A Vietnam War Historical Tribute!

On 1 July 1964 MAJ Charles Kelly, MS, an aeromedical evacuation pilot, was called to pickup wounded Special Forces soldiers that were in heavy combat with Viet Cong. Upon arriving at the fire fight, the SF detachment commander radioed MAJ Kelly telling him the LZ was not safe to land, and the soldiers on the ground could not protect his helicopter if he landed. MAJ Kelly still insisted on landing and picking up the wounded soldiers, and radioed back to the detachment commander, “I will not leave until I have your wounded.” Those where the last words MAJ Kelly spoke, as a Viet Cong bullet pierced his body and killed him. MAJ Kelly didn’t know that he would establish an enduring ethos for AMEDD soldiers that “I will not leave a fallen comrade.”

The story of Major Kelly could be told about many AMEDD Vietnam War soldiers performing extraordinary heroism in connection with military operations involving conflict with an armed hostile force. In that war 17 AMEDD soldiers received the Medical of Honor, and 92 received the Distinguished Service Cross, with one receiving the Navy Cross (award citations at http://ameddregiment.amedd.army.mil/). The U.S. Army Medical Command has partnered with the Vietnam War Commemoration Committee (http://www.vietnamwar50th.com/) to recognize the service of our Vietnam War era AMEDD soldiers by accomplishing the following objectives:

* To thank and honor veterans of the Vietnam War, including personnel who were held as prisoners of war (POW), or listed as missing in action (MIA), for their service and sacrifice on behalf of the United States and to thank and honor the families of these veterans.

* To highlight the service of the Armed Forces during the Vietnam War and the contributions of Federal agencies and governmental and non-governmental organizations that served with, or in support of, the Armed Forces.

* To pay tribute to the contributions made on the home front by the people of the United States during the Vietnam War.

* To highlight the advances in technology, science, and medicine related to military research conducted during the Vietnam War.

* To recognize the contributions and sacrifices made by the allies of the United States during the Vietnam War.

The commemoration will be over the next eleven years, so you will see more Vietnam War focused articles in the AMEDD Historian, and I encourage our readers to send us pieces about Army medicine in Vietnam to be printed in the AMEDD Historian.
During the commemoration period, the AMEDD Center of History & Heritage (ACHH) is planning several events, with a special event being a two-day Medical Symposium in March 2016 dedicated exclusively on the medical aspects of the Vietnam War.

If you are an Army Medical Department Vietnam War era soldier or relative of an AMEDD soldier and have uniforms, scrap books, letters to home, etc., please consider donating them to the ACHH so the history of the AMEDD can be preserved in a larger scale for future generations.

In closing, don’t forget, when you meet a Vietnam War veteran, “thank them for their service and welcome them home!” We look forward to hearing from you about our past!

Bob Driscoll
Chief, AMEDD Center of History & Heritage

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**The Beginnings of Aviation Medicine**

Lewis Barger, Office of Medical History

The Army’s association with heavier than air flight began on the 10th of February, 1908, when the Army signed a contract with the Wright Brothers for an airplane. It was four years before the War Department published instructions, drafted by Surgeon General George H. Torney, directing the medical examination of pilot candidates attending the Signal Corps Aviation School. By April 1914, the particular physical demands of aviation were becoming better known and two future Brigadier Generals, ophthalmologists Theodore C. Lyster and W.H. Wilmer, outlined new specifications for aviators: “vision, ocular muscle balance, and the effect of refractive errors, were particularly considered.”

It wasn’t until April 1917, that a Medical Service for the Aviation Section was created. Newly-promoted Lieutenant Colonel Lyster was put in charge of aviation issues in the Surgeon General’s Office and was responsible for the physical examinations of all those seeking to serve in the Air Service. In two months’ time Lyster organized 67 examining units at sites around the country. He also incorporated the specifications he had worked out with Wilmer into the physical standards for pilot candidates, but he recognized that the standards were based more on common sense than actual analysis.

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Left: Equilibrium testing for an aviation candidate, 19 March 1918. Early tests tried to replicate aerobatic stresses. Courtesy National Archives

Meanwhile aviation cadets were dying at a horrific rate in training accidents, leading Lyster to call for a research program to determine what type of person would best be suited for aviation duty. In September, Lyster was made Chief Surgeon of the Aviation Section, Signal Corps and promoted to Colonel. He immediately set to work organizing an Aviation Medical Research Board, which the War Department gave authority to:

* Investigate all conditions which affect the efficiency of pilots.
* Institute and carry out experiments and tests to determine the ability of pilots to fly at high altitude.
* Develop and test systems to supply pilots with oxygen at high altitudes.
* Act as a standing medical board for the consideration of all matters relating to the physical fitness of pilots.

