surgical Hospital". AMEDD Bulletin 69 (10/1943). 7-8.

Marks, George A. "Portable Surgical Hospital at Buna." AMEDD Bulletin 71 (12/1943). 43-54.

Thorndike, Augustus. "Surgical problems in the Buna Campaign". AMEDD Bulletin 79 (8/1944), 77-81.

Willis, John and Menaker, Gerald. "Medical Aspects of Amphibious Operations in Pacific Ocean Areas". *AMEDD Bulletin* 4/1 (7/1945), 61-8.

John Greenwood, "Front Line Surgeons: Portable Surgical Hospitals," unpublished research.

National Archives files, "Correspondence regarding PSH, 1942" and "Correspondence regarding PSH, 1943" on file, ACHH.

Organizing Medical Command and Control Scott Woodard and Sanders Marble, ACHH

Through WW2, a formation's command surgeon was both staff officer to the commander and in command of medical units assigned to that formation. The "unit or area surgeon ... commands all Medical Department troops not assigned or attached to subordinate units of the command." Such command was typically exercised through subordinate HQs (medical group and/or medical battalion for maneuver formations, and those plus possibly hospital centers for area commands) but the Corps Surgeon or Army Surgeon was both staff officer and commander. This was not perfect, and MG Paul Hawley, the Chief Surgeon for the European Theater of Operations, had repeatedly expressed his frustration at not controlling the medical system.

In 1944, Army leadership was concerned about the tooth-to-tail ratio, and how many soldiers were absorbed in geographic support commands. Over several years, the concept for a Logistical Command was developed, in three sizes – to support a corps, a field army, or a theater. (All were titled Logistical Command, but there were types A, B, and C.) Medical support was apparently to be subordinated to logistical commands.

In the Korean War, initial events developed too quickly to implement the logistical command framework. The officers in charge implemented a WW2-style system of command from the surgeon's office until 1952, when the Korean Communications Zone was created. Then rear-area medical units and functions were transferred to KCOMZ, while the 30th Medical Group handled medical support in forward areas.

After the Korean War, doctrine for the Logistical Command became more detailed, and it clearly had responsibility for medical support, including in tactical areas. (The TF sent to Lebanon in 1958 had a LOG-COM that oversaw all medical support beyond unit medical detachments.) In the late 50s and early 60s studies tried to delineate what was a command function versus a staff responsibility; this had not been necessary in WW2 when the surgeon was responsible. The LOGCOM structure was intended for peacetime and operations, and AMEDD functions were put under the logistics commander around the world.

Throughout this period TSG did not have direct access to the Chief of Staff, but was under other layers. In WW2 TSG was under Army Service Forces, and afterwards he was under DCSLOG when the DA Staff was organized. This may have affected whether any AMEDD protests to the LOGCOM structure were ignored. In 1963 TSG was again directly reporting to the Chief of Staff.

Vietnam: Separated, Then Unified Medical Authority

The medical force structure evolved as US presence increased from an advisory role to the fielding of combat forces after 1965. The initial structure of medical support was modeled after the doctrinal theories of a study on combat supply and service activities, Combat Support to the Army (COSTAR) II, which directed that a field army should have all logistical support provided by a field army support command (FASCOM). In Vietnam, this was 1st Logistics Command. As forces grew, non-divisional medical commanders became dual-hatted staff officers and inundated with additional staffing requirements. Any direct link between the senior medical officer in US Army, Vietnam (USARV) and his directives as the medical representative for the USARV Commander was cut by logistical commands following corps tactical zones. The non-vertically integrated system created "duplicative, overlapping, and confusing channels of communication." This self-inflicted wound handicapped any comprehensive and responsive medical system.

In June 1967 BG James A. Wier (USARV Surgeon) cited the "confusion in command and control, support, and co-ordination" proposed putting the 44th Medical Brigade under HQ, USARV. Only the G-1 opposed, and when he rotated home, it was approved. The next USARV Surgeon, BG Glenn Collins, got approval and on 10 August 1967, the 44th Medical Brigade became a major subordinate unit of USARV. This move would allow more rapid reinforcement of tactical medical units, elimination of duplicative staffs, and most importantly, establish centralized control as the most efficient use of critical and scarce medical assets. It was the only means to reduce the delays in medical planning and statistical reporting and also implement the recommendations of professional medical consultants assigned to USARV.

Collins assumed the dual role of Command Surgeon, USARV and Commanding General, 44th Medical Brigade. The missions were: 1. Advise the USARV Commander on all matters regarding the health of the command; 2. Exercise technical supervision over all medical activities of the command; 3. Plan to assure the availability of adequate medical support in the command; 4. Control the assignment and use of medical per-

Page 12 The AMEDD Historian

sonnel in Vietnam; and 5. Manage medical supply and maintenance functions. All these responsibilities were within the scope of non-divisional medical units and entailed medium and long range planning, development of theater-level planning, and monitoring coordination between the 44th Medical Brigade and supported units.

Inheriting this newly improved system of theater-level medical services, BG Spurgeon Neel commented on the workability of the dual-hatted nature of his position as the USARV Surgeon and 44th Medical Brigade commander in his exit interview:

Medical staff actions, mid and long-range planning, and technical guidance to subordinate medical organizations are the responsibilities and functions of the USARV Surgeon. Day to day medical operations are controlled by the CG, 44th Medical Brigade and the tactical units' surgeons. The dual role of the CG, 44th Medical Brigade/USARV Surgeon and the capabilities of the two staffs to devote their efforts to separate areas of responsibility has proven to be more responsive to support requirements in the Republic of Vietnam.

The last measure reorganizing command and control came with the establishment of US Army Medical Command, Vietnam (USAMEDCOMV) in 1970. BG David E. Thomas, USARV Surgeon and 44th Medical Brigade Commander, had the 44th Medical Brigade staff and USARV Surgeon's Office amalgamated into one unified command. The theories developed in COSTAR II studies were replaced by the realities and complexities of large scale combat operations in a theater of war.

