Chapter Four

“I am satisfied that the recommendation of the [Surgeon General] is in the best interests of the Army and will best ensure continued satisfaction of the aeromedical mission.”

Maj. Gen. Norman Schwarzkopf,
Acting Deputy Chief of Staff for Personnel

Rumblings in Central America and Elsewhere

As the 1980s began, memories of Vietnam were still fresh on the minds of most Americans. However, a few national leaders were concerned about the communist takeover of Nicaragua and the potential for a similar revolution in nearby El Salvador.

El Salvador was a lot like Vietnam, with its rugged terrain, deep jungle, and hot climate, but America was still inwardly focused. As the situation to the south deteriorated, the American people had no interest in getting involved in another counterinsurgency effort. Instead, leaders in the U.S. government decided on a combination of economic sanctions, political initiatives, and limited military support to the friendly nations in the region. The Army had roles to play that were limited in both scope and size, and MEDEVAC units were required only in proportion to any deployment of conventional combat units. America and the Army were still at peace, and as the decade passed, that tranquility changed in response to these developments in Central America and other developing threats, and a renewed national willingness to use military force emerged. These forces affected theorganization and doctrine of MEDEVAC units and directed their participation in operations at home and abroad—sometimes in parallel fashion, but always in interrelated ways.
After attending the Medical Service Corps (MSC) advanced course in 1976, Capt. Art Hapner was posted with his family back to Landstuhl, where he served as the property book officer for the 2d General Hospital. It was a nonflying position, but he made friends with the troops of the 63d Med Det (RA) stationed at the Landstuhl airfield. When his assignment ended in 1980, he became the operations officer for the 63d, then under Maj. Tom Reed’s command. Reed returned to the United States the next year, and newly promoted Maj. Hapner took command of the 63d.³

Primarily, the 63d was involved with patient transfer. Many of its passengers were personnel being moved to the 2d General Hospital at Landstuhl from other locations in Germany. Occasionally, the unit moved patients to hospitals all over Germany and even into France and Belgium. The pilots all became well versed in both instrument and international flight procedures, and they also supported calls for medical assistance from the local German communities. Similar to the Military Assistance to Safety and Traffic (MAST) program, but not as formally established, Hapner’s crews remained alert 24/7 and responded to calls from throughout the area. Most of their taskings came from a joint operations center at nearby Ramstein Air Force Base, just a few miles northeast.

Some of the missions were very challenging, but Hapner trained his crews well and trusted them. As much as possible, he devolved launch authority to them. He explained:

We had a daily briefing for the crew coming on board, an operational briefing. We left it with the pilot in command—that was one of the responsibilities they were given... And the pilot in command had control of the mission and responsibility for the aircraft... If the weather was marginal, then the operations officer or the commander, whoever was on that call for that night, would then be called in or at least called and consulted. ‘This is what the situation is. The weather is at this point in time.’ We would then talk through the scenario and then give the okay or turn the mission down.⁴

Hapner spent a lot of time developing and mentoring his younger troops. He constantly stressed the importance of teamwork, emphasizing that each member of the crew made a valuable and critical contribution to the mission’s overall accomplishment. He always admonished his troops to remember that, “Our best day is somebody else’s worst day.”

Hapner also witnessed the results of the Army’s efforts to recruit more female soldiers. While he commanded the unit, he received two female pilots, one officer and one warrant officer, a crew chief, a medic, and an operations specialist. All fit in well. He commanded the unit until June 1982 when he was reassigned to Fort Bragg, North Carolina.⁵
Organization

_Eagle Dustoff_

The soldiers of the air ambulance platoon of the 326th Medical Battalion, 101st Airborne Division at Fort Campbell in Clarksville, Tennessee, considered themselves proud members of the division and “Eagle Dustoff” was their moniker. In September 1981, they received three new UH-60s for evaluation as MEDEVAC aircraft. Carousels were inserted into the cabins for ease of patient care. These aircraft were initially assigned to the division’s lift units. However, the division commander, Maj. Gen. Jack V. Mackmull, wanted his MEDEVAC unit to have the same mobility as the rest of the division and diverted them. Other MEDEVAC units were not programmed to get them for several more years.

