Part Two

Domestic Duties
&
Contingency Operations

Chapter Three

Quiet Years, 1973–1980

"MAST has saved several lives in Texas and has rendered invaluable aid in a large number of cases. I hope that the project will be maintained as a regular program and indeed expanded to every extent possible."

Sen. John Tower[1]

Return to Garrison

Societal Change

With the final withdrawal of Army units from Vietnam in 1973, the MEDEVAC force was either returned to the United States or dispersed to Korea and Europe. Personnel rosters showed that there were 359 Medical Service Corps (MSC) aviators, most of whom with vast combat experience. For them, the remainder of the decade brought few changes to organization, some updating of doctrine, a steady but not overly burdensome operations tempo, and the addition of a new mission, one focused on domestic needs.

The garrison Army to which they returned was very different from the one that had dispatched them to war a decade earlier. Like the nation in general, it had dramatically changed. Vietnam took a toll on American society. The growing antipathy to the war that developed in the late 1960s and early 1970s was in many cases transferred to the soldiers. In numerous documented cases, young soldiers were scorned when they returned home. "Baby killer" was an epithet shouted at many, and soldiers were not welcome on most college campuses. Racial tension was common on the bases because of the social revolution of the 1960s. Many soldiers returned from the war with drug addictions and behavioral and psychological issues. The Army returned home rife with low morale, poor discipline, and reduced military effectiveness. Career officers and noncommissioned officers (NCOs) were severely challenged by these difficult problems.[2]

One young MEDEVAC officer witnessed these developments. 1st Lt. Frank Novier entered the Army in May 1971. He was commissioned into the MSC and posted to a ground job with the 82d Airborne Division at Fort Bragg, North Carolina. A few months later, he was reassigned back to the Army Medical Department Center & School at Fort Sam Houston, Texas, in casual status awaiting a slot in flight training. He received orders to join the 421st Med Co (AA) in Germany after graduating in November 1974. Arriving in early 1975, he did his share of staff duty officer tours while getting mission-qualified. One evening, he handled a major discipline problem when some soldiers were throwing wall lockers out of a barracks. He also noticed that there were places on the post where it was unsafe to walk at night. At the time, he recalled, "Germany was not a real fun place."[3]

He also noticed that most of the pilots were excellent flyers, but highly individualized in their procedures. Many were downright sloppy in their dress, and he did not enjoy flying with them. However, they did teach him a passion for the mission. What was missing was unit pride and cohesion.

Novier said, "They were a reflection of the Army of the 1970s. It was not a very strong Army; it was beaten down from Vietnam. These guys were individual heroes, you didn't have this cohesive feeling of being a unit." He also noticed that the unit did not do any field training. Occasionally, a crew or two would fly out to be near a field exercise. They would land on a hill and monitor their radio for calls. Yet, he sensed that it was all done half-heartedly.[4]

With the end of the military draft on 30 June 1973, the Army had to compete for young men and women in the labor market instead of being infused each year with a new cohort of young soldiers as it had been since World War II. Many wondered if an organization as hidebound as the Army could openly compete or if the nation was prepared to pay a competitive price for young men and women who had other choices. A Presidential Commission was formed in 1969 to study the problem and make recommendations. One commission member, the renowned economist Milton Friedman, argued that it was the only way that a democracy with an open market economy could maintain a standing military. He made his case in a testy exchange with Gen. William Westmoreland, Army Chief of Staff, and former theater commander in Vietnam.

Westmoreland told the commission that he did not want to command an army of mercenaries. Friedman asked, "General, would you rather command an army of slaves?" Westmoreland responded, "I don't like to hear our draftee soldiers referred to as slaves."

Friedman retorted, "I don't like to hear our patriotic volunteers referred to as mercenaries. If they are mercenaries, then I, sir, am a mercenary professor, and you, sir, are a mercenary general; we are served by mercenary physicians, we use a mercenary lawyer, and we get our meat from a mercenary butcher." Friedman's argument carried the day, the military draft was eliminated, and the Army became all volunteer.[5]

To attract qualified young men and now women in the numbers needed to sustain the force structure, the Army initiated a recruiting program. The Army adopted

the slogan "Be all that you can be" to attract new troops.[6]

Recruited into the Reserve Officers' Training Corps (ROTC) earlier, Bill Thresher raised his right hand and recited the oath of commission on 21 December 1973, as he became a 2d Lt. in the MSC. Thresher was a recent graduate of Henderson State University, Arkadelphia, Arkansas. He initially intended to take his commission in the armor branch, but he changed his mind when he learned that his chances of flying were better in the MSC. When he reported for active duty, he was ordered to Fort Bragg for duty with the 5th Combat Support Hospital as a medical logistics officer. It lasted a little more than a year as he awaited orders to flight school. However, it was an eventful tour. Thresher was impressed with the sense of mission that permeated all of the units assigned to the XVIII Airborne Corps.

He remembered: "Everything there was about urgency. You have got to be ready to go, constantly under the gun for emergency deployment readiness exercises." He also saw the key part that the MSC officers played as the facilitators for the clinicians. It gave him a keen appreciation for the role they played serving both the profession of medicine and the profession of arms. It also gave him a strong fundamental knowledge of Army medicine that benefited him later. After 14 months at Fort Bragg, he was assigned to Fort Rucker, Alabama, for his flight training.[7]

Operations

Garrison Duty

After graduating from flight school in February 1976, 2d Lt. Thresher was posted back to Fort Bragg to serve with the 57th Med Det (RA), led by a tough commander, Major Bob Rose. Rose was a Vietnam veteran and a rigorous leader. Thresher found that same sense of urgency he had experienced on his earlier assignment and saw that it made perfect sense for a MEDEVAC unit. Another Vietnam veteran, Capt. Bill Kruse, who was the consummate pilot and held nearly every qualification possible, also mentored him. Thresher wanted to fly a lot, and Kruse taught him all manner of tactics and techniques in the cockpit that were hard learned in Vietnam. It was invaluable mentoring and the key way that flight experience was passed to new pilots. No fully standardized flight procedures existed then, and published flight manuals offered only the barest explanations of tactics and techniques.

Thresher's very first operational mission was to recover a soldier from the Sicily drop zone who was killed when both of his parachutes failed. Loading that soldier and another with a broken leg sustained in the jump onto his aircraft delivered to the young lieutenant the reality of his chosen career field. Thresher learned the basics quickly, and with barely 50 hours in the UH-1, he was upgraded to aircraft commander. As he steadily logged missions and hours, he grew to enjoy the mission and flying, and developed a deep appreciation for what it was giving him.

He said:

> It was a great grooming ground for responsibility because when you are the pilot in command of your aircraft with a kid in the back who has deviated his spine on Holland Drop Zone … and your copilot has got less time than you do, you learn responsibility pretty quick. …and this soldier in the back is depending on you. His mother and father are depending on you; his kids are depending on you. It's an obligation and you can't let him down. …The reason he is alive today, theoretically, is that you were able to get there within seven, eight minutes and get him to a hospital within twelve minutes so somebody then could do their job. … The medic on the ground who treats the guy when he is first hurt and the doctor who saves his life at the hospital—they are both critical but you are the glue between the two of them. That's what the 57th meant to me.[8]

In general, the MEDEVAC units did not suffer the same type of discipline problems rife throughout the Army then. In part, this resulted from the fact that all medical personnel were volunteer specialists of some sort who had to score higher on their entrance exams and then complete difficult training to get their jobs. In December 1977, now Capt. Bill Thresher was abruptly removed from flying duties and assigned to command the 429th Med Co, a ground ambulance unit. He inherited a poorly performing unit with a number of discipline problems that required him to issue several nonjudicial punishments or even discharges. Initially, he feared that his strong actions would alienate his other troops. However, he found that by taking firm actions against the recalcitrant ones, the good troops rallied to him. He instilled in them the sense of urgency he had learned in his previous units and turned the 429th into a very sharp unit.[9]

But Thresher's experiences were somewhat the exception. The Army also had to take internal steps to change the way it fundamentally did business. It had to get soldiers back to the basics of soldiering by hiring civilians to perform the mundane chores such as KP, grass cutting, and guard duty.

Training had to be refocused to provide more exciting and meaningful endeavors. It also had to be redesigned to encourage the development of initiative, self-reliance, moral and physical courage, and mutual confidence. Soldiers had to be encouraged to take advantage of educational opportunities—both on and off base—and develop a logical learning progression that would last throughout their career. The Army reenergized its programs to develop professional leadership for both officers and NCOs. It had to establish an NCO educational system for the development of sergeants at all levels. It also had to realign the officer assignment system to allow for stabilized tours for commanders, something that had been badly broken by the personnel turbulence caused by the rapid buildup and just as rapid inactivation of units for the Vietnam War.

Perhaps most important, it had to improve the quality of life for the soldiers. The barracks needed to be upgraded to allow for privacy. Better housing had to be built for Army families. Facilities on base such as the post exchanges, personnel offices, and gymnasiums needed to be improved. Health care had to be expanded, with longer clinic duty hours more convenient for the troops. Soldier pay needed to be improved to make it competitive with what an enlistee could earn on the outside. All of these items required increased funding,

and Congress supported them with increased appropriations starting in fiscal year 1973.[10]

In the mid-1970s, Lt. Col. Pat Brady was given command of the 326th Medical Battalion, 101st Airborne Division, at Fort Campbell, Kentucky. He had not served directly with troops for a while, and was shocked at what he found. Much of his time was taken up with disciplinary problems and drug use.