In explaining the attempt to manage an entire medical support plan for a theater under a non-medical command, once removed from the theater commander's director for health service support in the theater, General Neel penned this observation:

The preferred organization for employing and controlling military medical resources is the vertical medical command and control system which reached its epitome in Vietnam. Medical service is an integrated system with its treatment, evacuation, hospitalization, supply, service, and communications components. It is not a subsystem of logistics, nor is it a subsystem of personnel.

To achieve maximum effectiveness and efficiency in medical service support, with the utmost economy in the utilization of scarce health care resources, there must be strong professional medical control from the most forward to the most rearward echelon. The commander of the medical command, regardless of echelon, should function as the staff surgeon to the responsible supported commander. Medical capability must not be fragmented among subordinate elements but rather centrally directed and controlled by the senior medical commander. No nonmedical commanders should be interposed between the medical commander and the line commander actually responsible for the health of the command. Specifically, logistical commanders, with their broad materiel-related functions, should not be made responsible for a task so critical and so uniquely professional as the provision of health services. The well-being and care of the individual soldier must not be submerged in, or subordinated to, the system responsible for the supply and maintenance of his equipment. The issues involved are too great to risk failure or marginal accomplishment.

MEDCOM-V proved a template for the AMEDD to break out from under LOGCOM control around the world. MEDCOM-Korea, MEDCOM-Japan, and MEDCOM-Europe were formed. Each was different: MEDCOM-K had been mainly the 65th Medical Brigade, MEDCOM-J had been the 627th Hospital Center and the USARJ surgeon's office, and MEDCOM-Europe controlled both the 9th Hospital Center (for medical support areas) and several medical groups that would come under command of V and VII Corps in event of war. All these organizations were responsible for medical support beyond the unit level. Doctrine was slow to catch up, and also a patchwork. The 1970 edition of FM 8-10 (Medical Support in a Theater of Operations) had not quite caught up. It showed medical support under the Theater Army Support Command, but other areas (such as military intelligence, air defense, special forces, civil affairs, and psychological operations) were independent, and some of them designated commands.

The Army's command system has continued to evolve. The WW2 system where the command surgeon was both staff officer and commander has not been tried on any large scale; policy and implementation have been divided. The division of responsibility between forward and rear has been seen in every war, and the recent experience with Medical Command (Deployment Support) or Medical Deployment Support Command has been foreshadowed. While there is no reason to think current concepts of medical command should be divided will survive better than any other, placing medical support under logistics/sustainment has proven to be

inefficient and ineffective for everyone.

Sources

Albert Cowdrey, <u>U.S. Army in the Korean War: The Medics' War</u>. Washington, DC: Center of Military History, 1987.

FM 54-1 The Logistical Command, 13 July 1959

LTC Gary Wade, Rapid Deployment Logistics: Lebanon, 1958. Ft Leavenworth KS, Combat Studies Institute, 1984.

MG Spurgeon Neel, <u>Medical Support of the U.S. Army in Vietnam 1965-1970</u>, Washington, DC: Center of Military History, 1972.

James E. Hewes, Jr. <u>From Root to McNamara: Army Organization and Administration</u>. Washington, DC: Center of Military History, 1975.

FM 8-1 Medical Service of Field Units, 28 March 1942

FM 8-5, Mobile Units of the Medical Department, January 1942

FM 8-5, Medical Department Units of a Theater of Operations, May 1945

FM 8-10, Medical Service Theater of Operations, 1959, 1962, 1970.

FM 8-55, Army Medical Service Planning Guide, 1960

BG Spurgeon Neel, "Senior Officer Debriefing Report: Period 2 August 1968 - 1 February 1969."

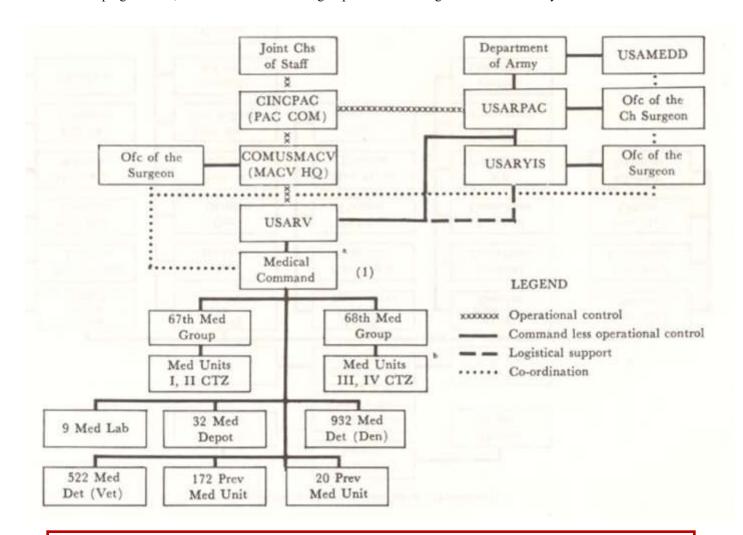


Diagram of Medical Command—Vietnam in the chain of command. From Neel, Medical <u>Support of the U.S. Army in Vietnam.</u>

Page 14 The AMEDD Historian

Controlling the Hospitals: A Century of AMEDD Command Structures

For most of AMEDD history, The Surgeon General had no direct control of hospitals. There was a doctor in charge, but he worked for the commander of the post for a "post hospital," or the commander of a geographic area if it was a "general hospital." Partly this was due to the limitations of communications and transportation. Before telegraphs there was no way to quickly pass messages, and by the time a letter was carried to the Surgeon General's Office (SGO) and an order to move a patient came back, the patient might well have recovered. Moving patients was also slow, especially before railroads, so it made little sense to move a patient by wagon for several days when he could stay in a hospital. It also mattered that there were not really specialized hospitals; with communications and transport both difficult, there was not really a hospital system but many separate hospitals.

