

EMS HISTORIAN

THE JOURNAL OF THE NATIONAL EMS MUSEUM

EMSMUSEUM.ORG

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STORIES FROM THE PAST



INSPIRING THE FUTURE

SAVING LIVES

SAVING HISTORY

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THE NATIONAL EMS MUSEUM

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The National EMS Museum is dedicated to preserving and commemorating the history of the Emergency Medical Services in the United States.

Through the study of the past, we inspire EMS practitioners to develop new tools and procedures to provide better and more effective emergency care to our patients and communities.

The National EMS Museum is a Non-Profit virtual and roaming museum that is devoted to the enduring story of EMS, the changes it's made, and the future it is creating.



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A Message from The National EMS Museum Board Chairman

By Richard A. "Doc" Clinchy, Ph.D., CHT (ret), EMT-P

I am both honored and humbled to welcome you to Volume 1 – Number 1 of EMS Historian: The Journal of The National EMS Museum. Fifteen years ago, some folks in EMS decided that it would be a good idea to put together a collection of EMS artifacts and publications so that those who follow us would better understand how the EMS profession has developed and what we once worked with 20, 30, 40 or more years ago - as well as the origins of what is recognized today as the Emergency Medical Services profession.

Many who were the groundbreakers of The National EMS Museum started as volunteers or military medics. To put our roots into perspective, those of us involved in the evolution of civilian EMS were, in fact, not Emergency Medical Responders, Emergency Medical Technicians, or Paramedics but were simply people providing First Aid Care. The Emergency Medical Services Systems Act of 1973 provided the impetus and the funding to begin to mold what we now know as EMS. Before that, it was dedicated neighbors devoting their time and energies to helping their neighbors. Yes, there were exceptions in places like New York, Miami, and Chicago but even in those locations the primary care was delivered by physicians with the education of the assisting caregivers remaining relatively rudimentary by today's standards.

Over the fifteen years since the germ of the Museum idea took root, we have grown and matured with virtual exhibits, online offerings through social media, more relevant

and robust presence at conference venues, bringing on a Director to manage what we do, and now this journal.

We thank you for your support and patronage and hope you will continue to help us grow and become a better and better resource for those entering the profession.

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Conflict and the Development of EMS

by Ronald I. Gross, MD, FACS

One of the earliest descriptions of field care of the injured stems from the days of Jesus, when a Samaritan came to the aid of a man who had been robbed, beaten and left for dead in the road. This parable is the basis of modern day "Good Samaritan" laws, but the concept of early care of the injured predated these laws by centuries.

Although the history of the ambulance began in ancient times, when carts were used to transport patients, ambulances were first documented in the care of the wounded by Spanish forces in 1487 during the Siege of Malaga. However,

The first civilian horse drawn ambulance was brought into service in 1865 in Cincinnati, Ohio, at the Cincinnati General Hospital.

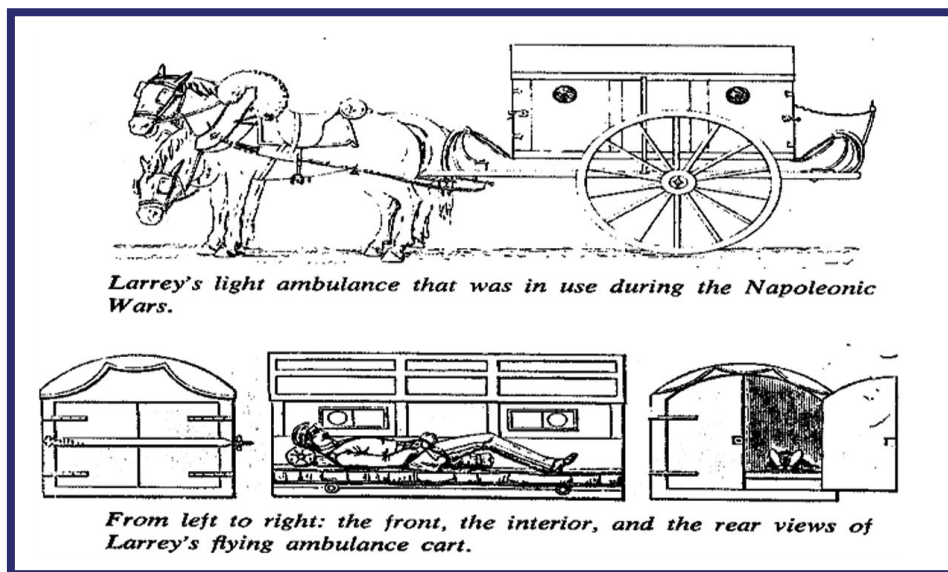
the modern day evolution of prehospital care of the sick and injured, and in fact the evolution of emergency medical services (EMS)

can be traced back to the time of the French Revolution and the Napoleonic wars. A French surgeon and military doctor named Dominique Jean Larrey was the director of Napoleon's ambulance service, and he is often considered to be the first military surgeon. Larrey saw

that the "remoteness of our ambulances deprived the wounded of the requisite attention." After seeing the speed with which the carriages of the French artillery could move, he adapted the carriages and constructed

the first mobile ambulance, the ambulance volantes - or "flying ambulance" - for the rapid transport of the wounded. These units went onto the battlefield, were staffed by trained medical personnel who controlled hemorrhage, provided care en route and transported the wounded from the front lines to field hospitals in the rear.

In the United States, the rapid movement of the wounded soldier from the front lines to the rear by horse drawn ambulances continued during the Civil War, where soldiers were moved to hospitals in the field, and subsequently by train to hospitals well removed from the battlefields.



Larrey's ambulance became the prototype for civilian ambulances - such as the Free Hospital of New York (now Bellevue) ambulance shown on the next page.

The first civilian horse drawn ambulance was brought into service in 1865 in Cincinnati, Ohio, at the Cincinnati General Hospital, and in 1885, Charity Hospital began its ambulance service.

In 1897, the Journal of the American Medical Association (JAMA) stated that, "A hospital without an ambulance is a hospital without patients."

Prehospital patient transport has evolved dramatically since Larrey's first "ambulance volante." Today, both ground and aeromedical patient transport have become accepted and standard modes of transport, and these ambulances are now often staffed with highly trained prehospital personnel.

In 1891, Dr. Nicholas Senn established the Association of Military Surgeons, and was quoted as saying, "The fate of the wounded rests in the hands of one who applies the first dressing." Eighty eight years later, in 1979, care of the injured took a giant step forward with the development of the Advanced Trauma Life Support (ATLS)[™] Course. Dr. Norman E. McSwain, FACS was the first chairman of the



ATLS ad hoc committee, as well as the Chair of the Prehospital Care Subcommittee on Trauma of the American College of Surgeons (ACS). He realized the profound effect that this course would have on trauma care. He also envisioned the effect that better training of the prehospital care providers would have on the care of both the injured and the sick. Dr. McSwain was a founding member of the board of directors of the National Association of Emergency Medical Technicians (NAEMT), and together with Dr. Gary Labeau, Richard (Rick) Vomacka, EMT-P, and Robert Nelson, EMT-P, the curriculum for a course called Prehospital Trauma Life Support (PHTLS) was developed. PHTLS is now taught globally and to all U.S. military medics.



Emergency medical care and Emergency Medical Services have evolved dramatically over the last six decades. Prior to 1950, the concept of "scoop and run" predominated, and no real care was provided enroute to the hospital. During the Vietnam War era (1969-1975), the concept shifted to appropriate field management and providing care enroute. For a decade after that, the thought was to "stay

and play” and field times were prolonged. It has since been recognized that the most appropriate approach is to provide the best and most advanced care to stabilize the patient as best as possible - while rapidly moving patients from the field to definitive care.

Major advances in the care of the sick and injured are usually seen during times of conflict. Hippocrates was quoted as saying, “He who desires to practice surgery must go to war.” In fact, not only trauma care, but the medical care of illness has always seen

advances from the lessons learned during war. That is true of today’s conflicts as well. Our understanding of hemorrhage control, hemorrhagic shock, resuscitation, rapid surgical intervention and damage control, the critical care of medical illnesses and the best methods of prehospital stabilization and transport have dramatically improved because of what we have learned over the last 50 years and multiple conflicts, and we will continue to see improvements in care as the military/ civilian “Getting to Zero” program comes to fruition.



“If I have seen further than others, it is by standing upon the shoulders of giants.”

- Sir Isaac Newton

The history of EMS is the history of conflict. The lessons learned in past conflicts have been brought from the battlefield to the civilian world, and our prehospital personnel have been better trained to care for the

sick and injured because of the constant updates brought to our standards of care by those who have served in war and continue to serve in peace. Dr. McSwain is one of those who bettered the care of our patients because of his vision, his devotion to excellence, and his constant quest to do better for all of us. As he always said, “What have you done for the good of mankind lately?” EMS has benefitted greatly from visionaries like McSwain, Larrey, and many others who contributed to the evolution of prehospital care.

Battlefield Medicine to Civilian EMS, a traveling exhibition by The National EMS Museum, is now open at the Aurora Regional Fire Museum in Aurora, Illinois.

A Brief History of The National EMS Museum

the country. A “Steering Committee” met at EMS Expo on September 27, 2006. Members included: Jim Slattery, Lou Jordan, and Bob Loftus (who organized the committee), Kevin

Agard, Scott Cravens, Jennifer Frenette, A.J. Heightman, Rocco Morando, Dawn Poetter, Jules Scadden, John Todaro, and Dr. Keith Wesley.

What came next set the stage for the development of The National EMS Museum!

The Idea

Since the closing of the original “To the Rescue Museum” in Roanoke, Virginia, the emergency medical services (EMS) has been under-represented, if represented at all, in museum collections across the country. The public did not have the opportunity to engage in the amazing story of pre-hospital care and the innovations at work in their community every day! Nor was there a dedicated museum to preserve and honor the legacy of those who changed the course of US EMS history forever.

However, private collections abounded in the homes and stations of EMS professionals coast to coast. History was being saved, but if it was not accessible to the public, where would those collections go if their current stewards were no longer able to care for them? Who was going to ensure the EMS story became front and center for generations to come?

After a series of meetings with private collectors, EMS innovators and industry leaders, and some community input, it was decided a national museum dedicated to EMS should exist to honor our brothers and sisters working day in and day out to save neighbors, friends, and family and to ensure the legacy of emergency medical responders was not lost to time...

[This material can also be found on The National EMS Museum’s website - <https://emsmuseum.org/about/> but is presented in the first issue of our new journal – with a few minor additions - for those readers unfamiliar with the Museum and its history.]

The National EMS Museum is a volunteer-led organization that collects, preserves and shares the history of emergency medical response in the United States in hopes of inspiring future professionals to take up the call.

The National EMS Museum organization operates a virtual museum and produces traveling exhibitions that tour the country every year.

The Collections at The National EMS Museum house over 300 years of history that cover the development of pre-hospital care in the United States, North America and around the world.

Our Story

In the early years of the 21st century, EMS professionals, educators, and community members from around the United States discovered their common desire to create a cohesive, national repository to house their profession’s history, preserve the memory of first responders around the world, and share the stories and artifacts with future generations.

In June 2006 a small group of EMS providers posed a question in a chat group to the EMS community: What if we develop a national museum to preserve our heritage and educate the next generation? Comments included: Many new EMTs and paramedics had no idea EMS even had a real history. It was also mentioned that many small museums had been set up at EMS and fire stations around

The Birth of a National Museum

With the assistance of a start-up grant from the National Association of EMT's (NAEMT) and a number of private donors, The National EMS Museum was born in the fall of 2006. Originally, the Museum's Board of Trustees hoped to develop a national repository and a number of satellite sites that would feature EMS history exhibits for EMS practitioners. Immediately the Board set out to collect as much EMS related materials as possible. This reflected the first two "phases" of the museums' development - virtual and traveling museums.