Brady remembered the following: "There was a permissiveness coming out of society that overflowed into the Army. I think probably the best way to describe it was the slogan of the time… 'Today's Army wants to join you.'" He believed that many of the troops that were entering the Army then were inferior to the soldiers with whom he had served in Vietnam and other earlier assignments. He further believed that too many of recruits brought with them "disciplinary problems that detracted from training."[11]

Maj. Doug Moore watched these developments from his position as the deputy commander for administration at the U.S. Army Medical Department Activity at Hunter Army Airfield, Georgia. In the summer of 1973, as a new Lt. Col., he reported to Fort Leavenworth, Kansas, to attend the Army Command and General Staff College. While there as a "token medic," he wrote a paper about the future uses of air ambulance units. His unpublished paper, titled "Air Ambulance Support for the Combat Division," was a forward-looking analysis of necessary air ambulance unit structure based on projected threats and missions. He proposed increasing the number of air ambulances necessary directly to support a division from six to 10. He also raised questions about the proper way to command and control them, provide for aircraft maintenance, and deal with the increasing sophistication of communications, navigation, and airspace control. He also suggested that MEDEVAC doctrine needed to be updated with these changes—all prescient thoughts as future events would show.[12]

Recruitment

Initial results for the new recruitment program were disappointing. During the fiscal year ending June 1972, only 68.5% of the needed quota of new enlistees was met. However, by Christmas, recruiting began to bottom out. By the end of fiscal year 1973, the enlistment rates exceeded 100%. Two reasons were cited for the turnaround: (1) The Army was smaller than it had been since well before the Vietnam buildup; and (2) Congress also helped by providing recruiting bonuses for 32 critical skills and incentive bonuses for recruiters.[13]

At the same time, a reduction-in-force for officers was enforced. The buildup of forces in Vietnam had created a huge bulge in the officer corps in year groups 1967 to 1970. Before Vietnam, officer strength had comprised about 11.6% of the total Army manpower. By 1972, it swelled to 14.9%. For long-term stability, it had to be reduced to 13.7%. In 1972 and 1973, reduction-in-force boards were held, and 4, 900 officers were released.[14]

Another paradigm shift was the active recruitment of women. Since 1948, the Army had limited the number of women to no more than 2% of total end strength.

They were restricted almost exclusively to the clerical and supply fields. Married women could not join, and women who became pregnant were discharged.

These restrictions were slowly lifted. In 1973, 10,900 women joined the Army. Capt. Jerry Foust, serving as an instructor at the Academy of Health Sciences at Fort Sam Houston, saw some of the first to come into the medical branches. He was impressed. "The first women who went through the school did just fine," he said, "They were smart." The numbers steadily increased, and by 1978, there were more than 53,000 women in the service. Female recruits were a key factor in the Army achieving its recruitment needs.[15]

As numbers increased, restrictions on assignments for women were relaxed, and they spread into almost all elements of the Army. In 1976, women were allowed into the U.S. Military Academy at West Point, and 119 entered the class of 1980. In the Reserve Components, female membership also steadily rose. By 1982, more than 38,000 women were serving in the U.S. Army Reserve (USAR). Women were also strongly encouraged to enter the ROTC program, and their numbers exceeded 5,000 active participants by the end of the decade. The integration of women into the Army was so successful and complete that the Women's Army Corps, in existence since 1942, was disestablished in 1978, and women were assigned to branches just like the men.[16]

The introduction of women into what had traditionally been an all-male environment led to a rapid increase in incidents of sexual harassment and fraternization. The Army soon realized that it needed to establish new rules and procedures to regulate soldier behavior. Firm guidelines were established that defined improper fraternization, especially between superiors and subordinates. The problems were never completely solved, but the trends turned positive as women began to firmly establish themselves in their chosen fields as professionals fully capable of doing their jobs and fully deserving of the respect due to them as professionals. The Army was truly no longer "your father's Army."[17]

Moore witnessed those changes. After staff college he attended airborne qualification training at Fort Benning, Georgia, and then reported to Fort Bragg, to command the 307th Medical Battalion, 82d Airborne Division. It was an intense two-year assignment because the division always had to have a brigade-sized force ready to deploy, and that included a company from his battalion. At the end of that assignment, he was directed to attend the Army War College at Carlisle Barracks, Pennsylvania, and was one of only six MSC officers selected.

He mixed with a broad swath of Army and other service officers, plus rising leaders from other governmental agencies and even other nations. It was a time of learning as they collectively struggled with the issues roiling the Army and nation. They discussed the efforts to rebuild and restructure the military. This experience was a good foundation to his next assignment with the Inspector General of the Army.[18]

In 1977, the MSC of the Army made a concerted effort to increase the number of females serving in that branch. At the MSC's request, the Recruiting Command conducted surveys among women already serving. Most indicated satisfaction with the progress of their careers, although many complained of sexual bias. More

than two-thirds preferred the MSC to other branches. The MSC made some positive changes to its recruiting effort, and the results were very positive. From a low of just 7 female officers in 1968, the MSC had 544 serving by 1987, most joining after 1977. Some joined to fly as MEDEVAC pilots.[19]

In February 1979, in response to the increased recruiting efforts to bring more women into the MSC, 1st Lt. Karen Anderson graduated from flight training at Fort Rucker and became the first female MEDEVAC pilot. She joined the 247th Med Det (RA) at Fort Meade, Maryland, as a medical evacuation pilot.[20]

Organization

Units

In September 1973, the active Army MEDEVAC units were located at the following places:

United States	
498th Med Co (AA)	Fort Benning, Georgia
507th Med Co (AA)	Fort Sam Houston, Texas
54th Med Det (RA)	Fort Lewis, Washington
57th Med Det (RA)	Fort Bragg, North Carolina (replaced the 151st Med Det that inactivated)
68th Med Det (RA)	Schofield Barracks, Hawaii
237th Med Det (RA)	Fort Ord, California (replaced the 32d Med Det that inactivated)
247th Med Det (RA)	Fort Meade, Maryland
283d Med Det (RA)	Fort Bliss, Texas
571st Med Det (RA)	Fort Carson, Colorado
AA Platoon, 326th Med Battalion, 101st ABN Div	Fort Campbell, Kentucky

Germany	
421st Med Co (AA)	Stuttgart – with platoons also at Schweinfurt and Darmstadt
15th Med Det (RA)	Grafenwöhr
63d Med Det (RA)	Landstuhl
159th Med Det (RA)	Bremerhaven
236th Med Det (RA)	Augsburg

Korea	
377th Med Co (AA)	Yongsan, Korea[21]

Throughout the decade, units would be reassigned and moved. In 1975, two more units, the 36th Med Det (RA) at Fort Polk, Louisiana, and the 431st Med Det (RA) at Fort Knox, Kentucky, were activated. In October 1979, the 283d Med Det (RA) moved from Fort Bliss to Fort Wainwright, Alaska. The next year, the 247th Med Det (RA) was moved from Fort Meade to Fort Irwin, California.[22]

Personnel Movements

Like the units, the personnel of MEDEVAC were also periodically reassigned as they progressed steadily through their careers. After graduating from the Army Command and General Staff College in June 1973, Maj. Jim Truscott went to Headquarters, European Command, located near Stuttgart, Germany, as an operations officer, an assignment that gave him a unique opportunity as a relatively junior officer to participate in joint and combined operations. A year later, he was reassigned back to the 63d Med Det (RA), now at Landstuhl, the same unit that he had commanded six years prior, but now equipped with six UH-1H helicopters and a full complement of pilots, medics, and support personnel. Their mission was to provide evacuation of sick and injured essentially from locations along the Rhine River to hospital locations. They were under the operational control of the 421st Med Co (AA). The unit received its logistical support from aviation maintenance and logistical units in the area. Truscott rapidly developed the skills necessary to work with both the medical and aviation communities to perform his mission.[23]

One hundred and eighty miles to the southeast, 1st Lt. Art Hapner and the 236th Med Det (RA) had settled into their facilities just northwest of Augsburg. Their six UH-1Hs had all flown in Vietnam and were completely refurbished. The pilots were a mixed lot, with one-half also Vietnam veterans. Many were not fully trained to fly in instrument conditions, and the unit had to set up an internal program to do so. The unit primarily supported field units, but also had occasional taskings to support the local communities. The pilots occasionally flew to Garmisch to pick up patients. Pilots in the unit became very adept at instrument and international flying. Hapner served with the 236th until 1976, when he was sent back to Fort Sam Houston for the MSC advanced course.[24]

Reserve Component Units in the Total Force

Another fundamental change was afoot within the Army. The active component was always supported by a large Reserve Component that had two subcomponents: (1) the USAR, and (2) the 54 Army National Guards (ARNGs) of the individual states, Washington, DC, Puerto Rico, Guam, and the Virgin Islands. In times of war, the units from both subcomponents were activated for federal service and fought alongside their active duty fellow soldiers. However, during the Vietnam War, for political reasons, there were only minor activations of Reserve Component forces. As the nation withdrew from the conflict, Secretary of

Defense Melvin Laird announced in 1970 a "Total Force" concept that would reintegrate the active and Reserve Components so that in future wars, both would be relied on to serve the nation. In 1973, this concept became official policy, and more force structure was moved into the two Reserve Components.