In the Civil War the Army had general hospitals well behind the front lines, and there was some of what we would understand as patient regulating. Dr. Silas Mitchell was a specialist in neurological problems, and many neurological patients were sent to the hospital where he worked – but not all. These general hospitals supported the whole Army, not a particular geographical department, but they reported to the geographic department's medical inspector, who in turn reported to the departmental commander. However, he also sent a copy of his report to the SGO. After the Civil War the Army shrank in numbers, and the general hospitals went away.

In 1882 the Army got its first permanent general hospital, Army-Navy General Hospital in Hot Springs, Arkansas. The Army had not sought it, but local businessmen persuaded a senator to have the military build a hospital. As the name suggested, it took Army and Navy patients, and the hot springs were good for arthritis and it specialized in those patients. Thus it was a general hospital not just because it took Army and Navy patients, but it took patients from all around the service. Around 1900 more general hospitals were added (one in San Francisco in 1898 to support operations in the Philippines and be a referral hospital for the western U.S., one in 1899 that specialized in tuberculosis patients, and one in 1909 that was a referral hospital for the eastern U.S.) and the specialized hospitals were put under the SGO. This made sense because they provided specialist care and patients moved to the hospital; communications and transportation had changed making that much easier and faster.

This pattern of routine care controlled locally and specialized care controlled centrally lasted into the 1960s. The Army changed its terminology for geographical districts, and for specialist hospitals, but the pattern was the same. In spring 1967 a Board of Inquiry on the Army Logistics System recommended "study be made to determine if The Surgeon General should be given worldwide medical support responsibility and command of the general hospital level." There were more urgent problems in the Army, and the AMEDD was effective, even if it was not efficient, so it was tabled in the summer of 1967. However, over 1968 other studies were done and Medical Commands were established in Vietnam, Korea, Japan, and Europe. Those proved effective and efficient, and seem to have changed ideas about an Army-wide medical command. In January 1969 a World-Wide Organizational Structure for Army Medical Support was started. This would be a substantial effort, predicted to need 160 man-months and take 9-12 months. It looked at fourteen functional areas in the AMEDD, and looked at civilian models of organizing hospitals into groups, and also at how MEDCOM-Europe worked. The goal was efficiency and effectiveness, but recognizing "the end product must identify with the Army family as a whole, respond to its needs, and be compatible with its overall methods of operation without isolating the health services community." The study group was aware "any recommendation to extend the command of The Surgeon General is subject to criticism of "empire building' [but the] study [is] based on a desire for patient satisfaction with the health services."

Three options were offered:

A Health Services Command that would control medical care in CONUS

A worldwide Health Services Command

A HSC that just ran the general hospitals – essentially the status quo

Option 1 was recommended, with TSG taking command, three regional commands, a Health Services Training Command, the Army Medical Material Agency getting a world-wide role, and a Data Systems Agency recognizing how data could affect healthcare. OTSG would be cut back to just handling policy. This would transfer post hospitals and some training schools from Continental Army Command (CONARC) and some

material organizations from Army Material Command. Perhaps most surprisingly, it also saw transferring medical field units (presumably hospitals rather than medical battalions and companies) to HSC, also from CONARC.

WORSAMS was rejected, but in 1973 the Army was restructuring and CONARC was being pulled apart; most of the pieces would end up in FORSCOM and TRADOC, but a Health Services Command was formed with hospitals and clinics, but not medical field units. Unlike the proposed HSC, the HSC that was actually formed had no regions and was not commanded by TSG; it had a two-star commander at Fort Sam Houston, and seventy-four direct-reporting units. Elements that had reported to TSG (such as the Health Facilities Planning Agency and some AMEDD schools) were realigned to HSC, which reported to the Chief of Staff of the Army.

With TSG still seen as the Army's "top doctor" and in charge of policy but not in charge of any execution, lines became blurred. HSC gradually became responsible for healthcare beyond CONUS, but still did not cover everywhere: Japan, Korea, and Europe were not in HSC, meaning OTSG had different responsibility in different areas, again causing confusion. By the mid-1980s both HSC and OTSG were colloquially called "Half-COMs." An AMEDD Command and Control Study was run in 1986-87 that called for a medical command, but it was tabled.

TF Aesculapius (January 1993-June 1995) was the next reorganization study. Against a background of the Army shrinking in size after the Cold War, the AMEDD needed to shrink and become more efficient because the beneficiary population did not shrink as much as the Active Duty population did. Aesculapius would put all the AMEDD elements (except field units) together, under a CG who was also TSG, and would introduce the regions that had been proposed in 1969. That was, of course, only one of three options. The others were to maintain the status quo, and to transfer HSC to FORSCOM, although neither of those options seem fully-developed. The creation of MEDCOM allowed OTSG to shrink which meant the nominal head-count of the Army Staff shrank, which doubtless pleased Congress.

MEDCOM became fully operational on 1 October 1993, and rapidly took command of the hospitals beyond the US. For the first time The Surgeon General controlled the Army's hospitals. Over the years MEDCOM was able to perform a number of internal reorganizations. There were some re-examinations of Army (especially Army Staff) structure, but the MEDCOM was able to avoid major externally-driven change.

The MEDCOM has been the status quo from 1993 until the JTF-National Capital Region took charge of some medical facilities in September 2007 and then the Defense Health Agency was formed in 2013. AMEDD command and control will continue to change, and the AMEDD may always be a junior partner to the line and have to await opportunities when the Army is reorganizing rather than expect the Army to reorganize to suit the AMEDD.



Sources

World-Wide Organizational Structure for Army Medical Support, 20 August 1970. Task Force Aesculapius report, 16 June 1995.

Mary Gillet, <u>The Army Medical Department</u>, 1818-1865. Washington, DC: U.S. Army Center of Military History, 1987.