One of the Board’s first actions was to create the Central Medical Research Laboratory. The Laboratory was created with departments of Otology, Cardiovascular Medicine, Physiology, Psychology and Neurology, and Ophthalmology, and opened on the 19th of January 1918 at Hazelhurst Field in Long Island, with Colonel Wilmer as director. By that summer, twenty branch laboratories had been set up at flying fields throughout the United States and Wilmer was on his way to Europe to establish a Medical Research Board for the American Expeditionary Force. All this expansion was driven by the high rate of non-combat deaths, which would continue to drive research after the war ended.

In May 1919 the first eight-week course of instruction for Flight Surgeons was given by the Central Research Laboratory at Hazelhurst Field. By 1922 the laboratory had been renamed the School of Aviation Medicine and in 1926 was moved to Brooks Field in San Antonio. That same year COL Louis H. Bauer published *Aviation Medicine*, the first textbook on the subject.

Although Surgeon General Torney recognized the need for standards of fitness for military fliers relatively early, losing 59% of the fliers killed in France to non-combat accidents provided the War Department with the impetus to create research facilities to study the unique environment and demands of flight. Once the Medical Department was adequately resourced, they moved rapidly to the forefront of research and education on the subject and made significant contributions to the field of Aviation Medicine.

Sources


From the Historical Research Collection: Perpetuating AMEDD History
Carlos Alvarado, Assistant Archivist

Tucked away inside the AMEDD Museum and beyond the view of the exhibit galleries, the AMEDD Center of History and Heritage Research Collection quietly serves as a place where U.S. Army medical history is lived, relived, and communicated through historical documents, photographs, and rare books.

It is here that Army Nurse Corps flight nurse 1LT Clara Morrey Murphy shares with us the history of the 802d Medical Air Evacuation Squadron through a collection of detailed captioned photographs. The images, though time worn and faded, document the evolution of the unit from its activation in December 1942 to its inactivation in June 1945. Here too, 1LT Erma Aarons’ letters home during WWII help us understand the complicated issues of marriage during wartime and of the tensions some U.S. Army nurses felt towards the Women’s Army Corps. For example, after sharing her observations about the arrival of the WAC officers in Australia, she wrote “can you imagine me saluting a WAC? That’ll be the day.” But far from judging the words of 1LT Aarons, researchers are given the opportunity to put them in their historical context and learn from them.

These are just two small examples of what the AMEDD Center of History and Heritage collects, preserves, and shares with members of the AMEDD as well as researchers worldwide. Historical fragments such as images and letters help recount how policies and planning were interpreted and executed by individual Soldiers. These experiences are the necessary complements to official U.S. Army records which, when put together, make up a comprehensive history.

The research collection is located inside the AMEDD Museum and is accessible to the researcher and curious alike. It accepts AMEDD specific personal documents, photographs, books, and duplicates of unit/organizational files regardless of format type. At just over 46,000 cataloged items of historical material, the AMEDD is very fortunate to be so well represented. However, no research collection is ever complete. The AMEDD Center of History and Heritage would very much like to fill in the gaps belonging to all corps within the AMEDD. If you or your unit are interested in donating or would like more information about these collections, please contact the archives staff at 210-808-3297, DSN 471-3297 or usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil.
In search of the missing of the First World War
Peter C. Wever, MD, PhD, Jeroen Bosch Hospital, ’s-Hertogenbosch, The Netherlands; Military Medicine Historical Research Society, The Netherlands

No other class of casualty brought so much suffering to a family as the report that their boy was ‘missing in action.’ Therefore, during and after the First World War, the U.S. government put all possible care and effort into soliciting information from former company mates, buddies and officers in the hope that a missing soldier might be brought back to a marked resting place.

For instance, in a missing report Sergeant Antone Correia reported on the death of Private Thomas H. Taylor, Company M, 38th Infantry Regiment, 3d Division. Private Taylor died during the Meuse-Argonne offensive, apparently on 21 October 1918, of wounds inflicted by an exploding shell. He was buried near Nantillois, a small village in the Meuse department in northern France. Through these efforts, the unlocated field grave of Private Taylor was later discovered and he found a final resting place in the Meuse-Argonne American Cemetery in Romagne-sous-Montfaucon, about four miles from Nantillois.