Traditionally, the ARNG units had been composed primarily of combat type units while the USAR consisted mostly of combat support and combat service support formations, especially medical units. But the break was not clean. Congressional pressure and constant intervention resulted in each component having units of all types. During the Vietnam War, Secretary of Defense Robert McNamara tried to combine the ARNG and USAR. He was decisively blocked by congressional action and while the traditional split was maintained in theory, in reality, both components received authorizations for combat, combat support, and combat service support units protected by yearly appropriations laws that were subject to constant congressional involvement.[25]

To make these forces more capable of rapidly activating and operating with the active duty Army units, they received newer equipment and authorizations for more full-time personnel to ensure continuity of training and administrative matters. Additionally, the current Army Chief of Staff Gen. Creighton Abrams believed that the nation had made a terrible mistake in the Vietnam War by not calling on the ARNG and USAR to participate in the conflict. He saw the early and committed use of the Reserve Components as vitally necessary for sustaining the national will in time of war. Thus, he directed the Army to take specific steps to structure its combat forces so that it could not be committed to anything more than short duration contingency operations without calling on its Reserve Components. By the end of 1973, two-thirds of the combat support and combat service support units needed to sustain the Army in the field were in the Reserve Components. Although Reserve Component manning initially dipped during the 1970s, the units received new equipment and grew in later years.[26]

This restructuring affected the MEDEVAC force. More units were authorized for both components. The USAR activated new detachments. In most cases, the various states converted already existing ARNG units into MEDEVAC companies and detachments. In the mid 1970s, the following units were active in reserve status in the two components:

Army Reserve (USAR)

145th Med Det (RA)	Marietta, Georgia
273d Med Det (RA)	Tomball, Texas
321st Med Det (RA)	Salt Lake City, Utah
343d Med Det (RA)	Hamilton AFB, California
347th Med Det (RA)	Miami, Florida
348th Med Det (RA)	Orlando, Florida
412th Med Det (RA)	Louisville, Kentucky
872d Med Det (RA)	Lafayette, Louisiana[27]

Army National Guard (ARNG)	
24th Med Co (AA)	Nebraska
112th Med Co (AA)	Maine
123d Med Co (AA)	Mississippi
126th Med Co (AA)	California
1187th Med Co (AA)	Iowa
142d Med Det (RA)	North Dakota
146th Med Det (RA)	West Virginia
397th Med Det (RA)	New Hampshire
400th Med Det (RA)	Washington, DC
441st Med Det (RA)	Kentucky
470th Med Det (RA)	Kentucky
670th Med Det (RA)	Tennessee
717th Med Det (RA)	New Mexico
812th Med Det (RA)	Louisiana
813th Med Det (RA)	Louisiana
841st Med Det (RA)	Washington
867th Med Det (RA)	Missouri
868th Med Det (RA)	Missouri
920th Med Det (RA)	Kansas
986th Med Det (RA)	Virginia
1022d Med Det (RA)	Wyoming
1059th Med Det (RA)	Massachusetts
1085th Med Det (RA)	South Dakota
1134th Med Det (RA)	Alabama
1136th Med Det (RA)	Texas
1150th Med Det (RA)	Nevada[28]

A New National Mission for MEDEVAC

Operations

Military Assistance to Safety and Traffic

Concept. As the active duty Army struggled with the difficult challenges of the post–Vietnam era, several of the stateside MEDEVAC units received taskings under a new program called Military Assistance to Safety and Traffic (MAST). Many individuals participated in its development including Spurgeon Neel, a key contributor, who throughout the 1960s constantly wrote and spoke about the use of helicopters in medical care. His efforts drew the attention of civilian medical leaders who asked for a civilian version of MEDEVAC.

In February 1969, Dr. Charles Atkinson, a physician from Florida wrote to then Col. Neel, serving as the Director of Plans, Supply, and Operations on the Office

of The Surgeon General staff. Atkinson read one of Neel's articles and was interested in possibly procuring Army MEDEVAC support for his community.

Neel replied:

> The concept of using air ambulances in the highway safety program appears to be a very valid approach to the problem of getting the patient to professional care as soon as possible….The helicopter air ambulance is solving our major evacuation problems and I believe will solve yours also.[29]

Two months later Neel wrote an article for the *Journal of the American Medical Association* in which he stated: "The experiences that the Army Medical Service has gained in the utilization of helicopter ambulances can and, I believe, must be translated into comparable civilian emergency health programs." He also pointed out that Army MEDEVAC elements at Fort Rucker and Fort Sam Houston had performed local rescues of highway accidents on an ad-hoc basis since 1966.[30]

Others within the Army also pushed the concept. Lt. Col. Robert Sears, a career aviator, proposed an "Air Medical Evacuation System" in his master's thesis while attending the School of Engineering at Arizona State University in 1968. His paper proposed a "concept of utilizing helicopters as a means to transport the seriously injured to a medical facility capable of treating the specific injuries, with complete independence from road and traffic conditions …" He specifically noted that, "The U.S. Army has pioneered the field of helicopter evacuation and has proved the effectiveness of the concept."[31]

After graduating from Arizona State University, Sears served in the office of the Assistant Vice Chief of Staff of the Army, Gen. William E. DePuy. He briefed DePuy on the program and concept. DePuy gained approval for Sears to develop the idea and initially send it out for staff coordination on feasibility. The responses were generally favorable with questions raised about financing, legal authorities, etc. The ARNG was especially supportive, seeing its units as key participants, but noting that they would have to be reequipped with newer helicopters.[32]

Concurrently, the Departments of Transportation and Health, Education, and Welfare also considered similar proposals. Operation SKY-AID, the test program run by the 24th Med Co (AA), Nebraska ARNG in 1968 and 1969, had shown the efficacy of domestic MEDEVAC and portended great promise. After the Secretary of the Army, Stanley Resor, was briefed on the Air Medical Evacuation System proposal, he sent a memorandum to Melvin Laird, Secretary of Defense, stating that he believed that the project held great promise. For several months, Laird discussed this very idea with the Secretary of Transportation. In response, Laird appointed Resor and the Army to serve as the executive agent for the Department of Defense (DOD) on the matter, making him (Resor) the decision authority for all Air Medical Evacuation System matters involving the DOD and directing him to initiate an interagency study group to determine the best course of action.[33]

Test. The interagency study group formed and worked through the fall and winter. The Department of Transportation actually chaired the study group because it had already funded several test projects under the Highway Safety Act.

In April 1970, the study group visited Fort Sam Houston to observe the 507th Med Co (AA). The group also considered Army Reserve Component units for the program and visited the 24th Med Co (AA) at Lincoln, Nebraska, to hear about its success with Operation SKY-AID. In May, they presented a development plan for a test of the now renamed MAST program. The 507th Med Co (AA) was directed to be ready by June to provide coverage over San Antonio and the adjoining 10 counties. The test began 1 July and ran until the end of the year. Each governmental department would fund its own incurred costs.[34]

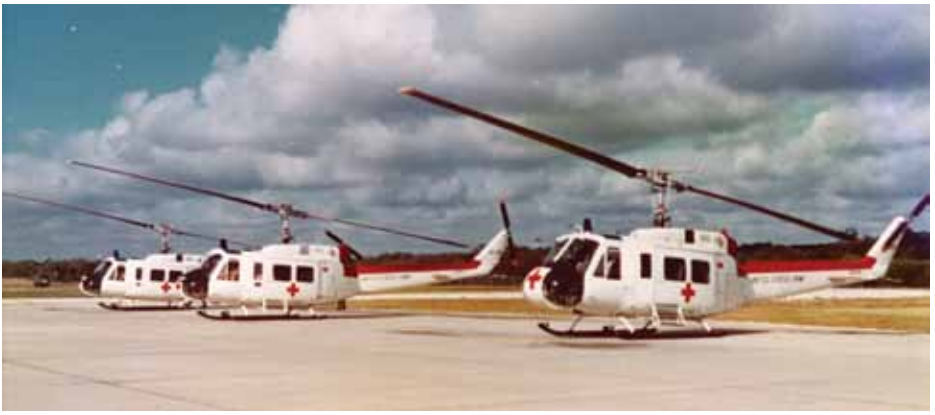
Subsequent discussions between DOD and the Department of Transportation determined that the initial test would be expanded to five locations, none of which would initially include a Guard or Reserve unit. The sites were selected based on the location of military units, a state government's expression of interest and support, a rural environment contiguous to adequate medical facilities, and different climate and terrain conditions.