Page 16 The AMEDD Historian

Overhauling Field Medical Support

When the draft ended in 1973, the biggest impact on the AMEDD was the end of the doctor draft, and the rest of the 1970s the AMEDD's biggest priority was providing healthcare in the brick-and-mortar hospitals. By the early 1980s the Army had overhauled its force structure and operational doctrine into what it called AirLand Battle. Major new equipment was coming into service, the so-called "Big Five" of M1 Abrams tank, M2 Bradley infantry fighting vehicle, UH-60 Black Hawk and AH-64 Apache helicopters, and the Patriot air-defense missile. (In 1982 the military would start developing a new generation of deployable hospital equipment, hardly as glamorous.) The AMEDD had made few changes; the combat developers at the Academy of the Health Sciences were under Health Services Command, with a dotted-line relationship to The Surgeon General. Change was coming, but the impetus was from outside the AMEDD.

In 1984 the Vice Chief of Staff of the Army, GEN Maxwell Thurman, challenged AMEDD concepts that had not fundamentally changed since the early years of the Vietnam War. Thurman started a Medical System Program Review (MSPR) which looked at both medicine in garrison and for operations. That 1960s doctrine had been based on a draftee Army. Then, replacement manpower for sustained combat power could come initially from the large Reserve Components and later from increased draft calls. Therefore, while preventive medicine and field medical care were important, the medical system was not necessarily a critical part of sustaining combat power. The AMEDD was extremely useful, and reduced the training and transportation problems of sending replacements, but returning patients to duty was not critical. Switching from a draft to an All-Volunteer Force reduced both the Active Duty forces and the Reserve Components. Thurman noted the wounded who were returned to duty would be the main replacement stream for the first 120 days of combat, and World War III could be lost without them.

Meanwhile, medical researchers identified the main causes of death for combat. The AMEDD had previously focused on areas under physicians' control, the hospitals, and had substantially reduced the Died of Wounds rate. (DOW are casualties that die after admission to a hospital, and thus an indicator of hospital effectiveness.) The new data pointed out



GEN Maxwell Thurman who started the Medical System Program Review. U.S. Army photo.

casualties were dying before admission to a hospital, and would be categorized as KIA. So, to reduce fatalities (whether KIA or DOW) medical care had to be improved before the hospital, and work in this area required agreement from the line Army that the goal was achievable and worthwhile.

All these changes set the conditions for the MSPR, and that team worked through 1984. The review led to many changes in the TO&E part of the AMEDD. At Echelon I medical care there were:

More medical skills for self-aid/buddy-aid included in Initial Entry Training Combat Life Savers were introduced

91A (the basic medic) training upgraded to Emergency Medical Technician – Ambulance standard 91B (senior medic) was previously awarded on promotion to E-5, assuming the individuals would have received on-the-job-training but a new "Super B" training course ensured senior medics would be able to technically supervise their juniors

Moving back along the chain of evacuation, at Echelon II there were ideas about increasing the forward surgical capability in the divisional area. Previously, light divisions and independent brigades had a small "surgical squad" to reinforce the main support medical company, but various units experimented on forward surgical teams. Hospitals at Echelon III were also overhauled. TO&Es were updated to reflect a new generation of vehicles (5-tons, versus the 2.5-ton trucks that dated back to WWII) and other routine updates of equipment. Simultaneously, hospitalization in the theater of operations was revised, driving changes to types and sizes of hospitals. As early as possible, casualties would be identified as return-to-duty (RTD) or for evacuation to the US (not RTD). Initial hopes were this could be at Echelon II (in the division), but quickly it became clear this could not be done before a hospital. With the emphasis on RTD, there would be somewhat fewer

general hospitals (for definitive care) and more Medical Companies, Holding (1,200 beds for convalescent patients who needed physical toughening before returning to combat). The overhaul not only focused on returning patients to duty, it reduced the number of hospitals overall and the varieties, while still increasing the number of operating room table hours available for casualty care. Fewer beds were required because fewer soldiers were getting sick (for example, from improved vaccines) and those who did get sick were spending less time hospitalized because of improved pharmaceutical therapies.

Studies were begun that would affect rear-area hospitalization, Echelon IV. The MSPR, and subsequent reviews that turned into Health Service Support for AirLand Battle (HSSALB), recognized earlier air evacuation would allow shifting some hospitalization out of theater, and the Army engaged the biservice Airlift Concepts and Requirements Agency to have it studied by the USAF. The Civilian Reserve Air Fleet was identified to move patients from operational theaters to the US, with the new Boeing 767 specifically identified when C141 were not available. However, strategic air evacuation would still be after hospitalization in theater because en route care was a substantial step down in capability over the intensive care unit that hospitals provided.

For the foreseeable future, the Army of the 80s would have a large theater hospital system for two reasons. First, doctrine foresaw large wars with large forces against capable opponents: WWIII in Europe could have 500,000 soldiers plus other U.S. services. Second, there would inevitably be DNBI (disease and non-battle injury) patients. The Army was expecting some 360 casualties per division per day, of whom 143 would need treatment beyond the division rear. (The 143 wounded evacuated from a division, plus the 36 killed, captured, or missing, meant the division lost about a company of soldiers each day of action, or each and every platoon lost a soldier.) With six division-equivalents stationed in Germany (and three more due to reinforce), that would imply well over 1,000 patients/day needing rear-area hospitalization. Casualties among other units would increase that number to around 1,500/day. If patients needed roughly a week to be stable for strategic air evacuation, that would imply a bare minimum of 12,000 rear-echelon hospital beds to allow a modest cushion against casualty spikes or delays in evacuation.