The search for the missing started immediately after a battle. The horrendous task of the battlefield searcher is graphically described in the written history of the 42d Infantry Division’s 117th Sanitary Train. “No picture of the shambles wrought by this battle can portray its gruesome actuality. […] men piled in great heaps, the dying with dead, legs, arms, heads, and torsos; gray, and blue, and khaki cloth intermingled; blood, red, or clotted black; torn, seared, crying flesh, all in a labyrinth of mutilated trenches […]. There were searchers carrying odd ghastly sacks slung over the shoulder as one would carry grain. But of these bags, each one contained all the human remains of some comrade and whatever pieces of his clothing might be clinging to those fragments of flesh and bone.”

The Red Cross took up a case as soon as a member of the American forces was reported missing. It communicated with the family and described the steps being taken to learn the missing soldier’s fate. The Paris office also instituted inquiries through Switzerland into Germany as a number of men reported missing had been taken prisoner. Red Cross ‘searchers’ continued enquiries in the hospitals. On 24 December 1917, the American Red Cross was authorized to attach a searcher to each statistical section of the Adjutant General’s Department and to hospital subsections. Their information was transmitted to the Red Cross’ Central Bureau of Information and compiled.
Acknowledged as the first Red Cross searcher in France, Mrs. Johnston de Forest was attached to Base Hospital 101 at St. Nazaire. In 1919, she recalled her duties in *The New York Times*. “Every day we received from Paris two lists of which it was our ‘searcher’ duty proper to keep up to date. One, ‘The Hospital Inquiry List,’ asked whether a certain boy was in our hospital, and if so what his condition was. This was in answer to inquiries from home. The other was the ‘Missing List.’ We had to find out whether there were any men in our hospital who belonged to a missing man’s company and then question them as to what had happened when he was last seen.”

Some Red Cross searchers eventually located comrades of a missing man, learning about his actions in battle, where he was last seen, and whether they had any personal knowledge of his whereabouts. This evidence, often conflicting, was sent to the man’s family, carefully pointing out the parts that were only hearsay.

After the Armistice, the Graves Registration Service superintended and conducted the search for missing soldiers. The Graves Registration Service was established as a Quartermaster Corps field activity on 7 August 1917. For years after the First World War, the Graves Registration Service employed field investigators, often former doughboys, to locate and identify the bodies of American soldiers. From 1 January 1924 until 1 October 1929, 562 bodies of American soldiers, either missing or unknown, were recovered or identified. A report from the chief investigator in the Meuse-Argonne sector illustrates their work: “The body of Corporal Robert A. Masterson, Co. G, 7th Infantry, has been found in an isolated grave in the Bois de Beuge near Nantillois. It has been identified by T.O.B. [tag on body]. Burial had been made at a depth of half a foot, and the tag for the body was found on a piece of telegraph wire which had been wound around the body.” The report added that the grave was found about ten feet from a former first aid station, as many medical supplies were found in the vicinity. Corporal Masterson found a final resting place in the Meuse-Argonne American Cemetery.

After the war the Surgeon General’s Office instituted ‘The Port of Missing Men’ as a column in all Army hospital newspapers. It listed the names missing men, company and regiment, and the date and name of the place where last reported. The circulation of these newspapers was estimated at 50,000 soldiers and it was hoped that comrades of missing soldiers would give information not contained in military records.

Despite all efforts a number of missing men were either never identified or recovered. Among the 14,246 military dead in the Meuse-Argonne American Cemetery are 486 unknown soldiers. Inscribed on memorial loggias beside the cemetery chapel are Tablets of the Missing with 954 names. Rosettes mark the names of four men that have been recovered and identified after their 1930 inscription on the Tablets of the
Missing. Most recently, a rosette has been placed behind the name of Private Joseph A. Dorfer whose remains were recovered in 1956.

Almost a century after the First World War, soldiers missing in action are occasionally still recovered from battlefields and field graves. On 28 May 2013, the finding of one human bone near Verdun led to recovery, in only a four square meter area, of remains from 26 French soldiers who had died in 1916; at least seven have been identified so far. Yet, after all these years, the question has also been raised if “RIP” would not have more meaning if these soldiers would have been left, buried where they were among their comrades.