First Mission. The operation at Fort Sam Houston started 15 July 1970. The first call came two days later. A young man had been run over by a tractor in Dilley, Texas, 84 miles away, sustaining a broken leg and shoulder and internal injuries. Two minutes after the call was received, a 507th MEDEVAC helicopter under the command of Capt. Sam McLamb lifted off and sped to the scene. The subsequent return flight to the hospital took 30 minutes, well short of the 90 minutes required by a ground ambulance. The value of MAST was immediately clear. Later, McLamb stated that, "It was the closest thing to a Vietnam Dustoff mission one could imagine. It included the same tension and speed … everything but the hostile fire."[35]

Additional Army operations were started on 6 August with the 78th Med Det (RA) at Fort Carson and the 54th Med Det (RA) at Fort Lewis. The U.S. Air Force also participated and opened MAST operations with detachments of the 42d Aerospace Rescue and Recovery Squadron at Luke Air Force Base, Arizona, and Mountain Home Air Force Base, Idaho, on 1 September 1970. At each location, the operation was crafted with the support of local authorities. It was clearly understood that military usage would not replace or compete with local services. The helicopters would not be used in areas where ground ambulances could better respond. Requests for helicopter assistance were based on the judgment of medical or emergency personnel at the scene who believed that the medical situation was life-threatening and required expeditious helicopter transport to a facility capable of providing the necessary care.[36]

Secretary Laird made a trip to San Antonio to observe the program. Watching a 507th helicopter deliver a patient injured in an automobile accident, he pointed out that highway accidents were the greatest killer of young men in America. He added, "When I saw the rapid evacuation and treatment of casualties in Vietnam, I thought this was one lesson we could apply at home."[37]

The test ran through December. The 507th logged 114 missions and recovered 138 patients. All other units were dramatically lower, with the Mountain Home and Luke units only logging four and five missions, respectively, because they



White UH-1s from the 507th Med Co, Fort Sam Houston, Texas, performing MAST duty in the 1970s. Source: Army Medical Department Museum.

only made crews and aircraft available for a limited period each day. The 54th at Fort Lewis flew 34 missions and carried 41 patients. Unfortunately, one of its crews suffered a fatal crash, and subsequently, the local authorities were reluctant to call them out, fearing another accident.

Limitations in communications gear were noted, and localized procedures had to be resolved. Overall, the program was successful. Some local resistance occurred because a few local ambulance companies perceived the use of the military assets as unfair competition. From a military perspective, the report noted that:

> It proved desirable from the standpoint of training and motivation for the medical unit in particular. Aeromedical evacuation procedures developed for combat situations are readily transferable to civilian applications. Public acceptance of the concept was clearly established and reflected most favorably upon the military. … MAST operations were a 'natural' for the medical company … [38]

The Interagency Group completed the test phase with several conclusions:

1. Even though the short test was based on limited operational experience, the concept appears to be sound from a military and civilian perspective.
2. The military possesses significant capability for providing assistance that does not necessarily exist within civilian companies due to financial considerations.
3. Army MEDEVAC units are particularly well suited for the missions that provide realistic training and motivation for assigned personnel.
4. Tactical aviation units can provide the support, but it diverts them from their primary mission.
5. Air Force rescue units have limited manning and equipment and require augmentation to provide 24/7 coverage.

6. The test indicates that participating units suffered no degradation of unit integrity, effectiveness, training, or ability to do their primary mission.
7. Availability of military assets does not mean that the local communities will necessarily use it.
8. Less than full-time availability of assets restricts community requests for the services.
9. The local community emergency medical system must be capable of integrating with the military unit for proper and timely notification, coordination, and communication.
10. The general public and medical and law enforcement officials show a high degree of acceptance of the program.
11. Military units supporting MAST operations do not require any additional money, personnel, or aircraft.[39]

At Fort Rucker, the home of Army Aviation, Commander Maj. Gen. William J. Maddox, Jr. watched the process very closely and was pleased with what he saw:

> I examined the interim test report… and decided that MAST was well within the capability of Army units to handle… I concluded that the MAST program was in line with the readiness objectives we have for Army units because it provides a method of giving our people an opportunity to have a life saving and operational mission as opposed to a routine training mission.[40]

Continued Operations. Even though the MAST test was concluded, the operations did not stop. As word of the program's success spread, more units wanted to participate, and discussions began about utilizing Guard and Reserve units. Many received newer equipment, and their close relationships with their communities ensured early acceptance of the new capability. The governors of Nebraska and Idaho asked to participate. The Governor of Arizona was especially interested. He was aware of Sears' work at Arizona State University and requested that the 997th Medical Company (AA) of the Arizona ARNG be included in the program. However, ARNG participation needed legal determination before it could occur.

Enabling Legislation. Political support for the program began to develop. Congressmen J.J. Pickle and Abraham Kazan of Texas both submitted statements of support for the program into the *Congressional Record*. Senator John Tower, also from Texas, wrote a strong letter to the Secretary of Defense in which he stated, "MAST has saved several lives in Texas and has rendered invaluable aid in a large number of cases. I hope that the project will be maintained as a regular program and indeed expanded to every extent possible." Numerous city mayors from across the nation, like Franklin Keller of Lacoste, Texas, copied his efforts. Keller wrote, "Please do all you can to have the lifesaving service of MAST continued and expanded throughout our area. I feel this is a very worthwhile service and should by all means be continued."[41]

In 1971, President Nixon called for increased medical support for rural areas

as national policy. Political support continued to grow for MAST as congressional and executive branch offices received letters of endorsement and city council resolutions of support. The next year Congress passed and the President signed Public Law 93-155, authorizing (but not requiring) the use of DOD helicopter resources in a continuing medical emergency transport role in the civilian community. The law also specified some limitations:

1. Assistance could only be provided in areas where military units able to provide assistance were regularly assigned, and military units could not be transferred from one area to another for providing such assistance.
2. Assistance could be provided only to the extent that it did not interfere with the performance of the military mission.
3. The provision of assistance would not cause any increase in funds required for the operation of the DOD.[42]

In addition to these limitations, the Secretary of Defense set several more restrictive policies for the program:

1. Military units would not compete for emergency medical evacuation missions in areas where civilian operators could provide comparable support.
2. Military support would be accomplished only as a by-product of and within the Military Department's annual training program and without adverse impact on the primary military mission. MAST sites would be established adjacent to installations only where air ambulance or rescue units were regularly assigned and aeromedical personnel and equipment were available.
3. MAST operations could be discontinued with little or no advance notice because of DOD priorities.[43]

By January 1974, the five original MAST designated units had flown 2,456 missions and carried 2,773 patients.[44]

Within the next several months, several more units received MAST taskings. The 57th Med Det (RA) at Fort Bragg, the Air Ambulance Platoon of the 326th Medical Battalion at Fort Campbell, the 68th Med Det (RA) at Schofield Barracks, the 82d Med Det (RA) at Fort Riley, Kansas, the 237th Med Det (RA) at Fort Ord, and the 498th Med Co (AA) at Fort Benning with platoons at other locations all assumed MAST duties to the great delight of their local communities. Two years later, the 273d Med Det (RA), an Army Reserve unit at Tomball, Texas, became the first Reserve Component unit to also assume MAST tasking. There were many more within the next year, as MAST became a major consumer of the services of the Army's active and Reserve Component MEDEVAC community.[45]

At Fort Sam Houston, Capt. Jerry Foust became a self-described "talking dog" for MAST. He was sent to cities and towns across Texas, Louisiana, New Mexico, and the midwest to relay the positive things that MAST could do for their communities. He loved the assignment.[46]

At one point, Foust encountered a young lieutenant named Dan Gower, who had graduated from Texas A&M University in 1970 and commissioned into the infantry. He asked for and received orders for flight school. While at Fort Rucker, he and his wife were injured by a tornado. Consequently, he had to request a humanitarian assignment back to Fort Sam Houston after graduation.

There he was assigned to the 507th. Foust liked Gower and convinced him to branch transfer to MSC. Gower transferred and flew his fair share of MAST missions.[47]

In addition to his flying obligations, his first position in the unit was to serve as the administrative officer that thrust him into the myriad social issues prevalent then. He had troops in trouble for drugs and alcohol abuse, and several had to be discharged. He dealt with racial tensions. In general, Gower noticed that the soldiers who came to MEDEVAC were a bit more mature and stable than troops in other units. They understood the importance of MEDEVAC and accepted the necessary training and focus necessary to accomplish the mission.

During his time with the unit, the 507th received some of the first women to enter the MEDEVAC mission area. Their first female medic was Spc. Donarita Czerwinski. Her first real mission after qualification was a MAST scramble to recover a farmer who fell into a combine that chopped his legs off just below his groin. She handled the difficult mission because the "old head" Vietnam veterans had trained her. Gower was proud of her and his other soldiers. He served with the 507th until 1977 when he attended the MSC advanced course and transferred to the 68th Med Det (RA) in Hawaii.[48]

MAST Continues to Grow. The next unit to join the MAST program was the 431st Med Det (RA) at Fort Knox, Kentucky. Activated in the spring of 1975, it began participating in MAST almost immediately. By September 1976, more than 8,200 MAST missions had recovered 8,613 patients. Helicopters from Army and Air Force units—both active and Reserve—were on call at 22 locations across the United States. Missions came in all varieties. A crew from the 571st Med Det (RA) at Fort Carson was launched to pick up a young soldier's wife who was going into labor four weeks early. They picked her up for transport to the Fitzsimons Army Medical Center in Denver. However, en route at 8,000 feet she gave birth to a four-pound daughter who was delivered by the flight medics, Sp5 Tom Haverkorn and Pfc. Debra Kleinfelter.[49]

In another incident, a backpacker fell on Mount Rainer and slid down 1,500 feet, receiving severe internal injuries, fractured ribs, etc. He suffered from exposure to the harsh elements. Park rangers were notified late at night and determined that it would take several hours to rescue him with a ground team. They called the 54th Med Det (RA) at Fort Lewis for help. At first light they launched a UH-1 MEDEVAC helicopter. The backpacker was on a glacier with jagged ice at 9,500 feet elevation. The pilot held the helicopter on one skid as the crew recovered the man. They evacuated him to a hospital in Takoma.