HSSALB on the Battlefield

Instead of WWIII, the Army ended the Cold War fighting Iraq in Operation DESERT STORM. Iraq had (on paper) formidable forces – nearly 1,000,000 soldiers and around 5,000 tanks – plus chemical (and possibly biological) weapons, so the Army treated the Iraqis as a capable foe and deployed the force structure and used the doctrine for WWIII. Knowing Iraqi capabilities, especially with WMD, there was no reason to take risks with hospitalization. Following doctrine, to support the roughly 300,000 soldiers deployed, the Army alone

deployed 44 hospitals, from MASHs to follow the combat troops to General Hospitals and Field Hospitals for rear-area support; these totaled 13,400 beds. (The lack of strategic air evacuation capability required some of the rear-area hospitals, which also provided a cushion against casualty spikes from chemical or biological weapons.) Fortunately this was far more beds than needed for the 467 wounded in action, and for the 14,530 DNBI who needed in-patient care over the yearlong deployment. Some units had been reorganized and some had been reequipped before deployment, and DEPMEDS was fielded during the deployment. Recognizing that medical care needed to be close to the troops various nonstandard FSTs were carved 'out of hide' because the UH-1 MEDEVAC helicopters had short range for the large operating environment. (The Army had not prioritized medevac units for UH-60s.) The hospitals provided excellent care, and returned most soldiers to duty, but deploying so



47th Mobile Army Surgical Hospital (Kentucky Army National Guard) deployed in Saudi Arabia, 1991.
Courtesy Kentucky Army National Guard emuseum.

Page 18 The AMEDD Historian

many looked foolish in retrospect: the logistical burden was quantifiable, but the amount of insurance provided could not be calculated.

HSSALB turned into Emerging Medical Force 96, then into Medical Force 2000, then into the Medical Reengineering Initiative. The armed forces were trying to slim their deployed logistical footprint, and the medical part of that was deploying a smaller hospital system while relying more on air evacuation. It would take several years to implement providing only "essential care in theater" and evacuating most patients in only a few days, but it was clear doctrine in 2001. These reviews were more synchronized with overall changes in Army concepts than the MSPR had been, perhaps because the doctrine developers worked for Medical Command, and thus The Surgeon General.

Sources

AMEDD Stockholders' Report, AHS, 1989, document on file, ACHH.

COL Ronald Bellamy, "The causes of death in conventional land warfare: implications for combat casualty care research," *Military Medicine* 149/2 (February 1984), 55-62.

Annual Historical Report, U.S. Army Academy of the Health Science 1985

Frank N. Schubert and Theresa L. Kraus, general editors, *The Whirlwind War: The United States Army in Operations DESERT SHIELD and DESERT STORM* (Washington, DC: U.S. Army Center of Military History, 1995)

GAO NSIAD report 92-175, Operation Desert Storm Full Army Medical Capability Not Achieved, August 1992

Barbara Wojcik et al, "A Disease and Non-Battle Injury Model Based on Persian Gulf War Admission Rates," *American Journal of Industrial Medicine* 45 (2004), 549-557.

John Robertson and Calvin Glazier Jr, "The Medical System Program Review: New Methods to Improve Medical Readiness," *Army Research, Development and Acquisition Magazine*, 26:4 (July-August 1985), 17-21.

DASG-HCD Information Paper, Health Service Support AirLand Battle, 21 April 1987, on file, ACHH.

Undated briefing, Medical Force 2000 and Synchronization of the Health Service Support Effort, on file, ACHH.

Ulmont Nanton, "The AMEDD Experience: Medical Reengineering Initiative," AMEDD Journal, (May/June 1996), 38-39.

TRADOC Pamphlet 525-50, Military Operations Combat Health Support, 1 October 1996.

Harry Noyes, "Medical Reengineering Initiative prepare AMEDD to serve next-generation Army," <u>The Mercury</u> September 1996, 6-7.

Chairman of the Joint Chiefs of Staff Instruction 3010.02A, 15 April 2001.





Photos from the Joe Diaz collection.

Left: Continuing mission. Destroy everything in our path.

Right: To my wife whom I love with all my heart.

SSG Joe Diaz Collection

SSG Jose "Joe" Diaz, a native of San Antonio, became a paratrooper in 1957. He was one of the first combat medics to arrive in South Vietnam in May 1965 with the 173d Airborne Brigade (Separate). Diaz was with 1st Battalion, 503d Infantry Regiment on 8 November 1965 on a "search and destroy" mission when a Viet Cong regiment nearly overwhelmed the Americans, inflicting heavy casualties on both sides, in one of the earliest battles of the Vietnam War.

Diaz donated a collection of materials from his tour of duty to the AMEDD Center of History and Heritage Archive. It mostly consists of photographs that show camp life, combat patrols, local countryside, a Bob Hope USO show, helicopters, and aircraft at Bien Hoa air base. Additionally, it has clippings from San Antonio newspapers, Army News Feature posters of the 173d Airborne Brigade (Separate), a booklet on the 173d Airborne Brigade (Separate), an America's Fighting Heroes comic strip about Medal of Honor recipient Lawrence Joel, and post cards with images of life in South Vietnam.

The SSG Joe Diaz Collection is doubly valuable as not just the unique record of a soldier but also that of a Hispanic soldier. One of many who have bravely served in the ranks of the U.S. Army. If you or your unit are interested more information about this collection or would like to donate something similar, please contact the archives staff at 210-808-3297, DSN 471-3297 or <u>usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical</u>



history@mail.mil.



Photos from the Joe Diaz collection.

Above: Rice paddies are hell.

Above right: This is what we were riding

in.