Sources
- “Army papers will help locate missing.” The Scranton Republican, 12 February 1919.
- Bedford, D.W., Superintendent, Meuse-Argonne American Cemetery, Romagne-sous-Montfaucon, France. Personal communications, 12 March and 17 April 2014.
- Iodine and gasoline, a history of the 117th Sanitary Train. No publisher listed, undated.
Initial treatment of the wounded in World War II began at the front line, with each soldier carrying a “Pouch, First Aid” that contained a “First Aid Packet, Carlisle Model.” First aid packets had been carried by soldiers in World War I, but the Medical Equipment Laboratory at Medical Field Service School (at Carlisle Barracks), developed an improved model of this field dressing in the 1920s. Improvements included replacing the “pull ring” opener with a more reliable metal tape. More importantly, the contents were replaced. The WWI First Aid Packet contained two small dressings and two safety pins, which proved unsatisfactory for battlefield wounds. Production of the new “Carlisle Model” began in 1940. It contained one large dressing and, from 1941, 5 grams of sulfanilamide in a sterile shaker-top envelope. Although the use of sulfanilamide for open wounds was not as effective as when taken internally, the use of this bacteriostatic was a significant factor in reducing infections during World War II.

Due to the need for strategic metals, the packaging of the First Aid Packet, Carlisle Model changed frequently during World War II. In 1940-1941 the Carlisle Model had brass containers. Copper was substituted in contracts negotiated after March 1941. By the end of 1941 however, copper was no more available than brass had been. Tinned steel was the third metal used for the case, but once again the War Production Board refused to allocate steel in the quantity needed to seal the bandage. Due to the shortage of metals, an alternative form of cheaper packing was adopted for the First-Aid Packet and in summer of 1940, the First-Aid Dressing made its appearance. The Small, First-Aid Dressing, U.S. Army, Carlisle Model was contained in a rectangular tuck-end cardboard carton, printed with the required markings, and dipped in wax.

The last form of packaging was introduced in 1943. The bandage was wrapped in laminated paper which was reinforced with aluminum or lead foil, and for extra protection, it was then placed inside a waxed cardboard shell. A selection of the various styles of Carlisle Model First Aid Packet is currently on display in the AMEDD Museum’s temporary exhibit, “Under The Red Cross, Army Medicine in World War II.”
As an Air Force historian who once served in both the United States Army and the United States Air Force in uniform, I must tell my Army comrades of the great difference in focus between Air Force and Army history. The Air Force tends to incessantly regale us of heroically brave feats of arms from our pilots; rarely do other career fields receive sufficient notice. This is understandable to some extent. However, it is my pleasure to change the focus to Captain Lillian Kinkella Keil, one of our greatest military heroes - medical or otherwise. One of the most decorated women in American military history, this flight nurse flew on 425 combat evacuation missions with the Army Air Forces in World War II and the Air Force in Korea. The captain took part in 11 major campaigns, including D-Day and the Battle of the Bulge in World War II and the Battle of Chosin Reservoir, in Korea, where Air Force pilots, doctors and nurses flew almost 4,700 wounded Marines to safety in nine days.

Before her military career, in 1938 Keil became one of the first generation of stewardesses for United Airlines when many early flight attendants were nurses. It was a passenger who suggested, shortly after the beginning of World War II, that she become a flight nurse for the Army Air Forces. Although the role of the flight surgeon was developed in World War I, it was not until November of 1942, when the School of Air Evacuation opened at Bowman Field, KY, that the flight surgeon’s counterpart – the flight nurse – became a member of the medical team. Captain Keil was among the school’s first graduating class of flight nurses.

During World War II, although women performed many roles in the U.S. military, only nurses were allowed in combat zones, said Jeff Duford, Air Force Museum research historian. Because of the rigors of the job, flight nurse training demanded physically fit nurses. To pass the course, the nurses were required to successfully navigate an obstacle course, sliding on their stomachs beneath a live wire, and swimming under ignited gasoline. This was important training in the event the nurses crashed somewhere, Captain Keil said, “so that no matter where we landed, we could take care of ourselves.”

By the summer of 1943, she was in England pulling wounded and frostbitten crewmen out of B-17s returning from bombing raids over Europe. While there, she witnessed the first buzz bomb attack on London. Shortly thereafter, Captain Keil and other flight nurses were on Douglas C-47s during the D-Day invasion, landing in the fields of France as close as possible to Omaha Beach. Because the C-47s were also filled with military supplies, the aircraft did not carry Red Cross markings, which meant no protection from enemy fire. The planes Keil was on were often filled with supplies for General George S. Patton’s 3d Army. He knew where the supplies were coming from and how the nurses were taking care of his wounded soldiers. As a thank you, General Patton sent the flight nurses a case of liberated champagne. By the end of World War II, Keil had made 250 evacuation flights, 23 of them transatlantic, moving from one man to another, stanching the flow of blood, bandaging wounds, giving medicine and comfort.