Unfortunately, 2008 was not kind, and with the economic downturn in October, The Museum Board decided to concentrate its efforts on maintaining its current collection and creating a traveling museum that could easily move to EMS conferences, trade-shows, and EMS related events around the United States as opposed to working toward the development of a standing or "brick and mortar" museum - Phase III. The Board chose wisely to live within its financial means.

The National EMS Traveling Museum was a huge success and has made repeat appearances at EMS Today, EMS World, and a number of state conferences every year. In 2014, the museum embarked on a new strategic plan to focus once again on public outreach and collection development with the hopes to expand the role of The National EMS Museum in the EMS industry and to open up the story of the Emergency Medical Services to communities across the country...

The New National EMS Museum

In 2015, with a new strategic plan approved by the Board of Trustees, The National EMS Museum set to work, collecting more artifacts, documents, pictures, and more, to highlight the innovations and everyday stories that make EMS what it is today. A new timeline app was launched for on the go history, and a new website was developed to feature the Virtual

Museum exhibits that now highlight important stories, events and people instrumental in the development of the emergency medical services.

2016 and 2017 brought more collecting and organizing EMS history within our collections and connections to more industry leaders to contribute to the strategic leadership of The National EMS Museum.

The biggest change to The National EMS Museum came in the fall of 2018 when the Board of Trustees (now the Board of Directors) brought on a development consultant to help ensure dedicated growth at the Museum each year for the next five years. Within the first year of the contract, The National EMS Museum was invited to exhibit in host museums across the country, including the International Surgical Museum in Chicago, Illinois. By the end of year two, The National EMS Museum had more than doubled its revenue, ensuring a budget surplus that would carry forward.

Year three of the contract brought us a global pandemic in the form of COVID-19, and despite the hardships experienced by NEMSM and its colleagues, supporters and friends across the country, the Museum was able to carry on with developing new virtual exhibits and programs to ensure more people had access to the historical collections held in trust at The National EMS Museum.

Going Forward

As the world starts to rebound and settle into a "new normal" post -pandemic, The National EMS Museum is looking to expand its presence within local communities in each region of the United States. To accomplish this goal The Museum needs your support!

- If you are an individual interested in EMS history, please become a Member of The National EMS Museum
- If you are a crew chief or operations officer, please encourage your company to become a Crew Member of The National EMS Museum

- If you are a company operating in the EMS Industry, get your brand in front of providers and decision makers by Sponsoring The National EMS Museum
- If you are a foundation manager, please connect with us on how your grant funds will support the growth of The National EMS Museum

2022 will be an interesting year for us all. We look forward to taking the opportunity to reflect and celebrate 15 years of historical preservation, but also can't wait to continue to grow, with your help, into THE NATIONAL home for EMS history in the United States.

Feel Through My Eyes

By Kate Bergen, BS, NRP, FPC

Art is up to interpretation. This was a strong emotional piece for me and I would like to share with you what I see... First, (the obvious) I see two people hugging in a real hug by how tightly they hold each other. I wonder, do they know each other or are they so overcome with emotion that this was a natural release? Second, I am drawn to this man's eyes. I want to know his story, what has he been through, I want to say to him, tell me what hurt you, lay down your burden, and please share with me. I see anguish, I see desperation, but more than that I see an undertone of hope; hope that there can finally be change desperately needed despite a gruesome past. Third, despite all that he has been through, all of the prejudices he has endured based solely on the color of his skin, he puts that aside for the sake of unity, moving forward and understanding one another. The compassion in this man's eyes is immeasurable. And this officer? I wonder what he has been through in his career. He has undoubtedly seen many evils out there but still continues to serve with compassion in his heart. Is his family worried he won't come home tonight? Is he now



targeted because of a uniform? Is the irony lost on him? I admire these men. I see the beginning of healing, a glimmer radiating from this man's eyes found in the common ground of compassion for human life. My heart hurts for them both, I stand behind them both, behind good humans being good to one another.

I don't have any magic words to heal, I don't know the answers and I won't pretend to. I do know that many uncomfortable conversations are necessary to move forward as a nation. It may not be much, but I chose painting as a way to share my voice, to share the love I feel towards others and encourage much needed healing.

There is so much hurt and anger, so much that needs to be said, and so much that needs to change. I can only hope that a step forward together, one embrace at a time is the new beginning that this country needs. Stay safe and God Bless.



Thomas Joseph Flanagan Early EMS Pioneer

By Clark Hurlburt

Nowadays, we tend to look back at the birth of what we call "Modern EMS" - placing this event sometime in the sixties with folks like James O. Page who is sometimes given the title of the "Father of EMS." Any field treatment and transport prior to those times is regarded as dark ages, "bag em and drag em."

Lost in time and history is the story of an individual who could easily be referred to as "The Grandfather of Modern EMS." That person is Thomas J. Flanagan (in the Model T on page 12, and in fur coat on page 13) of New Haven, Connecticut.

Early Life

Tom Flanagan was born September 8, 1893 in Meriden, Connecticut, the son of Patrick Flanagan, a hard working Irish Immigrant. As was common in the day, large Irish and Italian Catholic families sent one of their best and brightest to either the priesthood or convent. Thus, when the time came, Flanagan was enrolled in Niagara University in New York State. While he was a gifted student, this big,

strong Irish kid also excelled in varsity sports, leading the Niagara basketball team to victory. It was during one of these hard fought games that an incident occurred that would change both Flanagan's life and the lives of countless others.

While fighting for the ball in one game, Flanagan sustained a nasty leg fracture that required an emergency trip and admission to the hospital in Buffalo for treatment. In those days, ambulances - if available at all - were strictly used for transportation only. The treatment of injuries was crude at best, thus Flanagan was forced to endure a long and painful ride over rough back roads in the back of the University's Model T truck. His injury, even after treatment, would plague him for the remainder of his life.

During his long period of hospitalization and convalescence, Flanagan had time to dwell on the series of events that had caused his extensive pain and suffering. He read about the ambulances being run by New York City Hospitals that were beginning to treat patients with equipment carried on board. It was this idea that would drive Flanagan and would fuel his future work.

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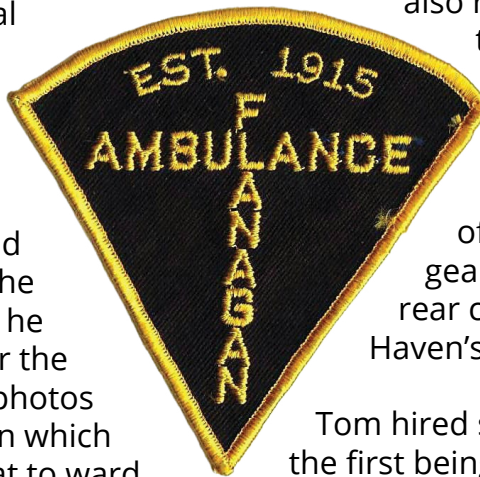
Starting Work on the Ambulance

Upon graduation from Niagara in 1912, Flanagan did not proceed to the seminary but instead returned to Connecticut taking employment at the then New Haven Hospital as a driver of one of their original motorized ambulances. These vehicles were placed in service in 1914, replacing the horse drawn wagons that the hospital had been operating since the Civil War. Hard work had allowed his leg to heal to the point that the physical work was possible. But he would be plagued with a limp for the remainder of his life. There are photos from those days, including one in which Flanagan is wearing a big fur coat to ward off the New England chill.

While working in New Haven, Flanagan began to formulate his plan to turn the hospital's transport ambulances into true EMS vehicles equipped with modern devices of the time and staffed with trained personnel.

Working with the hospital staff and the Yale School of Medicine, Tom developed a training

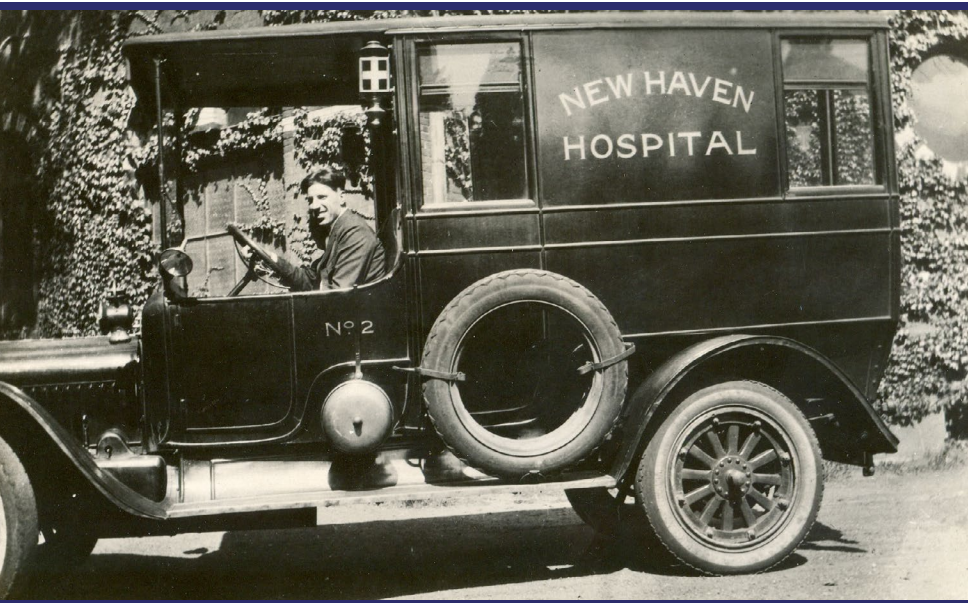
program that allowed his "Chauffeurs" to audit any medical school classes that were deemed to provide useful skills and knowledge that could be used during field treatment and transport. Residents in the Emergency Room also received training in working in the field so that they could form a two man team, dispatched out to emergencies. "Ambulance #2" underwent renovation with the installation of the new equipment, safety gear and an attendant seat in the rear compartment making it New Haven's first true EMS vehicle.



Tom hired some legendary chauffeurs, the first being Johnny Conte, followed by Art Fredricks and Andy Vets. These three would become the backbone of the service staying with Flanagan into the 1950s. One of the first Physician/Attendants was Dr. William Verdi, who would go on to become one of the world's most renowned surgeons.

System Development

The hospital-based ambulances/EMS units were an immediate success. Family physicians who previously would be tasked with the role of first responders and local police who would



often provide transport were now free to turn those roles over to the hospital-based service. Much positive acclaim was given to New Haven Hospital for their new innovative approach to providing care to the populace. With buy in from the hospital, a need now existed for a service to provide the non-emergency transports that still existed, and in 1918 New Haven Hospital leased to Tom Flanagan the use of Ambulance #4 for the sum of \$1.00 for the purpose of beginning a private ambulance service to be operated under his name, thus Flanagan Ambulance of New Haven was born.

Operating out of the original ambulance barn on Howard Avenue, Flanagan was soon able to purchase a large brick building on Congress Avenue along with the house next door. The ambulances and office were housed in the garage. The first floor in the house was reserved for accommodating the chauffeurs while the upper floors housed Tom and his new bride Louise. They soon had a son they named Tom Jr. Mrs. Flanagan did all the

cooking for the crews, most of whom lived on site.

At the time there were three hospitals in New Haven - New Haven Hospital, Grace Hospital and then Hospital of Saint Raphael, all of which ran their own ambulances. It wasn't long before all three hired Flanagan to train and staff their personnel and oversee their vehicles duplicating the Emergency Services in place. Meanwhile the non-emergency transports and emergency overflow went to the new Flanagan Ambulance.

Word of the success in New Haven spread, and Flanagan was called upon numerous times to travel around the country speaking about his methods and assisting other hospitals and communities set up their own EMS organizations. Advice was given as far away as

Spokane, Washington who wrote the company for advice.