The Air Ambulance Platoon of the 326th Medical Battalion at Fort Campbell also became very busy with MAST calls. In two days in June 1976, both aircraft and

A 507th Med Co crew responding to a MAST call.
Source: Army Medical Department Museum.

crews on call were dispatched six times to answer various calls to do the following:

1. Respond to an aircraft accident;
2. Transport a burn victim;
3. Carry emergency blood supplies (twice);
4. Transport a patient with a brain tumor; and
5. Transport a day old baby with birth defects.

These flights provided needed services to the communities involved and excellent training for the crews involved.

In California, a bad storm capsized a small boat off of Santa Cruz in the Monterey Bay. A patrol boat tried to save the occupants, but was itself swamped, and its crew of two had to swim to shore. A UH-1 from the 237th Med Det (RA) at Fort Ord was dispatched and rescued the crew of three in 15 minutes.

In still another illustrative incident in 1976, a butane truck exploded in Eagle Pass, Texas. Ten people were killed and 40 were injured. The 507th Med Co (AA) at Fort Sam Houston was called for help. The unit launched six helicopters that stopped at local hospitals to transport needed on-site medical personnel. Then the helicopters made seven trips back to several San Antonio hospitals to deliver 22 injured people. Representative Abraham Kazan was deeply appreciative and wrote a thank-you letter to the unit. "Be assured of my continued support of the MAST program and my deep appreciation for your aid to people in need…."

A witness to the entire incident, Texas Highway Patrolman Ken Phillips, also wrote to the unit. "I hope the MAST program will be expanded to include other areas in Texas that are remote from expert medical care." The dedication, courage,

and skill of the men and women of the MAST units proved its worth in saving lives, obtaining prompt medical attention for the seriously injured, and reducing suffering. MAST brought the military and local communities together while also providing excellent training for the crews. The program showed success beyond its expectations, and the Eagle Pass mission was recorded as one of the most memorable. By March 1977, the 507th and its two separate platoons had recorded the recovery of 2,000 patients.[50]

Crash Rescue

The MEDEVAC units were also considered for other missions. One was crash rescue. A small number of UH-1s was outfitted with fire suppression kits for use in recovering aircrews from burning aircraft. The helicopters were modified with an extendable boom that could spray 50 gallons of water forward of the aircraft. Theoretically, the spray could suppress flames long enough so that the medic and the crew chief—who was specifically trained in firefighting—could dismount, enter the wreckage, and pull out the trapped survivors.

Three units, the 132d Med Det (RC) at Fort Bragg, commanded by Capt. Glen Flint, the 214th Med Det (RC) at Fort Belvoir, Virginia, and the 218th Med Det (RC) at Fort Hood, Texas, were activated in 1971. Each unit had two aircraft, five pilots, three medics, and three crew chiefs, plus a small maintenance team. All were fully operational within a year. However, there was little need for their services. By 1975, all three units were inactivated. Their personnel and equipment returned to conventional MEDEVAC units that were then assigned crash and rescue duties as a secondary mission, but without the fire suppression kits.[51]

Refocusing on the Future

Organization

Europe

At mid-decade, the MEDEVAC units in Europe focused primarily around the field Army units located in central and southern Germany. The 421st Med Co (AA) located at Nellingen with its 1st and 3d Platoons owned or controlled 49 aircraft. Its 2d Platoon was located at Schweinfurt, and its 4th was at Darmstadt. The 421st also had several individual detachments assigned to it. The 15th Med Det (RA) was at the Grafenwöhr training complex where large combat units routinely rotated through for weapons training. The 63d Med Det (RA) was at Landstuhl and primarily performed intra-theater transfers. The 159th Med Det (RA) at Nürnberg and the 236th Med Det (RA) at Augsburg provided general support to large Army units in their area. All could be called upon to support Army dependents who were sick or somehow injured. Commanders also developed local relationships similar to the MAST program in the United States, which allowed the MEDEVAC units

to respond to requests from the local German governments for medical help.[52]

Commanders wrestled with the unique issues facing MEDEVAC flying in Europe. The single biggest challenge was the weather. Europe experienced four distinct seasons, and the flying there, especially in southern Germany, could be very challenging. The units required all pilots to become proficient at all-weather flying.

There were other challenges. The improving capabilities of the Soviet and Warsaw Pact forces to the east could not be ignored. MEDEVAC pilots had to be proficient at low-level or nap-of-the-earth flying to avoid improved enemy air defense weapons. One company commander, Maj. William Wood, wrote: "A pressing need exists for an Army-wide reassessment of air evacuation employment on the European battlefield… In many areas MEDEVAC doctrine remains to be developed." Those were prescient words, shared by others in other arenas. But change sometimes comes slowly.[53]

In 1976, Maj. Jim Truscott took command of the 421st. Although organized as a company command, it actually functioned as a battalion, and he found the challenges daunting. With his units scattered all over Germany, he constantly coordinated

Lt. Col. Jim Truscott (left), with Col. Jim Walker, commander of the 30th Med Group, as Truscott passes command of the 421st Med Co to Maj. Tom Scofield (right) then located at Stuttgart, Germany, in June 1978.
Source: Jim Truscott.

with and answered to several widely dispersed commands. His unit provided on-call service for local German governments, similar to MAST in the United States. Theoretically, they were only supposed to fly when German assets were not available. However, the Germans only flew in the daytime, which meant that the 421st received frequent calls at night. Truscott realized the value of such missions. Almost all were flown single-ship, which meant that all pilots learned rapidly how to make tough operational decisions. Additionally, he pushed them to develop their instrument flight skills to deal with the challenging weather, and he instituted an internal instrument course for some pilots who had weak skills. He removed several pilots from flight status because they either could not or would not improve their flight skills to handle the challenging European weather. When the weather was fine, he encouraged them to fly nap-of-the-earth and develop their tactical skills. His pilots rose to the challenge and enjoyed the flying. He also stressed strict risk management techniques. During his two-year command of the unit, they had no accidents. Truscott's talent and potential were both recognized, and he was promoted to Lt. Col.[54]

Doctrine

Field Manual (FM) 100-5, Operations, July 1976

Moving away from the searing experiences of Vietnam, the Army began an intensive effort to look forward and, as necessary, redefine its warfighting and supporting doctrine for the threats of the future. There existed cause for concern. Although the nation had been exhaustively engaged in that conflict, the Soviet Union and its client Warsaw Pact countries had steadily built up their forces arrayed across the central plains of Europe, both in terms of quantity and quality. New tanks, artillery, and air defense weapons indicated that perhaps the eastern forces were preparing—at some point—to move against the North Atlantic Treaty Organization alliance nations in a bid to establish hegemony over the entire region. The power of Soviet doctrine and technology was validated in 1973 when Arab nations allied with the Soviet Union dealt a devastating blow against Israel, a nation that had designed its defense force around western doctrine and equipment. American soldiers who later toured the battlefields of that conflict saw firsthand the lethality of current Soviet tanks, artillery, antitank weapons, and antiaircraft missile systems, and knew that they presaged a new and vastly more dangerous future for conventional war.[55]

Leading this reexamination of basic doctrine was Gen. William E. DePuy, now the commander of the newly formed U.S. Army Training and Doctrine Command. He had served as an infantry officer in World War II and commanded the 1st Infantry Division in Vietnam. He was personally and professionally well versed in the sting of battle. After reviewing several deep historical analyses, he determined that the future threat suggested war more along the lines of that experienced by the Army in World War II. He personally led the effort to rewrite FM 100-5, *Operations,* the Army's key operational doctrine manual of the time. Given the threats of the day and their geographical location, it focused on the primacy of the defense as opposed to offense and began moving the Army away from its modus of operation

during the Vietnam War. Over time, this doctrine would be further redefined into what would become the doctrine of "AirLand Battle." DePuy further dictated that these rediscovered concepts should be taught at the U.S. Army Command and General Staff College in Fort Leavenworth. There the doctrine was buttressed with historical examples and used to train a new generation of rising officers.

The concept called for new technologically superior equipment that could overcome the massive forces of the Warsaw Pact. Although design efforts for this equipment had been ongoing, developments in speed, survivability, rapid communications, night vision capability, target acquisition, and fire control fit well into the new doctrine, and they led to the development and acquisition of five new weapons systems:

1. The M1 Abrams main battle tank;
2. The M2 Bradley infantry fighting vehicle;
3. The AH-64 Apache attack helicopter;
4. The Patriot air defense missile; and
5. The UH-60A Black Hawk utility helicopter.