Captain Keil recalled one flight that really touched her heart. They had reached their destination, circled a few times, but could not land because of severe weather. "It was a terrible sight," Captain Keil said. "I saw 12 litters in the snow. The boys were waiting and waving at us. Those who couldn't wave managed to at least get their hands out of their blankets in an effort to get our attention. We had to leave them. It was horribly sad." Moving prisoners of war was also a challenge, Captain Keil said. On one flight, German POWs were on one side of the plane, and American soldiers on the other. They should never have been together, said Captain Keil, who had to calm down the Americans. "I was very stern and talked roughly to (the Americans) explaining how the Germans were POWs, wounded like themselves and deserved the treatment they would want if they were captured by the Germans," she said.
After the war, Keil hung up her uniform and became a stewardess once again. That is, until the Korean peninsula erupted in war in June 1950. Once again Keil volunteered to serve, this time in the new United States Air Force. Women, although a permanent part of the USAF, were initially limited to 2 percent of the total force. In USAF operations in the Far East, the only women permitted to serve in the Korean battle zone were medical air evacuation nurses of the USAF Nurse Corps. During the next 16 months, Keil flew 175 air evacuations out of Korea, logging 1,400 hours of flight time. The 801st Medical Air Evacuation Transportation Squadron to which she was assigned was one of the first units in the history of the USAF to earn and receive the Distinguished Unit Award. She was one of only 30 Air Force flight nurses in the entire Far East.

She was assigned to the squadron nicknamed the ‘Angels of Mercy’ and recalled flying the wounded out of Chosin. "The Marines had spent many, many days in the snow. Their hands and feet were so frostbitten, they could hardly hold a gun or walk," Keil told the Los Angeles Times in 1991. "Sometimes I gave my outer clothing to the shivering GIs that came aboard. We were fired upon and often had to land in slush, which was dangerous because the planes could skid. One of the nurses was killed," she said. "Somehow, the Marines came through." Speaking about her war missions, Keil told the Pasadena Star News in 2004, "It was all horrible, but it was all beautiful. I would do it again."

Her extraordinary experiences inspired the 1953 movie Flight Nurse, starring Joan Leslie and Forrest Tucker, for which Keil was a technical advisor. For her military service in two wars she was awarded 19 medals, including a European Theater medal with four battle stars, a Korean service medal with seven battle stars, four air medals and a Presidential Citation from the Republic of Korea. “She never questioned what she needed to do when there was a war. It was her calling, and she called the soldiers her ‘boys,’” her daughter said. According to Captain Keil, every patient was unique and memorable. “I had to make each patient feel [as though] he was the only one on the plane I was caring for, yet I was taking care of 23 others,” Captain Kiel said. “This made them feel very important, and they loved that.” In fact, Keil is estimated to have treated in excess of 10,000 wounded service members in just this way. This may be why, after her 1961 appearance on the popular television program “This Is Your Life” which normally hosted celebrities and movie stars, her episode generated one of the 10 highest mail responses in the program’s long history. Keil led a hero’s life and remained active in veterans’ affairs until her death in 2005, at age 88.

Sources
http://www.af.mil
http://www.nationalmuseum.af.mil
http://articles.latimes.com/2005/jul/10/local/me-keil10
http://www.findagrave.com/cgi-bin/fg.cgi?GRid=11328910&page=gr
http://www.aetc.af.mil/
Breaking the Mold: Selecting a new Surgeon General in World War II
Sanders Marble, Senior Historian, Office of Medical History

Until 1902 it was customary (although not invariable) to promote the senior colonel in the Medical Corps to be Surgeon General, regardless of their age. That year COL William H. Forwood was the senior colonel and was selected to be Surgeon General even though he had only three months to serve until compulsory retirement for age. That experience caused a change of regulations so that the senior officer young enough to serve a four-year term as Surgeon General would be promoted. After one Surgeon General (Robert M. O’Reilly) was selected under those rules, procedures were changed again so that all senior officers young enough to serve a four-year term were considered, with The Surgeon General to be selected on merit.

Merit, unlike seniority, was in the eye of the beholder. The first Surgeon General selected under the new rules was George Torney, who had demonstrated excellent judgment in responding to the 1906 San Francisco earthquake. Torney’s work earned support from California congressmen, who urged his promotion.

In February 1943 the Army began considering replacements for Surgeon General James Magee, whose term was going to expire on 31 May. The Chief of Staff, General George Marshall, reported to Secretary of War Henry Stimson the results of a board that had considered the eligible officers, with the following criteria:

- **a.** “Professional and technical qualification – that is, qualifications in the field of medicine or surgery
- **b.** Military qualifications
- **c.** Ability as an organizer, administrator and executive
- **d.** Standing or general reputation among the members of the civilian medical profession
- **e.** Training, experience and reputation among military men as a military doctor or surgeon
- **f.** Efficiency rating.”