One example of the EMS system's success occurred in the aftermath of the Rialto Theater Fire in New Haven. A converted Vaudeville house converted into a movie theater was showing Rudolph Valentino's "The Sheik" to a packed audience of Yale Students when burning incense caught the flammable curtains on fire. Panic erupted and many were burned or trampled in their efforts to escape. All the ambulances in the city were mobilized to respond and countless were treated and transported to the City's three hospitals. A physician from New York came to New Haven and did a study on what at the time was the first documented, organized field treatment of mass casualties and burn victims. The study determined that although the loss of life was extensive, the patients who were saved could mostly be attributed to the trained personnel on scene and timely transport to hospital care.

The “Ambulance Cot”

Flanagan continued to improve training and to innovate new equipment through the 1920s. On April 26, 1928 Flanagan patented what is thought to be the first multi-level ambulance cot. This wheeled device would be pushed into the back of the ambulance with its legs collapsing on their own thus eliminating the need for heavy lifting. Sound familiar? This replaced the short-legged cot previously used in ambulances that had to have staff waiting at the Emergency Room to help unload. This new device was named the “ambulance cot” - a designation used for the greater portion of the century. Veterans would give the rookies a hard time for calling it the “stretcher” as it was well known that the stretcher was used to carry the patient to *The Cot*.

Flanagan next invented and patented a proper stretcher in 1931. It was an adaptation of the military pole stretcher, was lighter, and the canvas split in the middle, not unlike the modern scoop stretcher. This allowed for ease of transfer from cot to hospital bed with the crew being able to separate the canvas with little patient movement. The poles themselves could be pulled allowing the patient to be placed in any desired position.

Flanagan Ambulance continued as a much admired and successful entity as the century progressed. A legendary adventure occurred in the snowy winter of 1934 when the snow became too deep for the rigs. Flanagan borrowed a team of horses and a sledge from a local moving company in order to transport patients from the outlying portions of the city. After one grueling trip, the horses were unhitched in order to rest and drink. In a split second they were gone, having returned to their barn on their own thus suggesting that day that ambulance work was not fit for man nor beast. Flanagan continued to thrive and innovate. Crews appeared in the Hollywood film “Claudia and David” and several safety productions including the infamous “And Sudden Death.”

A permanent change in the system occurred in 1939. In the lead up to the Second World War, a doctor shortage occurred and physicians were removed from the rigs. The system we see today, with a driver and attendant, took over and remained as the staffing on ambulances going forward.

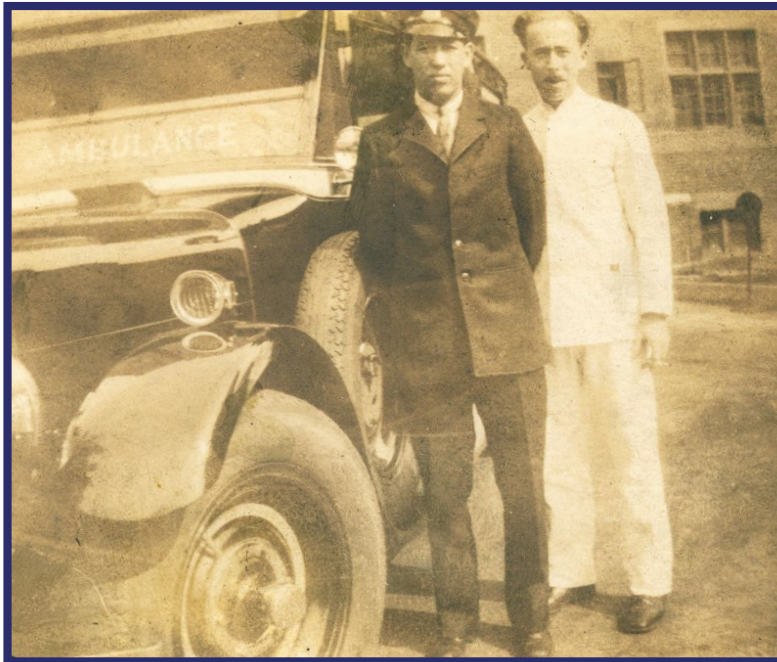


Final Days

By the late 1940s, Flanagan was getting tired. Flanagan had trouble turning down requests for employment - especially from returning veterans who had served as medics in the war - and he ended up with a fleet larger than necessary. At the same time, his leg injury was getting the best of him rendering him barely able to walk. Out of respect for Flanagan, no one had entered into competition in New Haven, but that was soon to change. Flanagan had always promised Conte, Fredricks and Vets that they would have first chance to take over the company but with increasing debt in 1953 he sold out to his friend Porter Lyke. Lyke had operated the taxi service in New Haven for most of the century and knew Flanagan and the business well. Vets remained as fleet manager, Conte continued as a chauffeur and Art Fredricks retired.

Tom went to work for what was then Yale-New Haven Hospital and worked as the night admitting officer, retiring to much acclaim in the sixties. He was written up in The New Haven Register as the Citizen of the Month, then retired to his home in West Haven. He passed away on February 29, 1972 and was buried in Meriden. All the ambulances from New Haven to Meriden sounded their sirens when Tom's procession went by. A fitting tribute to a great man.

The Lykes continued to operate Flanagan Ambulance, keeping the name. In 1967, in the Legal Case Flanagan Ambulance v The State of

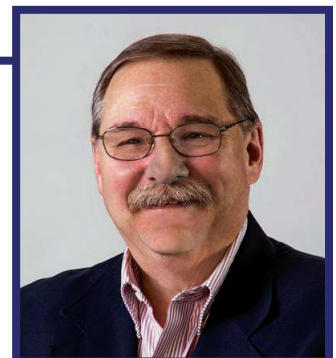


Connecticut, the right was won for ambulance companies to operate licensed handicapped transport, and in 1975 Flanagan Ambulance participated in New Haven's first paramedic program with paramedics trained at Yale-New Haven Hospital, thus bringing it all back full circle.

In 1983, one of the competitors started after Flanagan sold the company, made the Lykes an offer to buy the service, and on June 20, 1983 Flanagan Ambulance ceased to exist. The company that merger created would go on to become the cornerstone of the Northeast Division of AMR.

Tom Flanagan was a key innovator and was an important part of the growth and maturation of EMS in New Haven and throughout the country via the spreading of his ideas. Some of the practices and equipment we take for granted today are here because of creative and dedicated pioneers like him.

Clark Hurlburt began his EMS career in Connecticut in 1973. As an EMT, he worked for the Flanagan Ambulance Service - as did his father after World War II. Clark became a paramedic in 1980. He now works at Yale University in Emergency Facility Operations. His wife and daughter are paramedics as well - making for a multi-generational EMS family.



From the Files of The National EMS Museum



Dr. Emily Dunning Barringer (1876-1961)

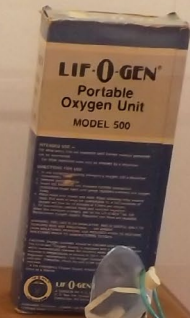
Upon her graduation from the Cornell University School of Medicine in 1897, Emily Dunning faced the traditional “male only” barrier of the medical profession. Though women had gained admission to medical colleges, none were allowed appointments to a hospital house staff. Encouraged by mentor Dr. Mary Putnam Jacobi to take the competitive internship exams, Dr. Dunning lobbied the Medical Board and Trustees of Mt. Sinai Hospital, which granted her permission to sit for the examination

with the understanding she would not be admitted no matter her standing. Dr. Dunning scored first place and applied to several of the city hospitals. All refused her admission.

In 1902 Dr. Dunning became the first woman admitted to an internship program in New York, at Gouverneur Hospital on Manhattan’s Lower East Side. A year later she became the first woman Ambulance Surgeon.



T.H. BARNES
1910
The National EMS Museum

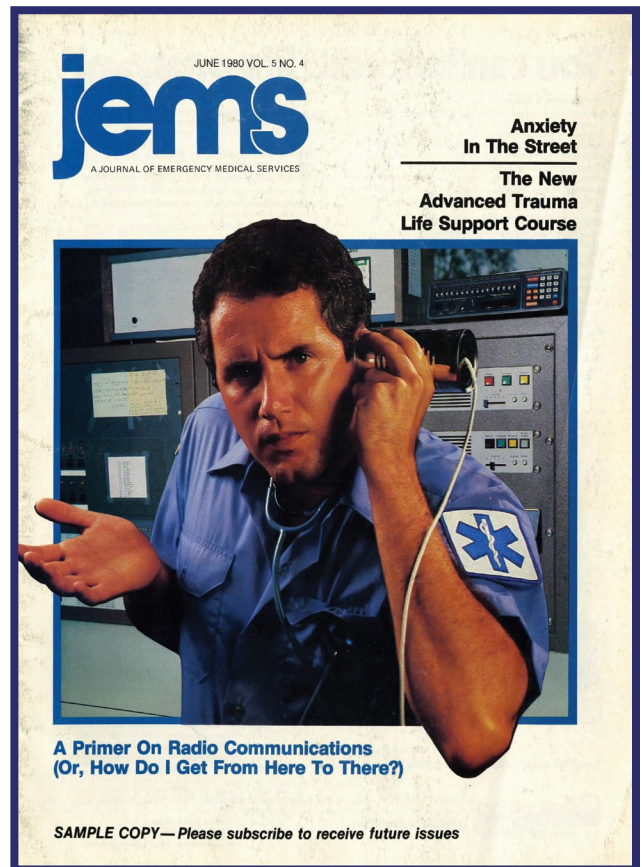


The Art of Emergency Care

By Kristy Van Hoven, MA, PhD-Candidate, National EMS Museum Director

They say a picture is worth a thousand words, and in no situation is that more true than in emergency response. From first-aid books to product advertisements, time is of the essence in pre-hospital care and a quick image will help a first responder decide the best course of action in the shortest amount of time. In some cases, that decision will be lifesaving. But art can do so much more than offer a step by step to a procedure or show off the newest gizmo in the field. Art can save lives through its creation, through its observation, and through discussion. The National EMS Museum is pleased to present artwork from our collections that have trained responders like you and me over the past 150 years, showcased innovation and design in ambulances and life-saving products, and last, but certainly not least, a collection of art created by first responders as they reflect on their careers and their commitment to their communities.

The Art of Emergency Care debuted in April 2019 and has enjoyed a successful cross-country tour traveling from north to south and east to west setting up in host museums in communities across the country. The exhibition has delighted



visitors and inspired professionals from response, education and the private sector to connect and understand the trials and tribulations first responders face every day. Through exhibitions like The Art of Emergency Care, The National EMS Museum connects families, friends, and communities with their local responders to encourage dialog and a life-long learning and appreciation of the art of emergency care.

The National EMS Museum (NEMSM) is dedicated to collecting, preserving and sharing the history of the Emergency Medical Services in the United States and communities around the world. By partnering with local organizations, The National EMS Museum creates exhibits for local communities to help share the story of EMS and inspire the future generation to take up the call.



NEMSM is solely funded by private donations and is dependent on your support to continue creating meaningful and engaging exhibitions. Please donate today by visiting emsmuseum.org or reaching out by phone or email. Thank you for making NEMSM the national museum dedicated to the EMS story.



“Rescue 8” - The Inspiration for the Jefferson Mills Rescue Squad

Information provided by James Covey III



Many people consider the TV show “Emergency!” to be an important catalyst for the development of the EMS systems we see today. (A.J. Heightman talks about that history in his article on Jim Page.) There’s no doubt that program had a significant impact - based on the rapid growth of EMS systems after the show’s premier. But yet another old TV show also had an impact in at least one location. The popular TV Show “Rescue 8” (which preceded “Emergency!”) was the inspiration behind the formation of the Jefferson Mills Rescue Squad (JMRS) in Pulaski, Virginia.