Right: John A. Nathan Aid Station Camp Ray (Bien Hoa) S. VN. Named after the first and only medic KIA assigned to 1/503-173d ABN BDE during first year of hostilities. (May 65-Apr 66)



Page 20 The AMEDD Historian

From Music to Medicine: "Ram and the Impalas" to Doc Chavez Scott C. Woodard, ACHH

Ramiro Chavez was a rising musician with a recording contract in the Corpus Christi and South Texas music scene in the late 1960s, but the Vietnam War and selective service had other plans. Following basic training at Fort Polk, Louisiana and advanced training at Fort Sam Houston, Texas, "Ram" arrived in the Republic of Vietnam to serve in the 199th Separate Infantry Brigade in September 1967. Once again his life, this time from the medical company dispensary, was interrupted by the war. On 6 December 1967, the entire roster of line medics of A Company, 12th Infantry suffered a devastating loss – one wounded and three killed in action. Private First Class Chavez was immediately pulled from the relative calm of the brigade rear and sent to the frontline fight at Firebase Nashua in a Chinook helicopter packed with empty body bags waiting to be filled.

In Chavez's first day in an infantry company, 6 December 1967, he faced direct combat. He described the landing zone scene where an unknown sergeant yelled, "'Are you a medic?' He grabbed me by the back, and he just kind of drags me. Takes me to Lieutenant Wayne Morris, my platoon leader." At the battalion aid station within eyesight of the fierce fight the A company was battling, he fumbled and struggled with his recently packed M-5 medic bag, "things start falling out. And I'm scared to death. As you can hear them all, shk-shk, zipping through, you can hear the explosions. And I'm trying to find morphine, and get organized, and I'm just dropping things." One of those now-soiled dirty bandages was applied to First Lieutenant Morris. An unknown soldier wearing a t-shirt laid his hand on the young medic and reassured him stating "Son, calm down. Just stay here. I'll bring you the wounded." The t-shirt clad figure was Chaplain An gelo Liteky and Chavez continued to treat the wounded arriving at his aid station. The butcher's bill for A Company that day was 25 dead and 82 wounded. His battalion chaplain, Chaplain Liteky, earned the Medal of Honor and his platoon leader, First Lieutenant Morris, earned the Distinguished Service Cross. The fresh off the helicopter medic, Private First Class Chavez, was in the middle of them both. His section pulled out of the fight four days after his arrival. Chavez turned 20 years old in the middle of that hell not even realizing the occasion until his unit was pulled back to the rear.



1 April 1968. Keeping a watchful eye is senior medic SP4 Ramiro Chavez, of D Company, 4th Battalion, 12th Infantry, 199th Infantry Brigade, as members of his company push through dense jungle, in a battalion recon force operation, which netted 18,000 pounds of enemy rice and destruction of enemy bunkers and tunnel complexes. Photo US Army, PFC N. Gonzales Jr.

Newly promoted Specialist Four Chavez was soon assigned as the senior medic of D Company, 12th Infantry. Having learned his lesson under fire, he began to break down the items inside the large M-5 bag and pull the essential items required for frontline combat — bandages, morphine, and albumin. These he secured in empty claymore mine bags, harnessed around his torso for easy access. It became the standard for all medics in his company. While conducting operations in the neighborhoods around the famous Saigon racetrack, D Company encountered a fierce Viet Cong force within "bunker" positions under St. Xavier Catholic Church on 23 February 1968. Three point men were gunned down from the enemy position under the church. Believing all three dead, the company commander began to call in an artillery strike against the position under Chavez's protest. Knowing that at least two soldiers were still alive, the only way to save them from the church blowing up, Chavez ran out in the hail storm of bullets to bring them back. Running at full-speed, Chavez tripped just as machine gun fire ripped at his head. He was alive, but the command thought the death toll was now four. He crawled 100 meters to the two wounded and one dead man, and secured them behind the protection of a dyke in the church courtyard. The most seriously wounded was priority. With the reassurance to his other buddy of "I'll come back for you," Chavez began to pull the immobile patient as he crawled back to the company. Crawling back to the wounded man left behind

the dyke, he directed other soldiers in the best route in returning to friendly lines. The lesser wounded man was able to crawl on one side, but Chavez had to help him over the various dykes within the kill zone all while dragging the dead soldier. As he negotiated the obstacles, he called out to the M-60 machine gunner to cover his move over the dykes. The path was blocked by an abandoned radio and Chaves forces it out of the way, turned his face, and received the full exit of a church bell tower sniper's well placed round into the dead man's head. Returning to the company perimeter, Chavez collapsed and slept six hours straight. For his actions that day, Specialist Four Ramiro Chavez was awarded the Bronze Star with Valor for heroism in ground combat. Chavez built a reputation of "going back." The love and rapport with his company still resonates today. That same attitude formed an instantaneous decision the evening of 6 May 1968. A new senior medic replacement arrived and Chavez was pulled from his 6-month infantry company field rotation. While awaiting transportation from battalion to brigade headquarters, numerous casualties began arriving at the newly formed battalion aid station at Firebase Stephanie. He decided to go and help his fellow medics sort through the chaos of broken men. At that moment, Chavez again decided to go back. Historian and author Robert L. Tonsetic served as the C Company commander in the 12th Infantry at this time and later wrote,

Specialist [Harvey] Cooley had only been with Delta Company for a week when he was killed in action. He had replaced medic Ramiro Chavez, who was reassigned to the battalion aid station. When Chavez saw Cooley's body at the aid station, he asked the battalion surgeon if he could return to Delta Company, even though he'd spent more than his share of time in the field. When the battalion surgeon approved his request, Chavez grabbed his aid bag and hopped on the next resupply chopper headed for Delta Company's location.