The UH-60A was designed to replace the fleet of UH-1s and was a very high priority with the infantry branch. Its speed and range would fit well with the faster armor formations and could be procured for air assault, utility support, and MEDEVAC.[56]

AirLand Battle focused on fighting battles in three areas: (1) close, (2) deep, and (3) rear. It called for the primacy of armor as the pivotal element, supported by the other arms, and closely integrated with tactical airpower. With its fleet of attack helicopters the Army would provide much of that airpower. As the forces received the projected new equipment, they would be reorganized under a program called "Division 86," which optimized that level of command with structured forces to take advantage of the evolving technology being fielded. The entire concept called for new arrangements of support functions to support fast-moving operations. Assignment of MEDEVAC detachments to divisions was considered and then discarded. (The 101st Airborne Division was not reorganized under "Division 86" and retained its AA platoon with helicopters.) The combat service support operations were required to reorganize and refine their subordinate doctrine to support these concepts. Specifically, the traditional division medical battalion was inactivated and its companies reorganized with a main support company to remain with the new division support command and three forward support medical companies to deploy with brigade-level forward support battalions.[57]

Field Manual 8-35, Evacuation of the Sick and Wounded, January 1977

The Army began to update its FMs from its Vietnam era versions. The first was a rewrite of FM 8-35. It replaced the 1970 version and was vastly more expansive in definition. No longer just focusing on casualty loading tactics, techniques, and procedures, it specified that:

> Medical evacuation is the process of moving any person who is wounded, injured, or ill to and or between treatment facilities. The medical evacuation and treatment of the sick and wounded begin at the place of injury/onset of illness and continue as far rearward as the medical condition of the patient requires. The military services accomplish these functions as rapidly, as orderly, and as effectively as possible, keeping the welfare of the patient as the primary concern.[58]

It included a section on the advantages of evacuation by air, indicating that the speed, range, and flexibility of helicopter ambulances shortened the time needed to move the sick and wounded to that medical facility best manned and equipped to deal with the specific needs of the patient. This made for much more efficient use of highly specialized personnel and equipment that existed only in limited numbers. The helicopter ambulances were not as constrained by terrain as ground vehicles and provided a smoother and comfortable ride for the patients.

The change also discussed some problems with air evacuation. Medical doctrine specified keeping wounded soldiers as far forward as possible so that they could be returned to duty if their wounds allowed. Helicopters, with their speed and responsiveness, made it too easy to very rapidly move patients to the rear, thus over-flying intermediate facilities that could handle their needs. The new FM emphasized that the flow of patients must be monitored and controlled within the medical chain of control to prevent this movement. It reiterated the command and control arrangements laid out in the April 1970 version of FM 8-10, and reemphasized the differing roles for the 25-ship companies and 6-ship detachments, repeated their basic missions, and added an on-call capability for air crash rescue for selected units.[59]

The document also recognized that aviation was inherently dangerous. Although the newer generation of helicopters was equipped with advanced avionics and flight instruments that made them fully capable of flying at night or in inclement weather, Army units in the field did not necessarily have navigational aids that the air ambulances could use in instrument conditions.

The new FM 8-35 also included a section on the dangers of mountain flying, especially at night, or instrument conditions. Varied or heavily treed terrain could force the use of hoists. Although most air ambulance helicopters were equipped with hoists, their use was challenging and required specific training for the crewmembers.

Lastly, the evolving serious threats to MEDEVAC aircraft were addressed. Advances in enemy antiaircraft weapons, especially massed guns, new missiles, and enemy aircraft, were highlighted. As a countermeasure, low-level or nap-of-the-earth flying was taught to all pilots. For the Vietnam era pilots, it was just a return to the ways that they flew in that conflict. The FM also included discussion of the threat posed by advancing friendly weapons systems, thus highlighting the need for procedures to properly coordinate the movement of MEDEVAC helicopters across the modern battlefield in a safe and expeditious manner.[60]

FM 8-10, Health Service in a Theater of Operations, October 1978

In support of this doctrinal shift outlined in FM 100-5, the Army also reviewed and revised its medical doctrine. The key document, again, was FM 8-10. It stated:

> Health service support is a single integrated system for providing, in the shortest possible time, the sick, injured and wounded soldiers in the theater of operations with the required care and treatment. This support… includes all health services utilized in the theater of operations… patient evacuation and medical regulating. The objective of military medicine *to conserve trained manpower* dictates that patients are examined, treated, and returned to duty as far forward … as possible and that health service support resources are employed to provide the utmost benefit to maximum personnel in support of the mission.[61]

Within any theater, the Army theater commander was responsible for the medical care of his soldiers and was assigned a medical command (MEDCOM). The MEDCOM commander also usually served as the Army Surgeon. The MEDCOM could be of various sizes based on the size of the forces assigned to that theater. Usually, it was a medical brigade, with necessary subordinate units task organized for the mission assigned. Air ambulance units, either companies or detachments, were assigned to the brigade on a basis of two detachments per division supported, one per independent combat brigade, or as necessary to hospital centers to meet the aeromedical evacuation needs of the theater. They were commanded and controlled by the brigade, or as necessary, subordinated to medical groups or even medical battalions.[62]

The new FM also laid out the responsibilities for evacuation. It clearly stated, "To the maximum extent feasible, air ambulances will be used in the combat zone for the evacuation of all patients with any category of precedence…" Tactical combat units were responsible for initial care and evacuation from the point of injury to an initial unit aid station. Division assets, either ground ambulance or air ambulance detachments, evacuated from there to division-level medical facilities. Corps ambulance units, again, either ground or air, then evacuated them to higher levels of care to prepare them for evacuation from theater, if necessary. At any point, any level of care could be bypassed if the condition of the patient required it and the means of evacuation was available.[63]

The Quiet Years Continue

Operations

MAST

As the MAST program continued to expand, it was only natural that Army National Guard MEDEVAC units were considered for the mission. It was something that could very naturally be incorporated into their role as state or federal assets. However, when the MAST program was established, guidance available at that time did not clearly determine that those units could participate. Before federal activation, Guard units were under the control of their state (also, Washington, DC, Puerto Rico, the Virgin Islands, and Guam). Legal opinions had to be developed before a decision could be made. That process was finally completed in May 1978, when the Under Secretary of the Army, Walter B. LaBerge, signed a memorandum authorizing National Guard units to participate in MAST.[64]

As expected, the various Army Reserve Component units received oversight from their Army gaining commands. Many rising MSC officers performed this duty. After completing his series of assignments at Fort Sam Houston in early 1977, Maj. Jerry Foust was assigned as a reserve advisor with the 89th Army Reserve Command in Wichita, Kansas. More than half of all MEDEVAC units were in the Reserve Components, and this afforded him an excellent opportunity to become acquainted with that community of citizen soldiers. Before leaving the assignment in 1979 to attend the Army Command and General Staff College, he visited every MEDEVAC unit in his area and actually flew with most of them, watching very closely for lapses in professionalism and safety. This was very critical because MAST flying itself could be very dangerous, a point sadly reinforced early in 1978 when the Air Ambulance Platoon of the 326th Medical Battalion at Fort Campbell suffered a tragic loss of a MAST crew responding to an automobile accident in the Great Smoky Mountains. That crash killed Captains John Dunnavant and Terrance Woolever, and Sgt. Floyd Smith.[65]

Foust observed many of the Guard units, such as the 24th Med Co (AA) from the Nebraska ARNG, and the 717th Med Co (AA) from New Mexico, as they deployed for summer training or exercises and flew MAST missions. In general, he was impressed with their professionalism, enthusiasm for the missions, and vast experience. Most pilots were older than their contemporaries in the active duty units and were mostly airline pilots in their civilian careers. However, he could also clearly see that their unit tactics still reflected the experiences of their predominantly Vietnam era crews and needed upgrading.[66]

Lt. Col. Pat Brady spent a great deal of time with ARNG and USAR units. Working as the medical coordinator at Sixth Army headquarters in San Francisco, he regularly visited their MEDEVAC units. He found that most of the crewmembers were Vietnam vets and had—on average—1,600 hours of flight time on mission, which was about double the hours flown by "experienced" active duty MEDEVAC crewmembers. The Guardsmen and reservists all chose to remain with MEDEVAC and possessed a wealth of experience that they put to good use.[67]

In 1978, after a very successful series of assignments in Germany, Lt. Truscott was transferred back to Fort Sam Houston to serve as the aviation staff officer at the Health Services Command Headquarters. He traveled worldwide as part of a survey team that visited units to review procedures and operations. This afforded him the opportunity to visit almost all MEDEVAC units. Although he saw a veritable panoply of problems and challenges, one issue kept appearing. He noticed that many units had enthusiastically embraced their MAST taskings. They realized that it provided good training, led to excellent community relations, and was great publicity for the Army. However, many of the units had also lost their tactical edge. Truscott had many intense conversations with local garrison commanders who kept their MEDEVAC units focused on MAST and would not release them for field exercises or training. He reminded them that the MEDEVAC units were go-to-war units and had to be ready. Yet, this was a time of relative peace and in many cases his message was not enthusiastically received.

After two years with the Health Services Command Headquarters, Truscott went to the Army Medical Department Center and School and became Chief of the General Subjects Branch and then the Chief of the Command and Staff Branch, both under the Military Science Division. He worked directly with the Officer Basic and Officer Advanced Courses and the Non-Commissioned Officer Courses. He had a direct and personal opportunity to mentor rising young officers and NCOs.[68]

Serving at Fort Sam Houston as the commander of the Health Services Command, Maj. Gen. Spurgeon Neel maintained his interest in MEDEVAC and watched the development of MAST. He applauded the increased involvement of the units in their local communities, but also recognized that it was affecting their purely military prowess. He commented that, "It is going to take some doing to get them out on a maneuver or get them back into a war."