JMRS was founded by James Covey Sr. in January 1959. At that time, first aid instruction was at its peak at Jefferson Mills (his company and the squad’s namesake). James watched this educational show every Wednesday night with his family and would often envision himself as one of the characters. He presented his idea of starting a rescue squad to his company and they liked the idea. Shortly afterwards, the squad was organized and then chartered and incorporated on March 12, 1959 by 28 dedicated Jefferson Mills employees. It was their way of serving the small community of Pulaski.

In 1963, James Covey Sr. recounted the story of the JMRS for a story published in the local Southwest Times newspaper, which is shared below. The squad changed its name to the New River Valley Emergency Squad (NVRES) in 1967 and ended in 1996 when it was rolled into the Regional Emergency Medical Services (REMSI) organization.





Jefferson Mills Rescue Squad - Charter Members - 1959

Charter members pictured left to right: (First Row) - James Covey, Denny Pace, Harold Nelson, Ernie Hutchinson, Clarence Spencer, and Royce Rosenbaum. (Second Row) - Hidden - Unknown Name, Jesse Hopkins, James Davis, Carl Viars, Cecil Ward, and Curtis Richardson. (Third Row)

Charter members not pictured: Eugene Dobbins, Eugene Vaughn, Henry Sloan, William Viars, Ronnie Vaughn, Bert Dehart, Richard Parks, Alfred Quesenberry, Walter Ingles, John Umberger, Bob Wolfe, Ernest Quesenberry, Garret Hamilton, Tommy Fagg, Roscoe Cox, John Dehart, and Williard Pace.



Covey, Sr. in front of new Chevrolet ambulance at his home and base station for JMRS c. 1965.

“Rescue Squad Assists Needy”

SOUTHWEST TIMES - PULASKI, VA • April 7, 1963

By James Covey Sr.
Founder, Jefferson Mills Rescue Squad

It all began back in January. At that time, first aid instruction was at its peak here at the mill. At least four classes were being held each week. Also at that time, a very interesting and educational program was being televised each Wednesday night. I think most everyone watched this program which was called “Rescue 8.” Often, I envisioned myself as one of the characters on this program. As I look back over the past few years, I realize this was the starting of Jefferson Mills Rescue Squad. I first consulted Mr. Roscoe T. Cox Jr., personnel manager, on the idea of organizing a rescue squad here at the mill. Mr. Cox was very enthused and offered 100 percent co-operation. We next consulted with our safety director, Mr. Ernest Hutchinson who was with us all the way. Now that we had the nucleus for such an organization we needed members.

In less than a week, we had 28 members. We now needed uniforms. Mr. Cox contacted Mr. Warren Bogarde of Sweet Orr Company who agreed to make our uniforms. We didn’t have a treasurer, so we dug down, each member paying for his own uniform. We still had a long road to travel before we could even call ourselves a rescue squad. Mr. Garnett

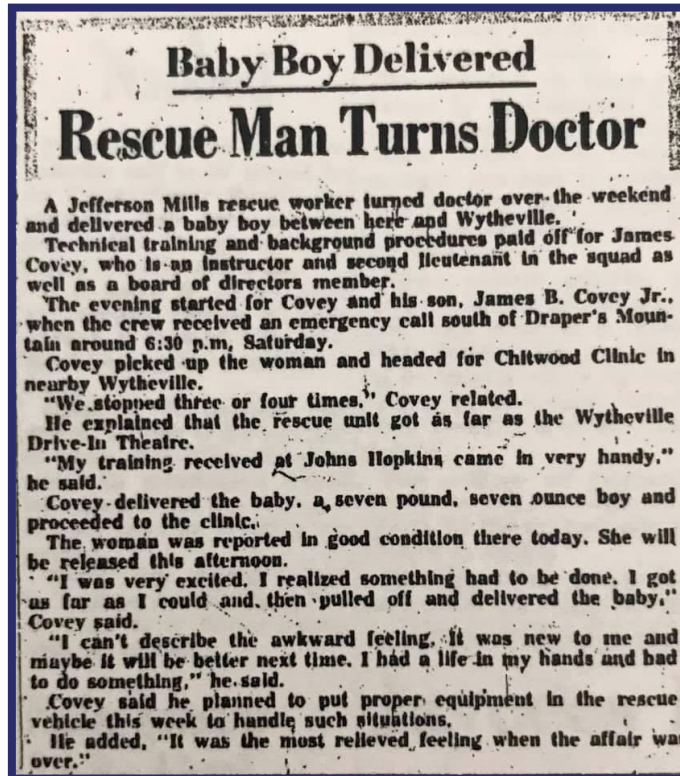
James Covey III is the Grandson of JMRS Founder James Covey Sr. and enjoys exploring his family history in community service and music. Originally from Radford, VA, James is an Air Force Veteran and Financial Compliance Professional who resides in Henderson, NV. To learn more about JMRS, visit Facebook - @memoriesofjeffersonmillsrescuesquad or contact James at jamescoveyiii@gmail.com.



Moore, town attorney, was very helpful in giving us legal advice.

I think our greatest help came from Julian S.

Wise, president of the Roanoke Lifesaving Crew. If there is anyone who knows life-saving, Mr. Wise is the man as he alone organized the first Lifesaving Crew in the United States. Mr. Wise was very helpful to advise and assist in the organization of our squad. We obtained a copy of the Roanoke Squad’s by-laws and constitution. From this, we created our own by-laws. We now began thinking of what to call ourselves.



Name Adopted

It was only logical to adopt the name we still hold, since our membership at that time consisted only of employees of Jefferson Mills. The mill was very generous to us in allowing us to use its attorneys and paying for incorporating fees.

We are proud of the fact that we are a member of the Virginia State Association of Rescue Squads. We also have met the high standards of operation the association requires. We were ready now for first aid supplies and equipment. We started taking up donations toward raffling off lawn mowers.

The employees of the mill played a major role in financing our organization by having a portion of their wages deducted each week by payroll and turned over to the squad. We purchased a 1954 model panel truck and converted it into a combination crash truck and ambulance. Mr. Bobby Stevens of Stevens Funeral Home donated to the squad an ambulance cot to go in the truck. The Pulaski Police Department donated to the squad a siren and a red light to be placed on the truck.

Operation Set Up

We were given one of the phones at the mill for emergency calls, enabling us to set up operations on a small scale from the Bunts building on Washington Avenue. We later moved to the Fire Department Parking Lot. We then obtained badly needed oxygen equipment from the Virginia Heart Association. This equipment, which was donated to us by the association, was purchased through your contributions to a very worthwhile cause. We needed to move closer to the mill, so with public donations along with the donations of the employees, we purchased a lot on First Street, S.W. This lot is now occupied by Jefferson Mills' new south plant. We operated from the first site and obtained additional funds by converting the lot into a parking lot for the mill employees convenience.



When Jefferson Mills decided to expand, we sold them our first site and they in turn furnished us a new lot which we now have along with a nice building which we use as headquarters for the squad. The mill is also furnishing us with lights, toilet facilities and heat. We are now operating full scale, 24 hours a day. We have added an ambulance, oxygen tent, porta-power jacks, latest in plastic splints. We are equipped to handle most emergencies we come in contact with. We still need equipment, for we have a long way to go, and will never cease to keep up to date with the latest methods in lifesaving.

Well Trained Crew

You will be assured of a well trained crew when in need of our services. We have five members in our squad who have been trained in the application of closed chest cardiac massage. These men were trained at Baltimore City hospital by the doctor who discovered this technique at Johns Hopkins Hospital, Baltimore, Maryland. We have handled most every kind of emergency including childbirth. We have qualified first aid instructors who are available anytime for first aid classes which you might like to start.

Today, I am sure each member feels that his individual time and efforts have been well spent, even though they are on a voluntary basis. Each member has gained a lot of experience and knowledge in this field of rescue work. He is fully satisfied that on his way somewhere he has helped ease the pain and saved the life of a human being. This summarizes the organization known as the Jefferson Mills Rescue Squad, Inc.

What Jim Page has meant to EMS


By A. J. Heightman, Editor-Emeritus of JEMS

Many people are not aware that James O. Page, the Publisher and Editor-in-Chief of JEMS, known to most as simply Jim, started his career as a firefighter signing up to join his home community fire department on his 21st birthday. He loved firefighting but he had a keen interest in the delivery of emergency care through the fire service. He believed that through the strategic positioning of apparatus by fire departments, they could deliver first aid and the newly established procedures for CPR.

While serving as a Battalion Chief in the Los Angeles County Fire Department, he was called upon by his Department to work with the producers of a proposed TV series that would focus on complex rescues occurring throughout LA County. Jim was assigned to work with Robert Cinader (Bob), the show's producer. Jim told Cinader that there really weren't that many complex rescues on an annual basis to truly feed a weekly series. But he mentioned a new pilot program in which six L.A. County firefighters were trained to be paramedics and deliver advanced level care in the field that had never been done before.

He was smart and had Bob Cinader do a ride-along with two of the best new graduates. History was made after that ride-along. Bob was amazed by what he saw paramedics do, and the respect that they were receiving in the emergency department.

Bob went to Jack Webb and told him that they needed to do a series about the new paramedics. Webb bought off on it and told Bob to proceed, with Page, Dr. Ron Stewart (then Medical Director of the L.A. County Paramedic Training Program), and a few other key folks serving as technical advisors to the show.



A.J. is currently with the Cambridge Consulting Group and is Editor-Emeritus and former Editor-in Chief of JEMS (the Journal of Emergency Medical Services). In addition, he served as Special Projects Coordinator for JEMS, and EMS Today Conference Chairman for 26 years. A.J. also served as Vice President of Jems Communications, Director of the Emergency Care Information Center and Director of the JEMS Conference Division.

In the 1971–72 season, Webb and Cinader launched *Emergency!*, a spin-off of *Adam-12*, which focused on the fictional Station 51 Rescue Squad of the L.A. County Fire Department, and its work in coordination with the emergency department staff of the fictional Rampart General Hospital. LACoFD's paramedic program was among the first paramedic services in the United States.

Webb cast his ex-wife, Julie London, as well as her second husband and *Dragnet* ensemble player Bobby Troup, as head nurse Dixie McCall and Dr. Joe Early, respectively, with Randolph Mantooth and Kevin Tighe playing paramedics John Gage and Roy DeSoto and Robert Fuller playing Dr. Kelly Brackett, Rampart's Chief of Emergency Medicine.

Emergency! ran as part of NBC's Saturday-night lineup for six entire seasons, and it was a popular series, sometimes winning its time slot against CBS's popular Saturday-night comedy block, which included *All in the Family*.

A funny side note is that producer Jack Webb had a habit of naming characters after the show's technical advisors, so he told Cinader that the rambunctious young paramedic played by Randolph Mantooth would be named Jimmy Page. When Jim Page was told about the character naming, he went to

Cinader and asked him to please get the name changed because some officials in the L.A. County Fire Department were not enamored with this new paramedic concept, and weren't happy about him pushing for it.

So, the next day Jack Webb agreed and had the name of Randy's character changed from "Jimmy Page" to "Johnny Gage."

As we all know, the show took off like crazy and *Emergency!* was widely credited by observers as one of the most important efforts to promote the widespread adoption of paramedic services by fire departments and hospitals in the U.S.

L.A. County was not alone in developing programs to train and utilize paramedics in the field. Other EMS systems in the United States were simultaneously instituting paramedic level care in large urban centers such as Miami, Seattle, Columbus, and Jacksonville.

As Jim predicted, his chance for further promotion in the L.A. County Fire Department diminished as the show became popular and paramedics were to become a permanent fixture in L.A. County, so he retired early and moved to North Carolina to become the State's first EMS Director ("Chief").