Specialist Four Chavez had originally replaced three killed and one wounded medic his first day of combat, now his last days of combat he replaced yet another medic killed in action. That evening, 6 May 1968, while conducting a deliberate ambush in the vicinity of Long An, three North Vietnamese Army soldiers pulling an anti-aircraft machine gun approached the unseen light fighters. Two very tall American soldiers trekked forward to contact the enemy element. The platoon leader directed Chavez to accompany the probe. As they were spotted, an enemy grenade sprayed hot iron above the waist of the two tall Americans with the much shorter Doc Chavez in between. All three Americans went down. Chavez quickly assessed the situation and immediately began life-saving intervention on a stomach wound, packaging the vital organs in a plastic bag and administering intravenous fluids. Incredibly focused, Chavez only paused to wipe the sweat off his face and put a locally made, albeit tight, beret on his head. He then turned his attention to the other wounded man re-setting his dislocated shoulder and arm. Once the wounded were evacuated, Chavez complained to the radio telephone operator that he had an incredible headache and went to lay down within the fighting position. He was awakened by the blinding flash and explosion of a daisy-chain of claymore minds hurling steel balls of hate into about 2,000 North Vietnamese regulars surprised to find a reinforced infantry company hidden in the jungle. The fighting lasted hours and was so intense one enemy combatant continued charging forward even after Ram emptied his entire M-16 magazine. He was only stopped with a quick pop of an M-79 grenade launcher which blew him in half, right in front of Chavez. After the battle, he supervised evacuating the wounded on a re-supply helicopter. As the sun began to appear through the jungle canopy, one of his buddies remarked that Chavez was hit. In disbelief, he asked where and looked all around his body. The infantryman informed the medic that he had blood all over his face. All through the night his beret had acted as a bandage soaking up most of the blood that Chavez thought was sweat. He refused evacuation and had one of his medics treat him.

Later the next day, the weapons squad led by a dear friend, became pinned down and was about to be over run. Unfortunately, most of the squad members were made up of new replacements who had not maneuvered or fought at any length in the jungle. The squad leader was wounded and Chavez ran to his position to assess the situation. He cried out in pain grasping his gun shot elbow. The wounded man thought only of his elbow, but Chavez saw his insides hanging out from his gut. Once his shirt was opened up and he saw the exposed wound, Chavez's patient began to fear death and began expressing his goodbyes crying "I'm gonna die!" and asking his good friend to tell his wife he loved her. Chavez slapped him and yelled, "You're going to tell her yourself!" He began treating the more serious injury and placed his intestines in a plastic bag and began pulling him out of the kill zone by his web gear. Doc Chavez explained his unorthodox, but proven bedside manner, "I learned that you've got to believe. Believing, you will survive. If you give up, it actually kills you!" Without hesitation, he turned toward the frightened rookies and called out, "Follow me!" and led the

Page 22 The AMEDD Historian

entire weapons squad back to friendly lines with enemy bullets piercing the air space all around. A devout Catholic, Ram laughed when recalling his fear. "Within those five days, I blessed myself three times, because I thought it was going to be the end of the Ram Chavez estate!" The Presidential Unit Citation for extraordinary heroism was awarded to Company D, 4th Battalion, 12th Infantry and its assigned support elements for the period 5 to 10 May 1968. The company killed 181 North Vietnamese Army soldiers and took 10 prisoners in addition to 139 Viet Cong soldiers killed. The commander of D Company, Captain James F. Dabney, received the Distinguished Service Cross for extraordinary heroism. The weapons squad leader survived his wounds.

For his actions, Specialist Four Ramiro Chavez was awarded a Purple Heart for wounds received in action and the Silver Star for gallantry and intrepidity in action against the enemy.

Specialist Chavez distinguished himself by exceptionally valorous action on 7 May 1968. On this date, Delta Company came under heavy small arms, automatic weapons and machine gun fire from an entrenched North Vietnamese Army battalion outside Long An. Specialist Chavez, with complete disregard for his own life, crawled and ran ten yards over open terrain while under constant enemy machine gun and automatic weapons fire to reach the wounded squad leader. While in an exposed position and under intense enemy fire, he administered life saving first aid. Specialist Chavez and another soldier continued to expose themselves to enemy fire while dragging and carrying the wounded Soldier to safety. Specialist Four Chavez' gallantry and devotion to duty were in keeping with the highest traditions of the Military Service and reflects great credit upon himself, his unit, and the United States Army.

Oral History Interview with SP5 Ramiro Chavez, 11 March 2020. ACHH Research Collection

Erik Villard. United States Army in Vietnam Combat Operations: Staying the Course, October 1967 to September 1968. United States Army Center of Military History, Washington, DC, 2017

Robert L. Tonsetic. Days of Valor: An Inside Account of the Bloodiest Six Months of the Vietnam War. Casemate Publishers, Philadelphia, 2007



Specialist Four Ramiro Chavez sits on the rear of a M113 armored personnel carrier. Notice the crossed claymore bags across his chest used for immediate combat medical requirements. Photo courtesy of Ramiro Chavez.

Symbols of Organizations Paula Ussery, AMEDD Museum

Army organizations are identified by, and reflected in their heraldic devices. These include flags, guidons, shoulder sleeve insignia, and Distinctive Unit Insignia (DUI). Although small in size, the DUI reflects the history or lineage of a unit, its mission and motto if there is one, all within a piece of enameled metal usually no larger than 1 1/8" by 1 3/8".

Distinctive unit insignia are a legacy of America's participation in WWI. Coats of Arms already existed for some branches, including the Medical Department, and insignia for the corps and branches also existed. However, exposure to British regimental insignia, worn usually on cap badges and buttons, influenced America's deployed troops. During 1918 and 1919 American units began creating and wearing divisional cloth insignia on their left sleeve. After several attempts to ban this new type of insignia failed, Army senior leadership decided to establish centralized control over these symbols and others already existing such as Coats of Arms and flags.

In 1919, the responsibility to coordinate and approve coats of arms and unit insignia was delegated to the War Department General Staff. This approval authority was next transferred to the Quartermaster Department in 1924. Finally, in 1949 Public Law 85-263 passed the authority to the Secretary of the Army to furnish heraldic services for all armed forces branches and other federal department branches and agencies. In 1960 the Institute of Heraldry was established



British King's Dragoon Guards Cap Badge from WWI

due to the scope of responsibilities. The Institute is under the Secretary of the Army and is responsible for the research, design, standardization, and quality control of all symbolic items, such as seals, medals, decorations, badges, guidons, streamers, and flags.