After eliminating those qualified officers who would be too old in 1947, BG Albert Kenner was top of the list. Kenner had served 26 years, had received a Distinguished Service Cross and three Silver Stars in WWI, and had just received a Distinguished Service Medal for his medical planning of a trans-oceanic amphibious invasion in November 1942. In between, he had held a variety of positions, including Assistant Chief of Surgery at Walter Reed General Hospital and Chief of Medicine at Sternberg General Hospital, and had been accepted as a Fellow of the American College of Surgeons in 1928. He was a thoroughly military doctor, having spent more time on Army staffs than as a clinician. The balance in his career can be seen in his publications: he had no clinical publications and a handful about medical operations.

Secretary Stimson concurred with General Marshall, and recommended Kenner to President Franklin Roosevelt. Roosevelt promptly replied, agreeing that Kenner was the best man, and moving to advice on how to handle the nomination. The president advised not sending Kenner’s nomination to the Senate too soon, which would undercut the incumbent and allow time for any opposition to mobilize. FDR also wanted Kenner brought back to Washington for a ‘right seat ride,’ and specifically wanted Kenner to pay attention to the AMEDD’s relationship to the Army Staff. At that point The Surgeon General did not report directly to the Chief of Staff, but through Army Service Forces, thus diluting medical control, which had led to controversies over hospitals, preventive medicine, and assignment of medical personnel. President Roosevelt specifically mentioned “there are many civilian medical leaders who feel that the present set-up is not good.”

Stimson followed Roosevelt’s advice, recalled Kenner to Washington, and waited a bit to send a formal nomination. On 8 April, Stimson must have been surprised to get a note from the president "I want you to reconsider the tentative selection made two or three weeks ago for Surgeon General of the Army. My best advice is that he [Kenner] is a good Doctor but that he would not be regarded as an outstanding choice by the medical profession. As you know, I am in much closer touch with the medical profession in all its ramifications than most people are, and I believe that some other selection could be made which would do more credit to all of us."
Stimson responded the very next day, arguing for Kenner and urging that FDR re-consider: “I believe that the officer’s demonstrated capacity as a Military Surgeon should govern the selection.” Secretary Stimson drew attention to Kenner’s “considerable battle experience,” noting his gallantry and his recent experience, then quoted from a long list of officers (both line and medical) who recommended Kenner: LTG Dwight Eisenhower, LTG Jacob Devers, LTG Jonathan Wainwright, LTG George Patton, COL William Keller, MG Charles Reynolds, COL George Beach, COL William Bartlett, MG Fox Conner, and others.

Despite Stimson’s support, Kenner was not nominated; instead BG Norman T. Kirk was. Kirk had been commissioned in 1912, and had an overwhelmingly clinical career, including being the main orthopedic surgeon at Walter Reed as the WWI wounded returned; Kirk handled roughly one-third of all the major amputations from the entire American Expeditionary Forces. His clinical acumen resulted in election as a Fellow of the American College of Surgeons in 1922 (aged 34), and in 1924 he published a major textbook on amputations. He then studied at both Johns Hopkins and Massachusetts General Hospital. Most of his assignments between the wars were as chief of surgery, and he continued his contacts with civilian medicine, elected as one of the 150 members of the American Surgical Association, Vice President of the American Orthopaedic Association, and publishing 17 clinical articles and chapters. Kirk had only one command experience – he had converted the 1,750 bed Battle Creek Sanitarium in Michigan into Percy Jones General Hospital (which, along with convalescent facilities at nearby Camp Custer formed a 12,000 bed hospital center) – but he had no experience on a military staff or in a combat theater. Kirk had been noted as a highly qualified officer, coming fifth on Marshall’s and Stimson’s list. Former commanders had commented on his energy, aggressiveness, and administrative ability.

Selecting Kirk over Kenner symbolized a shift. In the future Army doctors would be expected to have a medical specialty, and additionally to learn to be good officers. Previously, most Army doctors had been what civilians would recognize as general practitioners, but the Army saw their medical specialty as military medicine – preventive medicine, field medicine, staff work, and command. That would no longer be enough. Kirk would reorganize Army hospitals to add graduate medical education, changing the paradigm of military medical professionalism.

Sources
Kenner and Kirk biographies, ACHH research collection
“Going to War, not for self but others”
The Presbyterian Hospital of New York City, 1942-45
Pascal J. de Caprariis MD, FAAFP, Lutheran Medical Center, Brooklyn, New York
Angela de Caprariis-Salerno, RPh, MS, Garden City, New York

Throughout history, advancements in medicine have been publicly credited to distinguished individuals, while coalitions of equally important personnel have remained in the shadows of recognition. This is the case with an organization that had only a six-year existence, but in that period of time had a dramatic impact upon our nation and countless individuals during World War II.