Jim, who was also an attorney and a stickler for policies and procedures, was soon confronted by a high percentage of new EMT students who had difficulty reading and writing. They, and their services, petitioned to have the EMT test read to them, but Jim refused to do so citing the need for EMTs to be literate to be able to read prescription bottles, hazardous material sheets, road maps and other essential items they would encounter in the field. The squads politicized the issue and so the Governor gave in and fired Jim. Jim always said that everyone should get fired once in their life so they can adjust their path and career goals.

He moved to New Jersey to head up the ACT (Advanced Coronary Treatment) Foundation, funded by big pharmaceutical companies



to advance the idea of paramedics in every community. The New Jersey First Aid Squads, long the respected providers of exceptional basic life support, were boxed out of entering the paramedic realm because legislation enacted in the State of New Jersey limited paramedic operations to hospitals. That, plus a long tradition of independent service to their service areas made them resistant to the concept of paramedics being assigned to calls in their service areas. So, Jim Page and the ACT Foundation pushing for paramedics in New Jersey and throughout America did not sit well with the New Jersey First Aid Council. They petitioned the New Jersey pharmaceutical companies to fire Jim and stop pushing for paramedics in New Jersey.

The move did not work but it fired Jim up. He knew he had to start a journal to educate EMS providers and managers and confront the many issues that were surfacing in the development of BLS and ALS systems throughout the county and the world.

Jim was a contributing writer and advisor to the magazine *Emergency*, published by Glen Hare and his medical device company, DynaMed, when he met the magazine's young managing editor, Keith Griffiths in 1978. He told Keith he wanted to start his own magazine and convinced him to join him when he did.

To establish a national voice for EMS and to dig into the real issues involved in EMS system development, Page purchased *Paramedics International*, a quarterly magazine produced for several years by California paramedic Ron Simmons, for \$1.00.

JEMS was born in October of 1979 with Jim Page as publisher and Keith Griffiths as founding editor. He used his ACT Foundation salary to fund the development of JEMS in its early stages. Page and Griffiths published the last issue of *Paramedics International* in November of 1979, and converted it to JEMS, with the first issue out on the streets in March of 1980.

In addition to JEMS, Page and Griffiths started the trade conference *EMS Today*, *Fire-Rescue Magazine*, the peer reviewed journal *Prehospital and Disaster Medicine*, created consulting and book divisions, among other offerings and magazines focused on the public safety and emergency care market.

They sold the company to the Times Mirror Corporation in 1993 and became part of their Mosby Publishing Division, which provided health-care publications and textbooks, many in the emergency field. Mosby sold JEMS to Elsevier Publishing and, after a few years, Elsevier sold JEMS to PennWell Publishing which was bought by Clarion Events.

Clarion Events, headquartered in London, is an international business, with a portfolio of events and media brands across a range of vertical markets and employees based in offices worldwide who specialize in delivering

first class marketing, networking and information solutions in high value sectors, both in mature and emerging geographies.

Clarion organizes both live and digital events, attracting buyers with spending and decision-making power who are looking for solutions and innovations to help move their businesses forward. Putting them in contact with the providers of these solutions, and with each other, is our overriding objective, always. So the JEMS, EMS Today Conference, Fire Engineering Magazine and its FDIC Conference are a natural for Clarion Events.

Clarion ceased the publication of JEMS in paper format and turned their efforts to building a robust digital site for JEMS that could publish timely and important topics on a daily basis versus a monthly magazine.

Jim Page died in 2006, but his legacy lives on as the "Father of Modern EMS." Griffiths went on to be co-founder of the RedFlash Group, a marketing and communication firm focused on public safety, and now in its 20th year.

Jim Page, a brilliant writer, speaker, fire chief and attorney, had a vision for JEMS as a transformative publication, which tackled the tough issues of the day head-on. To show their intent, Page and Griffiths featured all their competition on the first cover and announced their intention to have a Journal, not a magazine, that told it like it was and called for change. And that they did. He and Griffiths achieved that by recruiting some of the brightest minds in the business to write for and, in many cases, work for the publications. JEMS will continue to strive to be an important voice in EMS.

The legacy of JEMS and the vision of Jim Page, Keith Griffiths and I can be seen in the timeliness of the articles and issues that graced the pages of JEMS. Examples of previous topics appearing in JEMS can be found at The National EMS Museum's Digital Library and Research Archives at emsmuseum.org/archives.



Chronicling 50 Years of EMS Excellence

The Story of Hall Ambulance Service, Inc.

Mark Corum, Director of Media Services, Hall Ambulance Service, Inc.

In 2020, The National EMS Museum, in association with the California Ambulance Association, published a special edition of the organization's publication - Siren - to coincide with the 50th Anniversary of the Wedworth-Townsend Paramedic Act. Within it, a special section entitled "Answering the Call: California's EMS Legacy" profiled 17 native Californians and their impact on shaping EMS in the United States. Harvey L. Hall, founder of Hall Ambulance Service, Inc., was featured for his impact and contributions to the industry as a private ambulance provider.

This is the story of Hall Ambulance Service, Inc., which celebrated its 50th Anniversary in February 2021.

The prologue leading to the first chapter of the Hall Ambulance story began on a dare—literally.

In 1960, Harvey L. Hall was working as a hospital orderly when a friend, employed as an ambulance attendant, dared him to ride along. The experience was so exhilarating that the next day, Hall embarked on what would result in a 58-year career in emergency medical services until his passing in 2018 following a short and unexpected battle with Creutzfeldt-Jakob Disease.



Although the founder's era came to an end, Mr. Hall's vision and legacy are now being carried forward by his wife, Lavonne C. Hall, as president and CEO, along with a dedicated leadership team.

Hall Ambulance has come a long way since 1971, starting with two ambulances and five employees. Today, it employs over 450 EMS professionals serving 88% of the population in Kern County, which is California's third-largest

county, with a fleet of over 100 ambulances, an air ambulance, and a critical care transport unit.

Hall Ambulance's continued success can best be attributed to a shared belief in the importance of adhering to Mr. Hall's standards, also known as the "Hall Way of Doing Things."

Reflecting on 50 Years of Service to Bakersfield and Kern County

With 11 years of experience, Hall founded Hall Ambulance Service in 1971 from his home in Bakersfield with a \$15,000 bank loan and two ambulances, a 1970 Miller-Meteor 42" Guardian Cadillac, and a 1971 Ford Galaxy Country Sedan Wagon that was converted by a local garage. Building off his ideals of Care, Compassion & Community, these exacting standards detailed how every customer should be treated, the importance of providing your employees with the best tools to do their job, and why being an essential part of the communities served by the Company matters. Growth for the Company has come by way of other communities noting Hall Ambulance's

reputation for providing exemplary patient care and service.

The first expansion was to Arvin, an agricultural community located

southeast of Bakersfield, in March 1975, followed by Lamont in 1976. In the late 1970s, Hall turned his attention to taking his ambulance service to Kern County's mountain communities, signing an agreement with Mountain Memories in 1978 to provide local, reliable service to Frazier Park. The next year, he negotiated an agreement with the Tehachapi Hospital District to bring 24-hour ambulance service to its residents. Shortly after that, Hall Ambulance extended service to Bear Valley Springs and Stallion Springs.





In April 2014, Hall Ambulance completed its final expansion during the founder's era, bringing service to Wasco, and thus expanding the Company's coverage to 88% of Kern County's population.

Driven by Innovation

Through the years, Hall Ambulance has been at the forefront of the evolution of EMS innovations. In February 1975, Hall Ambulance

introduced the first paramedics into Kern County (one of the first paramedic programs in the state), paving the way for this advanced level of care in the field.

The introduction of paramedics also served as the start of transitioning from professional cars to Type II vans. Hall purchased two Dodge Lifeguard III ambulances that he named Trauma 6 (T-6) and Trauma 7 (T-7). The larger vehicles were needed to accommodate the advanced capabilities of paramedic care, including telemetry equipment.

Just five weeks after introducing paramedic-level service, Hall Ambulance put its mobile intensive care program to the test at the highest level by providing standby service during President Ford's visit to Bakersfield. In a thank you letter, Assistant White House

In January 1994, at the request of Kern County EMS, Hall deployed a fleet of ambulances CODE 3 to cover the majority of eastern Kern County after their provider gave less than an hour's notice before halting ambulance service. That May, Kern County awarded the area to Hall Ambulance, and in June, the Company formed an agreement with the Muroc Hospital District to provide service in Boron.

The next two expansions came about with similar circumstances when the owners, both personal friends of Mr. Hall, decided to retire. Hall Ambulance began service to Taft and the West Side in March 1995, followed by Shafter in 1999.

In July 1999, Mr. Hall realized his dream of becoming the sole ambulance provider for Bakersfield.





Physician Chester L. Ward, M.D. noted, "It was comforting to know that if the President or anyone accompanying him during their visit to Bakersfield had needed care, there was a vehicle available as well equipped and manned from the Hall Ambulance Company."

In 1991, Hall Ambulance became the first EMS provider in California to be named the "United States Paramedic Service of the Year" by the National Association of Emergency Medical Technicians and the American Academy of Orthopedic Surgeons.



In 2001, Hall Ambulance created Hall Air Ambulance offering rapid response transport for the most critical patients located in outlying areas. The program was expanded in 2009 with the creation of Hall Critical Care Ambulance offering regional interfacility transport solutions by air and ground.

The idea of training its next generation of EMS workers began in 2001 with the creation of the Hall EMT Academy. This accelerated 8-week training program prepares recruits to start working in the Hall Ambulance 911 system. In 2018, Hall Ambulance developed the Hall Paramedic Academy, which provided training for EMTs ready to advance their career at Hall Ambulance. In 2019, the Harvey L. Hall EMS Academy opened, which houses both academies and offers continuing education to Hall Ambulance employees and their public safety partners.



In February 1975, Hall Ambulance introduced the first paramedics into Kern County, paving the way for this advanced level of care in the field.

The Founder's Era Comes to an End
Tragically, in April 2018, Mr. Hall became ill due to sporadic Creutzfeldt-Jakob Disease. Just two weeks and seven hours following diagnosis, his short battle with this degenerative



brain disorder came to an end. His passing reverberated throughout Kern County and the ambulance industry, having served not only as the founder of Hall Ambulance but also sixteen years as the 25th Mayor of the City of Bakersfield.

A Community Celebration Honoring the Life of Harvey L. Hall was held at the Rabobank Arena in Bakersfield. All three major network affiliates simulcast the ceremony featuring nine speakers who reflected on his life's many facets. Before the ceremony, a cavalcade of more than 40 emergency vehicles from across the state made their way through the streets of Bakersfield in an honorary procession.

To ensure as many Hall Ambulance employees as possible were able to attend, a mutual aid plan was put into effect using personnel and ambulances from seven different companies that traveled from as far as the Bay Area and Orange County to provide support.

Mr. Hall and his Company's impact on the ambulance industry was recognized in September 2018, when the American Ambulance Association posthumously

awarded the Robert L. Forbuss Lifetime Achievement Award to Mrs. Hall during the organization's Annual Convention in Las Vegas. Later that month, the California Ambulance Association conferred Emeritus Status Recognition upon Mr. Hall for his distinguished service to the science and art of ambulance services during its 70th Annual Convention at Lake Tahoe.

Looking to the future, Hall Ambulance is poised to continue serving as an innovator, drawing from its founder's vast legacy of success while providing exemplary pre-hospital care to its customers.

Affiliated with Hall Ambulance Service, Inc. for 25 years, Mark Corum serves as Director of Media Services, where he is responsible for promoting and protecting the Hall Ambulance Service brand.