Initially a DUI was issued to regiments, because the regiment was the standard building block of a division. AR 600-40 published in 1921 stated,

Regimental Insignia and Trimmings-a. Subject to the approval of the War Department and as a means of promoting esprit de corps, each regiment or similar organization is authorized to adopt and wear, as a part of the uniform, distinctive insignia or trimmings. Distinctive insignia should bear the regimental badge or coat of arms or similar device having historical significance connected with the regiment, such as the ornament of the regiment when originally organized or that worn in some prior war.

Distinctive Unit Insignia came slightly later. What is recognized as the Distinctive Unit Insignia for Medical Field Service School was approved on 1 July 1921. In the official paperwork however, it is referred to as a "Coat of Arms" even though it does not meet the standard criteria for a Coat of Arms. Therefore the generally accepted first Distinctive Unit Insignia authorized was for the 51st Artillery, Coast Artillery Corps on 18 March 1922. Distinctive Insignia was worn during the interwar period on the front of the campaign hat, on the standing collar of the enlisted men's coats and on the shoulder loops of the officer's coats. When the notched lapel coat replaced the standing collar on enlisted coats in 1926, the distinctive insignia for enlisted personnel moved to the lapel.

Due to the shortage of strategic medals during WWII, Distinctive Insignia stopped being produced in 1943. Production was resumed after WWII both in the US and in occupied Germany.

DUIs are color coded with the color of the shield being the color or colors assigned to that arm of service. Infantry DUIs have a blue background, yellow is used for cavalry, orange and white for signal corps and maroon and white (silver) for the AMEDD. The United States Army based its heraldic system upon the Eng-

lish model. As is normal for heraldic items, they are described using a specialist vocabulary designed for this purpose. Words not usually encountered such as *gules*, *fess*, *ordinaries* and *mantle* are all standard terms. The distinctive unit insignia of the 56th Medical Battalion is described thusly by the Institute of Heraldry:

Description/Blazon

A silver color metal and enamel device 1 1/8 inches (2.86cm) in height overall consisting of a shield blazoned: Argent, on a cross throughout Gules the peak of Mount Rainier of the first garnished Sanguine.

Symbolism

The Red Cross symbolizes the medical services performed by the battalion. The peak of Mount Rainier



Page 24 The AMEDD Historian

in the colors of the Army Medical Services, and gives reference to the place of activation of the 56th Medical Battalion.

In 1964 the Institute of Heraldry instituted a quality control process. A manufacturer was required to borrow the official die from the Institute of Heraldry for a particular design in order to produce an authorized

insignia. This did not necessarily prevent the production of Distinctive Insignia from manufacturers, especially overseas, that did not borrow the official dies.

One of the largest groups of distinctive insignia that was not made from the official dies was made in Vietnam during the Vietnam War. The insignia produced in Vietnam included both official pattern and "unofficial" DUIs. Vietnamese insignia were inexpensively made and are commonly referred to as "beer can" insignia. They are made of thin metal and are painted rather than being enameled.

In addition to being worn on the uniform, a unit's DUI is also found on "unofficial" or souvenir type items. Examples of these unofficial uses found in the AMEDD Museum's collection include cigarette lighters, challenge coins, officer's

batons, plaques, beer steins, and coffee cups.

When a unit is re-designated or re-organized the Institute of Heraldry decides whether the unit will continue to wear its previous DUI, or if it must be issued a new DUI. If a unit ceases to exist, then the DUI is cancelled. Examples of DUIs that have been cancelled for units that have been discontinued

include: DENTACs and the Walter Reed Army Institute of Nursing.

The 302d Support Battalion wears the one of the oldest AMEDD insignia. It was originally designed and approved for the 2d Medical Regiment on 12 March 1924. It was re-designated for the 2d Medical Battalion on 26 February 1940 and was re-designated for the 302d Support Battalion on 16 October 1989. Just as the 2d Medical Regiment supported the 2d Infantry Division from 1921-1939, so too

does the 302d Support

Battalion.



The 3rd Field Hospital's unofficial DUI features a 19th Century Army tent with the cartoon character Snoopy lying along the ridge.



DUI for the 302d Support Battalion

The AMEDD Museum is fortunate to have two significant collections of AMEDD Distinctive Unit Insignia on exhibit. MG Floyd Baker began collecting these during a solo tour in Germany in 1972 and donated his collection to the museum in 1987. This collection of just over 1,000 AMEDD-specific DUI provides a unique snapshot of the AMEDD during the 1970s time period. A second collection was donated to the museum by Mr. Louis Choquette.



Sources

Metal Stein with the DUI of the

U.S. Army Medical Department

Center and School.

Barry Stein. <u>U.S. Army Heraldic Crests</u>, <u>A Complete Illustrated History of Authorized Distinctive Unit Insignia</u>. Columbia SC: University of South Carolina Press, 1993.

Oscar Stroh, Heraldry in the U.S. Army. Harrisburg, PA: O.H. Stroh, 1980.

- "U.S. Army Heraldry, Department of the Army Instructions 1948," The Trading Post April-June 1971.
- "Distinctive Insignia Hallmarks" The Trading Post July-September 1975
- "Method for Approximating Date of Metallic Insignia" The Trading Post, July-September 1975.
- "Blazons" The Trading Post April-June 1973, American Society of Military Insignia Collectors.

Letter, War Department, Quartermaster General, 1 July 1921 to Commandant, Medical Field Service School.

Howard G. Lanham, "American Military Patches, Other Insignia and Decorations of World War II" https://www.angelfire.com/md2/patches/

Page 25 The AMEDD Historian

(continued from page 1)

And finally, in the military, organizations get insignia, and we look at some of the AMEDD Museum's collection of insignia and related objects.

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/

The AMEDD Museum: http://ameddmuseum.amedd.army.mil/index.html

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** 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