On March 11, 1940, the Army Surgeon General, MG James C. Magee contacted Dr. Walter W. Palmer, the President of the Medical Board of Presbyterian Hospital of New York City, requesting Dr. Palmer’s assistance in developing a military general hospital in the eventuality of war. General hospitals provided specialty complex medical and surgical care in thoracic, neurologic, plastic and orthopedic surgery, especially to the combat wounded, and had to be deployable.

On 30 June, approximately four months after their arrival at Fort Meade, the new soldiers were transported back to New York City where they boarded the Duchess of Bedford, a British cruise ship used as a troop transport. 1LT Albert R. Lamb Jr, M.D., described how just prior to the ship’s departure, the medical team realized that the ship lacked medical supplies for the 4,000 troops aboard as they headed to an undisclosed destination. They rushed to the Presbyterian Hospital pharmacy and were permitted to take whatever they deemed necessary. Waiting trucks were loaded and raced to the Duchess. The ship carried 120 separate units, including men for the 8th Air Force and from the 1st Infantry Division. The ship was crammed with five times her normal passenger capacity!
Some members of the 2d General were assigned eight per cabin while others slept wherever they could, including on or below the dining room tables. Early each morning the British stewards woke the sleeping soldiers, and quickly converted beds back into tables to feed the troops. On 3 July the convoy entered the U-boat zone, and troops had to sleep fully clothed with lifebelts at hand. The convoy’s zigzag maneuvers across the Atlantic were protected by fog for a portion of the 14-day voyage. The ship arrived in Liverpool, England, and the 2d General was the first Army hospital to arrive in war-torn England.

The Churchill Hospital, outside Oxford England, was transferred to the 2d General and the Americans (50 physicians, 105 nurses and 500 enlisted men) proudly identified their hospital an affiliation of The Presbyterian Hospital of New York City. Their daunting task was to convert this orthopedic hospital into a general hospital. Initially most patients were Royal Air Force and 8th US Air Force flyers, but they treated personnel from all US armed forces stationed in England.

The US medical staff worked with Dr. Harold Florey, who would later receive a Nobel Prize for his work on penicillin, and his team to complete the studies on the new wonder drug. The 2d General staff published in leading medical journals with their findings on high altitude frostbite, acute high altitude anoxia, cold agglutinins in atypical pneumonia and penicillin.

On 29 April 1944 the Second General Hospital relinquished care of its 900 patients to the 91st General Hospital and began training for the European invasion. With D-Day, the Allied troops secured a landing in Normandy, and the 2d General Hospital headed for France on D+45. When Tech. 4 Hugo V. de Caprariis was asked if he was afraid, he answered, “…not really, we knew our boys would protect us.” Protect them they did! After landing on the beaches, a motor convoy transporting the hospital staff mistakenly took the wrong turn and was heading to the battle front, parallel to trucks of Patton’s 3d Army. An MP halted their progress and turned them back in the correct direction.

The 2d General established a 1,000 bed tent hospital at Lison, France. The location, near roads and a train junction, allowed quick transport of casualties to the hospital. At maximum capacity its medical teams could receive more than 500 admissions in twenty-four hours. Set up to run six operating tables continuously on two 12-hour shifts, the unit assured its objective to maintain the mortality figures as low as possible.

By August 1944, the wards filled with combat wounded. On a late September evening, CPT Sidney Tucker MD recorded 136 admissions transported by train. By November, the 2d General had 3,091 admissions in three months, with general surgery and orthopedic cases comprising the largest share. The majority of cases comprised of shock, shrapnel wounds, blast injuries, amputations, trench foot, otolaringal presentations, and enucleations in addition to ophthalmology issues.
As twenty-eight US divisions advanced across France and Belgium, a continuous supply of fuel and ordnance was required to maintain them. The ‘Red Ball Express,’ a massive convoy system, accomplished this with 900 vehicles operating around the clock and transporting an average of 5,088 tons of supplies to forward depots daily. Many injuries occurred on the Red Ball Express and required treatment at the 2d General. Several soldiers, mostly drivers, presenting blurred vision or blindness, acidosis, and shock were admitted to the 2d General Hospital. Five of these eleven cases admitted to the hospital died of methyl alcohol poisoning resulting from ingestion of cognac, mirabelle and crème de prunelle made illicitly by local distributors using methyl alcohol. CPT F. Phinizy Calhoun MD, an ophthalmologist with the 2d General Hospital reported these findings in the U.S. Army Medical Bulletin.
As the front lines were pushed eastward, the 2d General Hospital followed, caring for soldiers, civilians, and prisoners of war. The hospital’s next location was Nancy, France, where casualties arrived by train and plane. During the eight months at Nancy, there were 12,532 admissions, 2,376 requiring surgery. By the end of the war, the hospital had admitted over 32,000 patients with over 50% arriving while in France.