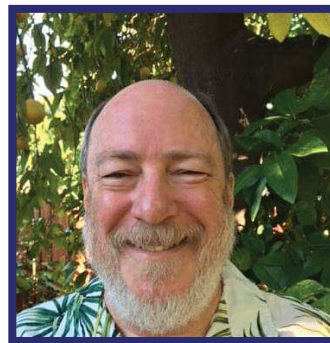
Let's celebrate EMS History!

By Fred Claridge, EMT-P, EMS Museum Board Member

Hello everyone. Welcome to this - the first issue of EMS Historian! The Historian is the "re-engineered" journal of The National EMS Museum. Our hope - and goal - for this journal is that it will help us to achieve the Museums' mission of "memorializing and commemorating the history of EMS and the individuals and organizations that provide emergency care to the sick and injured." We want this journal to mean something to our EMS brothers and sisters. Our goal is to produce a quality publication - the kind of publication you'll want to hang onto, maybe put up on a bookshelf along with all your other EMS books, magazines, and assorted publications.

For us, EMS history is a labor of love. By turning out a quality journal which supports the work of our Museum, and which tells our EMS story, we're hoping we can engender a love of EMS history in you too. That history doesn't belong to us, it belongs to all of us collectively.

In some ways, it's easy to see EMS as having started in the late sixties with the publication of the now legendary white paper - "Accidental Death and Disability: The Neglected Disease of Modern Society" and the federal legislation that grew out of it creating regional EMS systems (along with funding) and which established the first training standards, a.k.a. The Orange Book, for a new level of caregiver called an Emergency Medical Technician. Some see EMS as starting with the first paramedic training programs - in Pittsburgh with Freedom House, and other cities like Los Angeles (Johnny and Roy), Columbus, Ohio and Jacksonville, Florida. It could be argued that those halcyon days were indeed the beginning



of "modern EMS." But our history goes back much further than that.

Those "ambulance attendants" dressed in all white, hopping into a Cadillac or a Packard ambulance, armed with little more than a First Aid card from the Red Cross - they're an important part of our history too. Or consider the challenges faced by the medical staff at the Battle of Antietam during the Civil War. In twelve nightmarish hours, there were over 24,000 casualties - including 10,000 wounded. All the wounded from that battle were evacuated from the battlefield within twenty-four hours. Could your EMS system today handle that kind of call volume? With horse-drawn ambulances? Think about that accomplishment for a minute.

The history of EMS is jam-packed with amazing stories, people, and innovation. People answering the call, whether it comes from a plectrum or overhead speaker, or from within - the desire to help. The mission of the Museum is to make sure that history isn't lost. To celebrate that history. To make it come alive for the people carrying on those rich traditions.

We want this newly conceived and designed journal to help us carry out that mission. To do two things really: to bring the work and holdings of the Museum to a larger audience through access to this publication, and to memorialize that work in a worthy publication for posterity. We hope to strike a good balance between informative and fun, scholarly (but not too) and popular. We want you, as members of the EMS community, to contribute. We can't do it all ourselves. Hearing from just us all the time would grow



stale. We want your input, articles, research, ideas, suggestions, photos – all of it. As we mature and grow the journal, we'll develop guidelines and standards – information that we hope will prove helpful and useful. In the meantime, don't hesitate to contact us. We want to hear from you about what you'd like to see.

We think we've done a pretty good job of putting this first issue together. We want it to be the first of many more to come. We're starting off modestly with the size and the frequency of publication. How it develops has as much to do with you as it does with us. At the very least, we hope you'll agree that we started this journey with a quality

publication worthy of the Museum – and more importantly, worthy of the important work it speaks to.

And some final words of thanks: Thanks to the Board of The National EMS Museum for green-lighting and supporting this project – and thanks to those who worked on this journal and the earlier iterations of a museum newsletter back in the day. Special thanks also to our sponsors – without them we couldn't pull this off. And maybe most important, thanks to you – our readers – for spending some time with us.

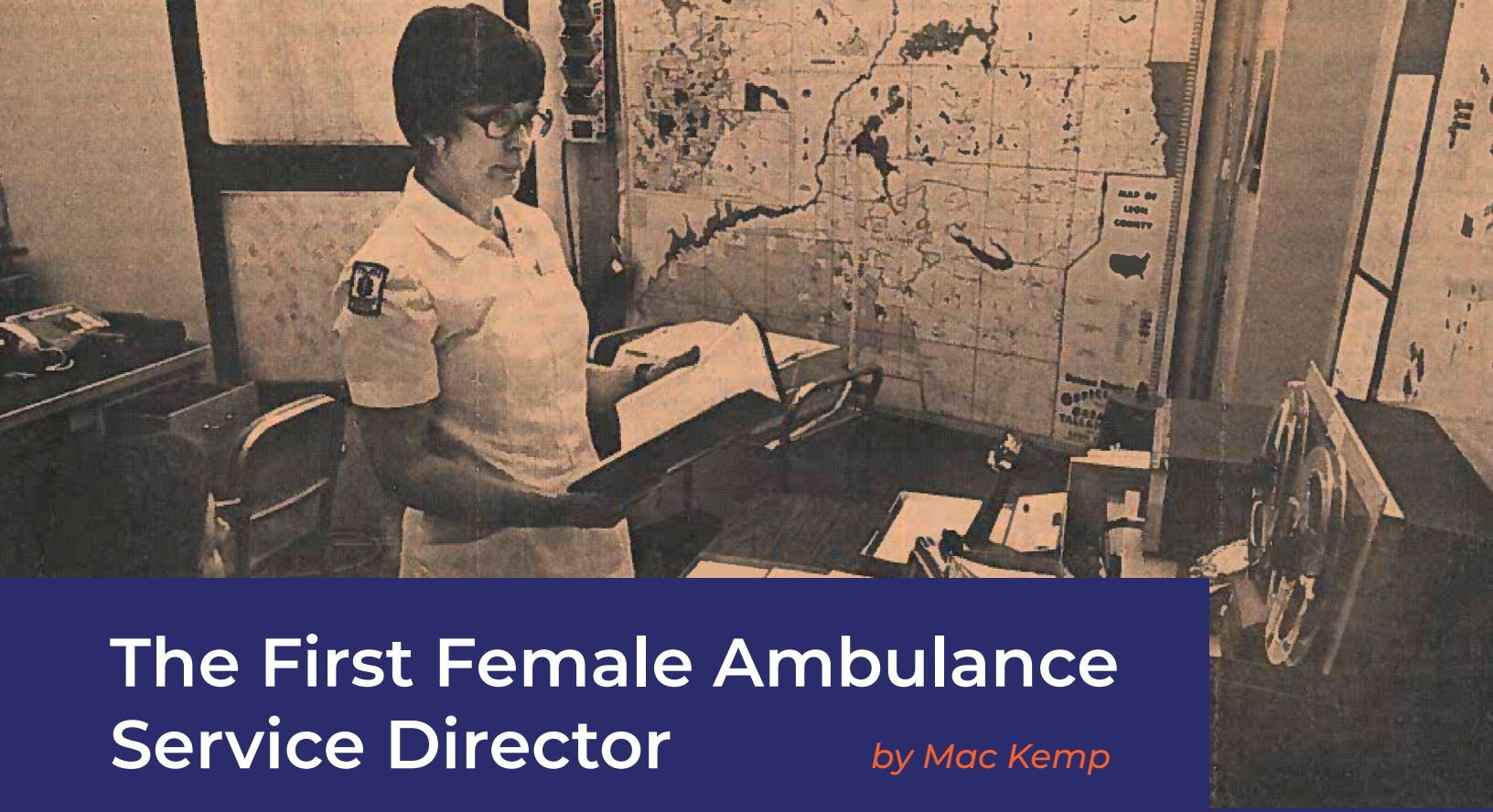
Fred Claridge retired in 2020 after a 41 year career in EMS.

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The First Female Ambulance Service Director

by Mac Kemp

In the 1960's and 70's Emergency Medical Services (EMS) was just getting started. Movement of sick and injured people had been performed for the most part by funeral homes across the United States as they were generally the only services to have stretchers and vehicles that could fit them. However, funeral homes did not have medically trained personnel and carried little, if any, equipment for lifesaving measures. It was a time of scoop and run when someone was in crisis.

By 1973, both a physician-led 'white paper' and the funding to support its recommendations were making their way into communities across the country. Hospitals were among the first organizations to take on the challenge of providing more robust roadside care, even though it had never been done before. Who would administer these programs? What training would the pre-hospital personnel need? What equipment would they use? How would they communicate with a base station and the hospital? What were the legal grounds surrounding this new service? All these and many more questions began to be worked out as dedicated ambulance services sprang up across the nation.

New Environment, New Approaches

In this new, uncharted, environment, Tallahassee Memorial Hospital (TMH), Florida, had been approached by the county and city governments to take over patient transportation and to provide pre-hospital care to northern Florida. TMH agreed and on August 8, 1972 started the first ambulance service in Leon County. To lead this new service, TMH made a bold choice in hiring a 44 year old mother and EMT, Marilyn Crook. As one of her classmates and fellow EMS workers, Robbie "Doc" Boissiere, said:

"She was chosen as the one of our group with the maturity and life experience to make the endeavor a success. She took a group of people with no previous medical experience and turned them into an excellent, cohesive unit, capable of meeting any challenge that was presented."

Marilyn and her crew of new EMTs quickly learned about day to day life as an ambulance based provider. Each member of the crew learned on the job, from chest pain to stroke,



vehicle accidents to shootings and stabbings: every call was a learning experience for the team. During her tenure, Marilyn partnered with a number of agencies, physicians and other EMS professionals to grow the profession into what it is today. Working closely with Dr. Thomas Bixler, they brought Advanced Life Support (ALS) trained medics to the streets, to start performing more medically

based interventions on patients. Medics would get individual training on each drug or medical procedure and get cleared by Dr. Bixler or other physicians to perform that procedure. Later, Marilyn was also tasked with adding helicopter/air response to her arsenal and rose to the challenge in providing ground and air response for TMH.

The First Female Ambulance Director

Crook also faced a separate challenge as she took charge of the Tallahassee Memorial Hospital ambulance service. As one of the first, if not the first, female Ambulance Service/EMS Director she had to contend with male crews who were not used to being directed by a woman. She also had to eventually coordinate with other first response agencies who were not accustomed to working with a woman

director, or the new EMS professionals in general.

Julie Holta friend and a nurse in the TMH Emergency Room recalled:

"I think it was difficult for her to be the first female in this role and some of the guys 'tested her' to see if they could get away with some stuff or see if she was a push-over. Her supervisors tested her too, but I think she was the right person for this job. She was strong, confident in her knowledge, and would hold her ground and defend her decisions and not back down, but in a professional and polite manner."

These were the days when everything was new and each EMT had to be trained individually how to function in the field. There was no such thing as standing order Paramedics: all advanced care was directed by physicians or nurses in the hospital emergency room. EKG telemetry was new and available using what was called the Orange Box to transmit them to the Emergency Department. Bandages to stop bleeding, long spine boards and cervical collars for spinal immobilization, large cardiac monitors weighing over 40 pounds, bag valve masks for helping breathing, and intravenous lines with fluids for resuscitation were also available. Drugs would come later, as would protocols for doing field medicine without a direct physician order. Managing all of the personnel, training, equipment purchases, medical coordination, and more was a gargantuan task.



But Marilyn always put the patient first and pushed her personnel to do the same, even while they were trailblazing a new profession.

Eventually, the TMH service grew from 25 works to over 100. New systems like central dispatch, call tracking and medical direction changed field operations. New interagency relationships grew and new state and federal requirements began to roll out. New drugs and medical technologies for cardiac arrest,

trauma, and pain management entered the scope of practice, while Epinephrine, Sodium Bicarbonate, Lidocaine, Isuprel Drips, intubation, and defibrillation treatments became commonplace. Surprisingly, back

other agency leaders, and medical staff. She seemed to excel at gaining that respect. Although Marilyn was always all business when it was needed, she also knew how and when to enjoy herself and show her sense of humor.