However, he saw the clear value of the training, especially for the medics. "We feel that the best way to train our medical technicians is to let them take care of actual patients under actual conditions. It is the only way. You can't simulate patients. There is a certain urgency about someone bleeding or not breathing."[69]

Concerning the training provided to the pilots, he was less sanguine. He later said, "To be perfectly candid, this is not the best training for our pilots because there is no war, this is a peacetime situation and we always follow the FAA [Federal Aviation Administration] regulations and we fly fairly high. So the pilots, after accomplishing their MAST mission, still have the requirement over and above that to maintain their proficiency in tree-top flying, nap-of-the-earth flying, night flying, and all of that."[70]

Capt. Bill Thresher also developed a strong opinion of MAST. In April 1979, he moved to Fort Sill, Oklahoma, to command a platoon of the 507th Med Co (AA). What he found when he arrived concerned him. The unit was heavily committed to MAST and basic base and range support, but was undermanned with crews which meant that each had to fly more missions each month. He could see the chronic fatigue in his personnel. More importantly, however, the unit had not had any field training in several years and had lost its tactical edge. To Thresher, the inherent complacency and lethargy in his soldiers' actions were blatantly obvious indicators that the unit and his soldiers needed some redirection.

Thresher was in a quandary. He could clearly see the value of MAST both in terms of what it provided to the local community and the training it provided for his medics. The flying trained the pilots to be very good at instrument procedures since they almost always flew with flight plans under Federal Aviation Administration air traffic control. However, the unit was a designated "go-to-war" unit, and intuition told him that it was just not ready to meet its designed tasking. Thresher addressed the problems forthrightly. He requested and received more aircrew-members to spread out the mission requirements. He also received the unit's full issue of field equipment and began taking his troops to the field for training exercises. Soon his troops were out "soldiering" again, and morale and performance began to improve.

On one of these excursions, Lt. Col. Eldon Ideus, who recently replaced Truscott as the aviation officer at the Health Services Command, under Neel, visited the unit. Ideus had been to many of the MEDEVAC units and shared Thresher's concerns. He was pleased at what he saw at Fort Sill and shared with Thresher a large project that he was working on to develop training manuals designed to standardize flight procedures across the Army. His effort was drawing heavily on the experiences of the disappearing Vietnam era mass of pilots who were beginning to either retire or otherwise leave flying. Thresher enthusiastically supported the work, feeling that it was necessary to stanch a recent increase in flight accidents.[71]

New Personnel

Other Vietnam MEDEVAC veterans touched the new troops in similar ways. In the summer of 1978, Scott Heintz graduated from the ROTC program at Morehead State University in Kentucky. During his summer camps, he was exposed to the combat branches but did not hear much about the support and service support organizations. Fortunately, a friend was going to volunteer for the MSC and told him about its mission. It appealed to him, so he made it his first selection, and as a distinguished graduate of ROTC, he received his choice. Attending the MSC basic course that summer, he was subsequently assigned to be a ground ambulance platoon leader with Charlie Company, 15th Medical Battalion, 1st Cavalry Division at Fort Hood.

The 15th had commanded an air ambulance platoon with the 1st Cavalry Division in Vietnam. Its current commander, Lt. Col. Ernie Sylvester, had flown with great distinction as a MEDEVAC pilot in the war. He and the Charlie Company commander, Maj. Gerry Nolan, a Vietnam era MEDEVAC pilot, took young 2d Lt. Heintz under their wings and regaled him with stories about the mission. They took him to the Fort Hood airfield where a platoon of the 507th Med Co (AA) was located. They pushed him to take the Flight Aptitude Skills Test. He passed it with exceptional scores and was accepted for flight training.

Heintz was also fortunate to have assigned to him an excellent platoon sergeant, S.Sgt. Otis Smith, who guided him on "how to do things right." Heintz later recalled, "The late 1970s, drugs were still an issue. We had some knuckleheads. It was a little bit of a challenge." Smith gave him the training and structure that he needed to handle and learn from those experiences. In December 1980, Heintz reported to Fort Rucker for flight school.[72]

Organization

New Aircraft

Starting in early 1979, the Army began to take delivery of production models of the UH-60 Black Hawk. The first aircraft went to the aviation battalions and companies, with the expectation that some would be assigned to MEDEVAC units

to replace their aging UH-1s. The MEDEVAC variant of the UH-60 was designed to carry four litter patients on a rotating carousel, which eased loading, or up to 14 ambulatory patients. It had a projected cruise speed of 160 knots at sea level with a sprint capability of 180 knots, and an un-refueled range of 300 miles. It was equipped with a powerful hoist so that it could work above deep forest, and deicing gear, so necessary in Europe and Alaska. Its assignment to MEDEVAC duties ensured that the medical community was equipped with the most up-to-date aircraft so that it could support the combat units being reorganized and equipped to bring reality to AirLand Battle doctrine. In December 1980, plans were announced for the entire MEDEVAC fleet to be converted to UH-60s by 1990.[73]

Monitoring this development from afar since he had retired from the Army in 1977 with more than 43 years of service, Maj. Gen. (ret) Spurgeon Neel had mixed feelings about the Black Hawk. He saw the value of having a common aircraft across the Army fleet and appreciated its strong engines and upgraded avionics. However, he felt that the new machine was too big and made an inviting target. He remembered that many times, soldiers were wounded in "ones and twos." With bigger, more expensive helicopters, the temptation would exist to hold the patients forward until more were wounded so that a larger helicopter could carry several at once, thereby being more efficient from a transportation perspective. He counseled that, "We don't want to become efficient to [the point] where we let [a casualty] die while we are waiting for 16 more."[74]

New Personnel

In May 1980, Pauline Lockard graduated from Rutgers University in New Jersey. She was the top Army ROTC graduate in her class and took great delight in serving as the first female battalion commander at a school that had originally been all male. Lockard had entered ROTC three years earlier when her brother returned from a tour with the Army in Germany and recommended that she do so. She discovered that the Army was especially keen to recruit capable young women, so she signed up.

After receiving her commission, Lockard reported to her first duty assignment as a platoon leader with the 36th Medical Clearing Company at Fort Bragg. While going through her initial unit training and still awaiting a slot in the MSC basic course at Fort Sam Houston, she met some of the MEDEVAC pilots from the 57th Med Det (RA). It only took a short conversation with them to convince her that she wanted to fly. In checking with her assignment officer, she was informed that she would have to serve a two-year tour with the 36th before she could go to flight school.

While attending the basic course, she submitted a request package for flight school, which required a letter of recommendation. After a course lecture one day, she had a chance encounter with the school commander, Brig. Gen. Quinn H. Becker. The next day, she went to his office and asked him directly for a letter of recommendation. His staff was dumbfounded. Having commanded the 15th Medical Battalion in Vietnam in 1970–71, he knew a bit about MEDEVAC and

just looked at her and smiled. "Anybody that has the nerve and audacity to do what you just did deserves a letter to flight school," he said, as his staff drafted the letter. The letter worked and she was accepted, but with the proviso that she serve out her assignment at Fort Bragg first.[75]

Pete Smart, a 26-year-old college graduate and school teacher, wanted to be an Army pilot, but could not afford to fly on a teacher's salary. He spotted an Army recruiting poster that said that aspiring enlistees could be an Army pilot in 40 weeks by becoming a warrant officer. That sounded just perfect. When he approached an Army recruiter, the sergeant wanted him to take a commission. Smart was interested, but then discovered that he would have to pick a branch like armor, infantry, or artillery. That would have required an initial assignment other than flying and would not necessarily allow him to get into flight school. Smart told them that he wanted to be a warrant officer so that he could fly, and they signed him up.

Reporting to the Warrant Officer Candidate Course at Fort Rucker, he found it surprisingly easy for someone who had grown up both physically and mentally fit and was four years older than anybody else in the class. After graduating as a new warrant officer, he remained at Fort Rucker and entered flight school, intent on becoming a MEDEVAC pilot. He was challenged by the formalized and rigid course, but enjoyed the camaraderie of his fellow students, many of whom would become lifelong friends.

As graduation approached, Smart hoped for an assignment to a MEDEVAC unit. Unfortunately, the only MEDEVAC slot for his class went to another student. WO1 Smart ended up with an assignment to the Charlie Company of the 501st Combat Aviation Battalion, 1st Armored Division, as an OH-58 pilot in Illesheim, Germany. He reported to the unit in August 1981. His plans for MEDEVAC would have to wait.[76]

Operations

Disaster Relief for the Eruption of Mount Saint Helens

The MEDEVAC community received another challenge from a completely unexpected quarter when the nation's attention was dramatically focused on events in the state of Washington in May 1980. On 18 May, the top of Mount Saint Helens, located 100 miles south of Seattle, was blown into the clear northwest sky in the single most devastating volcanic eruption in the United States.

Doug Moore had survived his "learning experience" with the Army Inspector General and was promoted. He escaped the Pentagon and served at Fort Lewis as the commander of the 62d Medical Group, which had a MEDEVAC flying unit, the 54th Med Det (RA) with 6 UH-1H helicopters assigned to it, and also had operational control of a medium-lift helicopter company with CH-47 Chinook aircraft.