During the two years and two months abroad, the 2d General Hospital had cared for blast injuries and amputations. They had treated shock. They had witnessed the arrival of the new drug penicillin and its beneficial effects. They had experienced extremes of patient care not imagined back home. They were a dedicated unit of young doctors, nurses, and personnel who had worked tirelessly serving the armed forces of their country. The war was over and it was time to return to the halls of the Presbyterian Hospital of New York City and care for its inhabitants.

Time has passed and this generation no longer walks the corridors of the Presbyterian Hospital. Both the sixty year old commendation from the Army Surgeon General and the commemorative plaque adorning the Churchill Hospital continue to recognize the 2d General Hospital of The Presbyterian Hospital and the superb quality of medical and inexhaustible professional talent displayed during its tenure across the ocean in foreign lands.

Sources
2d General Hospital, Annual Report for 1942, National Archives.
The Duchess of Bedford, http://www.duchessofbedford.com/

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Perioperative Nursing Students Establish Museum Exhibit

LTC Elbridge Merritt, BAMC

In early April, students from the Perioperative Nursing Course had an unusual officer professional development opportunity, helping install an exhibit at the AMEDD Museum. The Museum had a Soviet-built steam sterilizer on a trailer that was captured in 1983 during “Operation Fury” on the Caribbean island of Grenada. This sterilization trailer has been maintained at the AMEDD Museum under an outdoor pavilion with the ground ambulances for the last seven years. With the rotation of exhibits, it was brought inside once again.

The SDP-2 Autoclave was designed for sterilizing surgical instruments. The main components include a steam boiler, a distiller, two horizontal sterilizer units, a liquid fuel tank or the capacity to burn wood to heat the water into steam, and a hand pump to capture water from a variety of sources into the holding tank (to include a schematic of pulling water from a pond). There was a two man saw, and a collapsible ice auger with this unit so wood and ice could be cut and a place for an axe as well. The smokestack had brackets to hold it upright inside the unit during travel, and then could be placed on top of the unit when in use. Both sides of the trailer open for easy access to all parts, and the back of the trailer opens to access both of the autoclave chambers. The hot water valves are color coded red, the cold water color valves coded blue. Additional macramé in red and blue were added to the valves to prevent hands from getting burned or sticking to the metal in colder environments. You can see the slightly different Red Cross insignia, and the Russian made tires. Inside the trailer were brackets to hold a fire extinguisher and also a small first aid kit.

The 66E students were able to examine and discuss the operation of the entire unit, while assisting with cleaning both inside and outside with water, put the unit on jacks (all museum pieces are put on jacks to prevent dry rot of tires, and they cannot leak water or oil at any time), and decide which angle and doors could be open for public viewing. The students developed questions such as the possibility of sterilizing powders, liquids, and fabrics; if there was a “quick exhaust” mechanism; where the “sight glasses” are to determine the water level in the unit; what if any chemicals were used to keep the pipes free of minerals and other debris; and whether both horizontal chambers could be run simultaneously.

The next step is to collect information and possibly obtain an operating manual. Some of the instructions are written in English on metal plates and attached within the unit (indicating the unit was built for export), but there are unanswered questions to be researched for the exhibit information boards and the artifact record jacket/historical object record jacket. Keep your fingers crossed that more information will be discovered about this museum exhibit, and please congratulate these 66E students when you meet them for helping to preserve medical history.
DDT was an enormous help against insects and insect-borne diseases in WWII. Here, two soldiers examine an adapted compressed-air paint sprayer used to propel a kerosene/DDT mix.

They are in Amirabad, Persia (now Iran), part of the medical support to troops transporting war material to the USSR through Persia.

Photo courtesy National Museum of Health and Medicine.

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 (initially we will try a 500 word minimum), which must have sources listed if not footnotes/endnotes
- Book reviews and news of books about AMEDD history

Technical requirements:
Photos will need to be at least 96dpi; contact us about file format. Text should be in Microsoft Word (.doc or .docx) format. Please do NOT send text with footnotes/endnotes in .pdf format.
Material can be submitted to usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil

AMEDD Center of History and Heritage

Director, Mr Robert Driscoll

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