1975 **Callabasser Memorial** Sun., Jan. 26, 1975-21G
Marilyn Crook directs ambulances

in those days, the protocols even included jugular vein access, central lines, intracardiac injections, and pericardiocentesis. It was an exciting and dizzying time to be in EMS - with so many changes taking place in such a short amount of time.

Marilyn was a natural leader who took responsibility, led the way forward, showed compassion, and allowed others to grow. Change is constant in EMS and the ability to lead and mentor in these extraordinary circumstances was difficult yet came easily to her. It took great leaders like Marilyn to help shape EMS into what it is today.

Dealing With the Human Side of EMS

Marilyn had high expectations of her employees but also recognized the stress of the job and the need to have a balanced life outside of work. She recognized her crews were human and needed to have a straightforward approach to the job, one call at a time.

Great Memories and a Fitting Legacy

EMS was just being hatched as a profession and Marilyn understood very well that each and every patient encounter was crucial to moving the profession forward. She was a patient advocate and also an advocate for those who were providing care in the field. She knew how to “mother” her crews yet hold them to a high standard of care. Bobby Bailey points out: “Marilyn was rustling a bunch of cowboys and we were developing what EMS is today.” Julie Holt and Doc Boissiere remember Marilyn as one who got into the thick of it, helped when needed and led her team to provide crucial services to the people of north Florida. She was a patient advocate before it was fashionable and cared for her staff as a member of her family. Her legacy is the pioneering spirit and template for leadership she left for future generations of EMS professionals.

Before the time of Employee Assistance Programs or Critical Incident Stress Debriefings, she would pull crews aside and gently check in with them over time to make sure they were okay. She was a positive person who always approached things from a positive aspect. Bobby Bailey remembers: “She would pull crew members aside out of the rotation and just gave them time or tried to help them through [a rough call]. She had a great sense of humor...She had this great culture of positivity, you could not help but feel positive around her because she was such an outgoing person and she always saw the positive side of things and I think that helped a bunch of us stay grounded as we worked through the daily grind of EMS.”

Doc Boissiere remembers: “She was conscientious in monitoring the emotional health of her staff, taking individual, almost motherly interest in our lives without prying or judging, in interactions out of the public eye, we called her “Mom.” She seemed happy with that kind of camaraderie.”

It seems that Marilyn was always working on gaining the respect of her staff, her superiors,



Still on the Scene

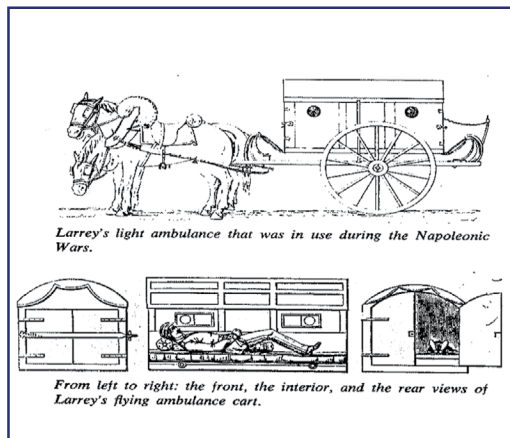
by Merry J. McSwain, (ret.) ACNP

Pre-hospital care is limited to the ability to care for and transport patients to definitive care treatment. If one overlooks the evolution of pre-hospital vehicles, the history of EMS is incomplete. Where would we be without ambulance vehicles? **Still on the scene...**

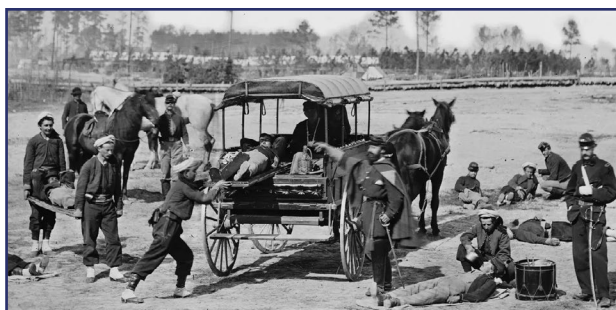
Many types of vehicles have been utilized in transporting the sick and injured, including litters, hand carts, wagons, horse-drawn carts, flying (air) balloons, fixed wing aircrafts, cars, buses, bicycles, motorcycles, motor scooters, all terrain vehicles, boats, steam ships, golf carts (electrical vehicles), sleds, toboggans, snowmobiles, helicopters, and military tanks, just to name a few.

1497: The word ambulance (emergency transport) originated during the Spanish forces siege of Málaga by Ferdinand and Isabella of Spain. *Ambulancia* were the first recorded field hospitals and originally meant a moving hospital following an army.

1784: Injured soldiers were moved to a medical facility by hot-air balloon.



1797: Dr. Dominique Jean Larrey, a French surgeon in Napoleon Bonapartes' Grande Armée, created the modern ambulance during the Napoleonic Wars. As the Director of Bonapartes' Ambulance Service, he was authorized to construct a light-weight carriage or wagon to quickly move patients to field hospitals and bring surgeons to the battlefields thereby, providing aid during rapid transport. He named these carriages the "Flying Ambulances." A corps was assigned to accompany them on the field of battle.



1861: President Lincoln approved an order creating the U.S. Sanitary Commission which managed the ambulance service. The luxurious mail boat, Jacob Strader, was used to transport the wounded to Fort Donelson at the Tennessee-Kentucky border.

1862: Prior to 1862, the Quartermaster Corps transported wounded soldiers as part of their duties of transporting supplies. Dr. Jonathan Letterman, known as the “Father of Modern Battlefield Medicine”, was a medical director in the Union Army. He, among others, introduced Flying Ambulances as a means of transporting wounded soldiers, thus reinstating Larrey’s concept. In this, Dr. Letterman started the very first Ambulance Corps, training men to act as stretcher bearers, picking up the wounded, and operating the wagons that transported them to field dressing stations. They ensured every regiment possessed at least one ambulance cart with a 2-wheeled design that accommodated 2 – 3 patients. The Battle of Antietam proved the success of the Ambulance Corps. With the use of 300 ambulances, medical personnel removed 23,000 casualties from the field within 24 hours.

While developing the Ambulance Corps, Dr. Letterman devised a system of sorting through the wounded, prioritizing the treatment and transport by the severity of their wounds, thereby instituting the concept of triage.

1865: First civilian ambulance service began, based out of Commercial (General) Hospital in Cincinnati, Ohio. The ambulance was likely to have been a single horse-drawn carriage with a movable floor that could be extended for setting the patient down.

1867: The ambulance carts Dr. Letterman designed in 1865 proved to be too light-weight and were phased out in favor of the Rucker Ambulance (adopted as the regulation ambulance), designed by Major General Daniel H. Rucker, of the US Army Quartermaster Department. These units were a 4-wheel design, with more elastic stretchers, extra springs in the floor, and improved ventilation.

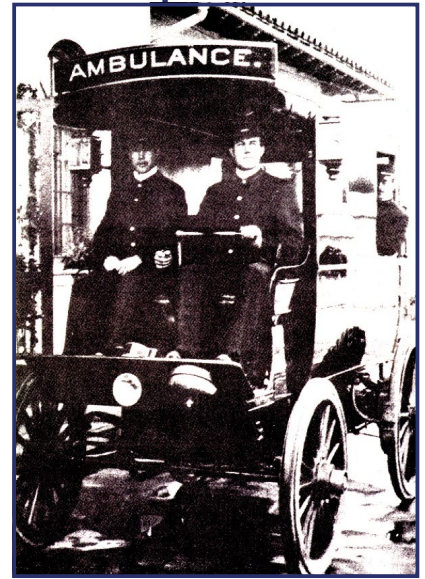
1869: In New York City, Dr. Edward Dalton, a former surgeon in the Union Army, was charged with creating a hospital in lower New York; he started an ambulance service to bring the patients to the hospital faster and in more comfort with on-call providers typically responding within 30 seconds. Dr. Dalton believed the faster the service, the better the outcome for the patient.

1890: The Board of Directors of Charity Hospital in New Orleans, Louisiana reported the status of their system citing ownership of 3 ambulances, 7 horses and harnesses, and hospital wagons weighing 1600 pounds requiring a double-team to pull them.

1896: Grady Hospital in Atlanta, Georgia started the first citywide ambulance service. Grady's Ambulance Service remains the oldest continuously operating hospital-based ambulance service in the U.S.

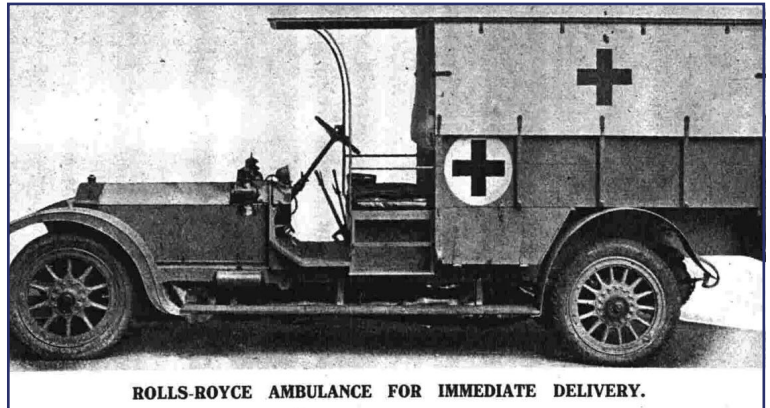
1901: President McKinley was shot at the Buffalo Exhibition and transported in this automobile ambulance.

1905: The first gasoline-powered ambulance was the Palliser Ambulance named for Capt. John Palliser of the Canadian Militia. This heavy tractor unit was a three-wheeled vehicle (one at the front and two in the rear) and designed for use on the battlefield, under enemy fire. With the power of gasoline engines managing the load, ambulances got much larger, carried more equipment, and hauled more personnel.



1909: The first mass production of automobile-based ambulances in the U.S., named Model 774 Automobile Ambulance. It was made by James Cunningham, Son & Co. of Rochester, New York, a manufacturer of carriages and hearses. The body featured electric lights, a suspended cot, two seats for attendants, and a side-mounted gong.

1915: During World War I, the first widespread battlefield motorized ambulances replaced the horse-drawn vehicle. The change was such a success horse-drawn variants were quickly phased out.



ROLLS-ROYCE AMBULANCE FOR IMMEDIATE DELIVERY.

1918: The Wright Brothers' development of the fixed-wing airplane opened the door for significant progress in air-medical transport and led to a Curtiss JN-4 biplane being converted into an air ambulance.

1937: First ambulance with air conditioning in the U.S., built by Hess & Eisenhardt of Cincinnati, specialized in building ambulances.

1947: Civilian air ambulances were introduced, and the first U.S.-based, Federal Aviation Administration-certified air ambulance was established in Los Angeles.

1950: The U.S. Air Force used H-13 Sioux helicopters for rapid evacuation of patients to the Mobile Army Surgical Hospitals (MASH) units during the Korean War (made famous by the film and television series, *M*A*S*H*).