When Moore assumed group command, he discovered that the 54th had become so deeply enmeshed in its MAST taskings that it no longer functioned as a

UH-1V from the 54th Med Det (HA) responding to the Mt. St. Helens disaster.
Source: Col. (ret) Doug Moore.

tactical unit. He took some very direct actions, including personnel replacements and unit realignments to return the unit to its primary mission. That was painful, but part of being a commander.[77]

Now, a mountain had blown up in his backyard, and his unit became directly involved in the response and recovery efforts.

Seismic activity near the mount had been detected several months earlier indicating volcanic activity, and as early as March some state level planning efforts had started. Moore's direct participation started early in May when the commander of the 9th Infantry Division, also at Fort Lewis, called him into his office and informed him of the worrisome seismic reports that indicated that a cataclysmic event might be looming. Moore immediately began working with the Washington ARNG and other state and local agencies to develop a coordinated response as necessary.[78]

The mountain exploded on a bright Sunday morning. Moore was at home when his assistant operations officer called him with the news. He looked outside and saw the ugly boiling mass of black and gray debris laden clouds building to the south. The 54th Med Det had aircraft on alert for MAST tasking, and Moore immediately directed them to launch their first aircraft to the area. Other units began to initiate response plans as Fort Lewis went on full alert. The overall state coordinating center was aware of the explosion and had diverted state assets into the area. It asked the Fort Lewis forces to hold and stand by.

Col. Doug Moore as the commander of the 62nd Medical Group at Fort Lewis, Washington, in 1980. Source: Col. (ret) Doug Moore.

Secondary eruptions continued into the next day as rain clouds moved in and blanketed the area with a steady rain. People drove with their headlights on and snowplows cleared the roads of debris and mud.

On 19 May, Moore was informed that the state was having problems mounting a coordinated rescue operation. President Jimmy Carter had visited the area that day and in a meeting with the Governor of Washington, Dixy Lee Ray, promised any necessary federal aid. One of his first requests was rescue support, and Moore was directed to lead the effort. He departed Fort Lewis at 0300 in a large convoy of support equipment for the airport at Toledo. Arriving at sunrise, he found a chaotic mess of intermixed agencies, personnel, and equipment. Observing it all was a crush of press personnel there to record the effort.

His troops immediately set up a rudimentary command center and by noon had established a modicum of control over events. Then he had a series of meetings with local police and sheriff commanders to establish an overall rescue and recovery program. Several of these individuals had to be flown to the Toledo airfield in 54th Med Det helicopters because the roads were blocked. Once these jurisdictional issues were resolved, Moore turned his attention to the coordination of aircraft from the Army, Coast Guard, several state National Guards, and many more federal, state, and private organizations.

While doing this, Moore always had to remember that he and his units were in a supporting role. The governor of Washington was in charge of the recovery effort, and Moore ensured that he had a proper chain of command to maintain that relationship. He discovered that his best course of action was to work through the local county sheriffs, and began direct coordination with their designated leader, Sheriff Bill Wiester of Lewis County.

Moore immediately asked Wiester to use his deputies to organize the airfield for continued operations to include an expanded search and rescue flight operations center, a collection point for concerned families and visitors, a gathering area for the ever expanding press teams, and a mortuary.

With those issues addressed, Moore then expanded the search and rescue operations. Pilots from the 54th and other flying units developed a communications plan with the sheriffs and other ground agencies. They agreed on map protocols and the identification of common points so that air and ground search could be coordinated. However, the eruption had so transformed the shape of the mountain that in the most devastated areas, the maps were of only minimal use. Before the eruption, there had been a beautiful lake on the north side of the mountain. The blast and subsequent magma flow literally moved the lake three-quarters of a mile to the northwest and raised it 200 feet. The lake was covered with a layer of dead trees and ash. It took some very skillful flying by some 54th pilots to determine its location and danger to anybody who tried to cross that apparent open area on foot. When the weather finally improved enough to allow steady flight operations, the aircraft started intensive search and rescue flights. However, they still contended with intermittent low clouds, rain, falling ash, and even snow. The magma that spewed forth from the eruption was still warm, and its heat combined with the

humid air to generate thick morning fog in the valleys. The Federal Aviation Administration established a special restricted zone around the mountain. Unauthorized aircraft still entered the area and caused several near misses.

Moore was onboard one of the first helicopters to fly over the mountain. They determined that as much as 1,300 feet of the mountain had blown away. A press team picked up their report, and his words were quoted in the papers the next day.

The crews from the 54th and support units flew up and down the valleys daily looking for and recovering survivors, remaining aware of the threat of fog banks full of rock outcroppings, towers, shattered trees, and power lines.

When the weather cleared for several days, another problem arose. The ash and dust that blanketed the area was easily disturbed. Any helicopter takeoff or landing generated clouds of dust. Fortunately, most of the military helicopter pilots were Vietnam vets and handled the challenge well. The thick ash was also very abrasive on the aircraft, and maintenance procedures had to be modified.

The crews picked up more than 200 survivors, including one media team that had disregarded all restrictions, entered the restricted zone, and came close to being killed by the harsh conditions. The crews also recovered 57 bodies, people caught in the horror of the eruption and subsequent fallout. Many of the bodies were horribly mangled, and reminded Moore and the other Vietnam vets of scenes they had seen in that conflict.

The crews from the 54th and other attached units operated out of Toledo until 29 May when the operation was terminated. While there, they were equipped to provide for themselves. Within a few days of their arrival, folks from the local communities brought hot meals to them. Day and night, the informal "chow hall" was open with fresh hot food and endless coffee for "our boys," as the locals called them. For men organized and trained for and experienced in war, the recovery missions flown to help their fellow citizens of southwest Washington devastated by the horrific eruption of Mount Saint Helens were some of the most satisfying missions of their entire careers.[79]

Tactical Training

As the decade ended the Army activated the National Training Center at Fort Irwin in the eastern deserts of southern California. This 1,000-square-mile complex was designed and built as a realistic training area structured to allow brigade-sized forces to practice the evolving doctrine contained in FM 100-5. Ten brigades a year, each with up to 3,500 soldiers, rotated through so the troops could "train as they would fight" in the expanses of the dry canyons. A large cadre of observers and controllers was emplaced to direct and train them.

The units maneuvered on a live-fire range with pop-up moving enemy targets and then through a fully instrumented battle arena against a well-trained opposing force, and actively learned and practiced the tenets of the AirLand Battle doctrine. The National Training Center was eventually joined by the Combat Maneuver Training Center, at Hohenfels, Germany, and the Joint Readiness Training Center, at Fort Chaffee, Arkansas, later moved to Fort Polk.[80]

In October 1980, the 247th Med Det (RA) moved from Fort Meade to Fort Irwin to support the National Training Center. They directly supported the brigades in their training and provided base medical support. In the following decade, this facility provided the Army with an opportunity to develop the ability to fight and defeat the massed forces of the Soviet Union and Warsaw Pact, should they ever attack any of the nations of the North Atlantic Treaty Organization.[81]

MAST Continues to Expand

In November 1980, the 412th Med Det (RA), an Army Reserve unit based in Louisville, Kentucky, signed a memorandum of agreement with the 431st Med Det (RA) at Fort Knox, to augment and on occasion replace it to provide MAST support to Fort Knox and the surrounding area.[82]

As the decade ended, the MAST program noted its 10th anniversary since its conceptual beginning. Missions were being flown from 29 different base locations and involved both Air Force and Army units to include units from their Reserve Components. Records showed more than 18,500 missions had flown consuming more than 43,000 flight hours. The following was in one historical report:

> MAST is an outstanding and durable example of military and civilian community cooperation. The civilians benefit from the life-saving service, and the supporting military unit receives the opportunity to maintain mission proficiency under conditions which cannot be duplicated in a training environment. The reason for the success of the MAST program … is the personnel assigned to the helicopter ambulance and rescue units. They cared about saving the life of an injured backpacker in a remote area of the Colorado Rockies and a critically ill premature infant in a small community hospital in southwest Texas – and they'll care about the people who will need them in future decades.[83]

* * * *

The 1970s had been a relatively docile period. With the return of American forces from Vietnam, the nation enjoyed a quiet respite and had generally turned inward. The Army was given a chance to reform, rebuild, and refocus. That also benefited the MEDEVAC community as it reconstituted itself, updated and revised its doctrine in line with larger doctrinal and operational changes, entertained thoughts of a new aircraft, and actually picked up a new mission—the MAST tasking—which forced it to integrate with local governments across the nation.

However, ominous events were occurring overseas. Iran experienced a bloody religious revolution and its new anti-U.S. government seized 52 American hostages. They were held for 444 days before diplomatic efforts brought them home. A military rescue effort was mounted but failed. MEDEVAC forces were not involved. That event was perhaps a harbinger of increased American involvement in that region of the world.

Worrisome events also occurred closer to home. In 1979, a communist cabal overthrew a pro-U.S. government in Nicaragua. That led to a leftist insurrection in El Salvador and potential instability in other nations of the region. Central

America had long been considered a quiet backwater. These events began to draw the attention of the nation to that region and portended possible increased involvement there.[84]

On a lighter note, in February 1980 veterans of MEDEVAC units from Vietnam and Korea came together and formed the *Dustoff Association*. Their objectives were to capture their history, recognize their outstanding performers through a Hall of Fame, and link with the current generation of MEDEVAC personnel to perpetuate their heritage. These veterans, like old soldiers from all conflicts, realized that the bonds that they had forged in the sting of battle were not ephemeral but enduring and enriching.[85]