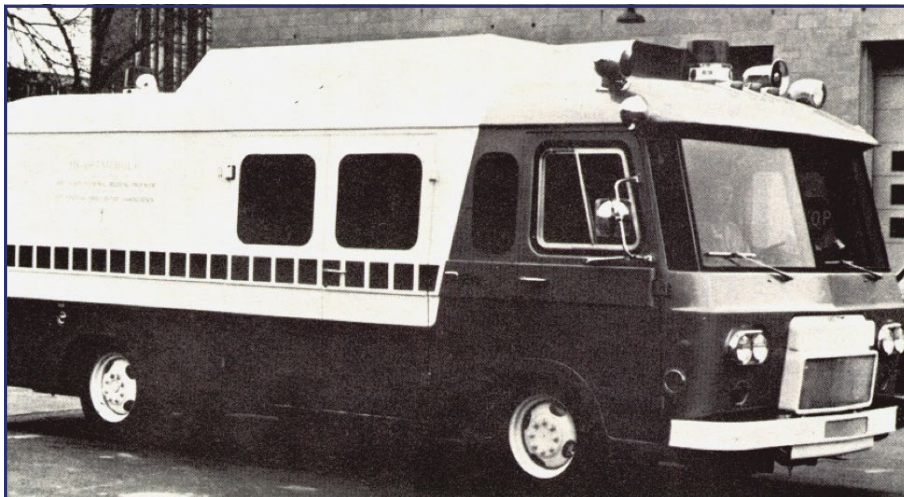


1962: The U.S. Army initiated helicopter evacuation of combat wounded on the battleground with the 57th Medical Detachment (HelAmb). Because of the dust kicked up during operations in the dry country, they adopted the call sign DUSTOFF. In a DUSTOFF operation, the patient is flown directly to the medical treatment facility best situated for the care required.

October 12, 1962, an Alouette III went on its first mission. Flight for Life was the first civilian helicopter service, founded by Henry Cleveland MD, among others, at St. Anthony Summit Medical Center.



1965: Hearse, station wagon, or limousine style ambulances were deemed inadequate with the publication of the White Paper "Accidental Death and Disability." Among other things, the paper called for an increase in the size of the patient care compartment making more room for the patient, equipment, and most importantly, an attendant.



1967: The first mobile intensive care unit developed in the U.S. was developed by James Warren, MD in Columbus, Ohio.

1970: Ambulance design underwent major changes. High-topped, car-based vehicles, were developed, but car chassis proved unable to accept the weight and other demands of the new standards; van chassis would have to be used instead. The early van-based ambulances looked very similar to their civilian counterparts, having been given a limited amount of emergency vehicle equipment such as audible and visual warnings, and the internal fittings for carrying medical equipment, most notably a stretcher.



1973: The EMS Systems Act of 1973 was passed into law providing further guidance on the requirements for the design and equipment of ambulances. Federal specifications KKK-A-1832 (K specs) outlined three acceptable chassis types, how they should be equipped, marked colors and types of marking which are required or permitted.



The evolution of ambulance design has come a long way from the days of horse-carts and hot-air balloons. In our next issue of The EMS Historian, we'll take a look at more modern ambulance designs, including new safety features and equipment which makes it easier for the people working in them to provide care.

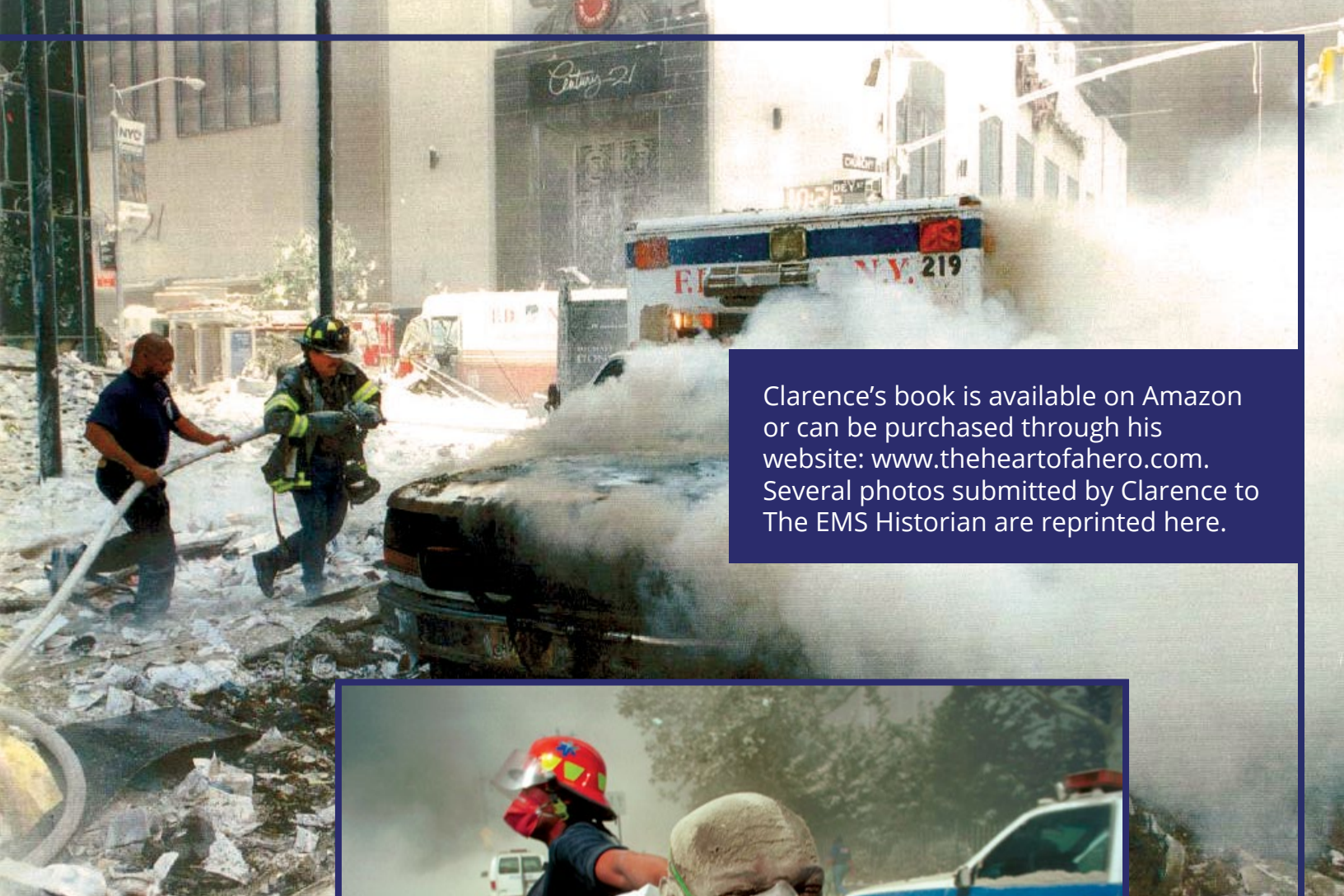
Merry J. McSwain started her medical career in the 80's as an EMT-Ambulance working for the New Orleans Health Department, the 911 service in Orleans Parish. She continued her medical career as a bedside nurse and earned her Masters degree in Acute Care Nurse Practitioner. Currently she serves on four non-profit EMS foundations, including one she started in her father's name, the Norman E. McSwain, Jr., M.D. Trauma Education Project.

Clarence Singleton was a New York City firefighter who experienced the trauma of 9-11 firsthand. He wrote about his experiences in a book entitled *The Heart of a Hero*. In his book, he also describes his hardscrabble upbringing, his time in the Vietnam War (where he was awarded the Purple Heart), and the PTSD he suffered after nearly dying at the site of the World Trade Center collapse on that fateful day.

To learn more about the role of EMS in the September 11th response you can visit *Responding Heroes: Remembering September 11th* at the Atlanta History Center or online at emsmuseum.org/virtual_museum until December 31, 2021.

Clarence Singleton is a motivational speaker, author, a retired United States Marine, a veteran of the Vietnam War, and a Purple Heart recipient. Singleton is also a decorated former New York City Firefighter whose unit responded to the first attack on the World Trade Center in 1993, where he was credited with saving numerous lives. After retiring from the FDNY in 2000, Singleton volunteered for duty on September 11, 2001 at the World Trade Center, where he was seriously injured and was featured in *One Nation: America Remembers September 11, 2001* by the authors of *Life Magazine*.





Clarence's book is available on Amazon or can be purchased through his website: www.theheartofahero.com. Several photos submitted by Clarence to The EMS Historian are reprinted here.



From the Files of The National EMS Museum

The Lungmotor was developed by Life Saving Devise Company and was the main competitor to the Pulmonator in the US - the Lungmotor was hand operated and consisted of two unconnected cylinders and operated like a bicycle pump. Drawing up the pistons pulled room air or oxygen into one cylinder and drew air out of the lungs into the other. Pushing down on the piston delivered fresh gas to the lungs and emptied the second cylinder into the atmosphere.

Lungmotor



Currently NEMSM only has this fantastic picture of a Lungmotor - if you have one hiding (or any marketing materials) please consider donating the objects to NEMSM, as the early history of life saving is a crucial chapter in our story!



LifePak 33

In 1968 Physio-Control released it's "90-day wonder" the LifePak 33 portable defibrillator. This defibrillator would launch a series of models that would change the way pre-hospital care was delivered forever. By 1967, Physio-Control, founded by Seattle surgeon Dr. Karl Edmark, had a decade of work into designing and developing defibrillation units to be used in hospitals to respond to sudden cardiac events in the hospital wards. Dr. Edmark worked to develop a unit that would detect the patient's heartbeat as well as deliver a life stimulating DC charge

to jump start the heart in the event of an emergency. In 1961 the first successful DC defibrillation took place with Dr. Edmarks "Breadboard" pulse defibrillator. This event charted a course for Dr. Edmark and his company into the future.

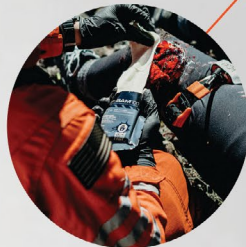
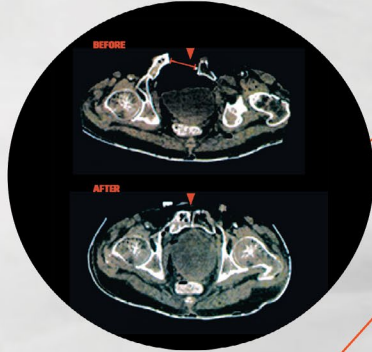
By 1968, Physio-Control was one of the leading innovators in the field of defibrillator development. The LifePak 33 was the first of a long line of LifePak defibrillators and was the first truly portable and stand-alone defibrillator and integrated monitor. What is remarkable about the LifePak 33 is that it was conceived, designed, developed and tested in three months, making it one of the fastest produced medical devise on the market at the time.

LifePak 33 was named as a nod to the 33-pound target weight for the unit, with other companies quickly closing the ranks on portable defibrillators "it was all about marketing" when the product launched, and the 33-pound unit became a standard issue in many services across the country.

The National EMS Museum is honored to have the first LifePak 33 as part of the permanent artifact collection and regularly put the very special artifact on tour throughout the year.

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We hope you've enjoyed the newly "resuscitated" Journal of The National EMS Museum – The EMS Historian! We want this to be the first of many issues to come. We're still in the process of determining how often we'll print issues. A big part of that decision will depend on how much content we receive from you – our readers. Please contact us at the museum if you would like to submit an article or photos – or both – for consideration for publication in our Journal. We want this to be a collaboration between those of us who are affiliated with the museum staff and our EMS brothers and sisters. Content can range from purely historical and research in nature to more popular items dealing with EMS history (our story about Jim Page for example). If you want our help in fine-tuning your idea, don't hesitate to contact us. We're happy to discuss it with you. We will prepare author standards and guidance in the near future to help with the specifics of submission.



We can be reached via email at director@emsmuseum.org

We look forward to hearing from you! Let's keep our shared history alive!

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The EMS Historian brings the history and innovation of pre-hospital care to life each year as a souvenir magazine published for NEMSM members and supporters.

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