Capt. Frank Novier commanded the platoon at the time. He received a visit from Lt. Col. Tom Scofield, who was an action officer and the aviation consultant on the staff of the Office of The Surgeon General. Scofield was an “old MEDEVAC hand.” He graduated from Troy State University in Alabama, with a double major in chemistry and mathematics, and joined the Army in 1964 after receiving his draft notice. Accepted for a commission, he branched into the MSC and then went to flight school at Fort Wolters in Texas. Subsequently, he served multiple tours in Vietnam with the 498th Med Co (AA), the 68th Med Det (RA), and the air ambulance platoon of the 15th Medical Battalion, 1st Cavalry Division. After the war, he worked in Army flight test programs with the Medical Research and Development Command and played a small role in the initial development of the UH-60. After attending the U.S. Army Command and General Staff College and completing a tour in Europe with first the 7th Medical Command and then as the commander of the 421st Med Co (AA), he took his vast and detailed knowledge of MEDEVAC to the Office of The Surgeon General in Virginia. He was one of those old Vietnam era “lionhearts” who provided key leadership to the MEDEVAC community in the postwar years.6

Scofield was at Fort Campbell to observe the test. He had recommended the UH-60 as a fine MEDEVAC vehicle to the Surgeon General. It was an ongoing battle, though, because other officers on the Army staff opposed its selection. Instead, they pushed to keep MEDEVAC in the UH-1 or even reequip the units with smaller helicopters designed to carry only one or two patients at a time, and without a medic onboard. Scofield worked diligently against such pressure and needed this test to go well. Perhaps to emphasize its importance, he put his arm around Novier’s shoulder and said, “Frank, you know, we need to test this and your unit is going to do this.” The test was successful, and the carousels made patient loading and unloading much easier, reinforcing Scofield’s case for the MEDEVAC UH-60. Shortly after the test concluded, the platoon was upgraded to Delta Company of the 326th Medical Battalion, with the expectation that several more UH-60s would replace its Vietnam era UH-1 aircraft.7
Returning to his office in Washington, Scofield perfunctorily reviewed the stack of pilot application packages. He knew that the Army was working hard to create opportunities for women and was pleased to see the application from 2d Lt. Pauline Lockard. However, he was taken aback by her letter of recommendation from Brig. Gen. Becker, so he called her, and she confirmed the encounter. He subsequently worked with her assignment officer and got Lockard released from her posting to the 36th Medical Clearing Company so that she could start flight training at Fort Rucker, Alabama, in October 1981, as one of three female aviators in her class.8

Back at Fort Campbell, Novier was pleased that his unit was being upgraded to a company. He also liked having the unit directly assigned to the 101st, believing that it helped his troops to develop a strong kinship with the other soldiers who “wear the same patch.” Even though his company belonged to the medical battalion, he had individual teams that developed habitual relationships with the brigades, continually working, training, and deploying with them as part of their support element. It was part of plan and practice, enshrined in “the Gold Book,” the division’s standard operating procedure.9

Even though his duties as the commander kept him busy, Novier sought to mentor and lead by example so he stayed on the duty roster, regularly flew missions, maintained combat ready status, and earned his senior and master Army Aviator badges. He loved the assignment, but left the unit in 1982 for an assignment in Saudi Arabia with the United States Military Training Mission.10

In August 1983, Delta Company, 326th Medical Battalion, gained some operational experience with its new Black Hawks when a detachment of six aircraft, crews, and support personnel deployed to Palmerola Air Base, Honduras, as part of a medical task force from the 41st Combat Support Hospital, which was home-based at Fort Sam Houston, Texas. They supported Operation AHUAS TARA II, which ran until February 1984. Delta Company, 326th Medical Battalion, then commanded by Maj. Morris Jackson, flew 843 sorties and carried 7,571 patients, including one soldier wounded by hostile fire. The unit also supported 135 medical civic action program missions and carried medical personnel and supplies to numerous remote locations. With improved speed, range, and communications capabilities, the aircraft proved its value as a MEDEVAC aircraft, especially in the recovery of patients from remote sites in hilly country. The only real challenge for the unit was the procurement of accurate maps, which were critical for navigation in the mountainous region.11

A few weeks after Delta Company deployed, Lt. Col. Jerry Foust arrived at Fort Campbell to assume command of the 326th Medical Battalion. He held a series of meetings with the aviation commanders to ensure that Delta Company was properly integrated into the overall division aviation plan. He also ensured that the battalion was integrated into the overall communications plan.

Foust’s position allowed him to fly and he quickly qualified in the new UH-60. He pushed his pilots to develop and maintain proficiency in the latest generation of night vision goggles (NVGs) because he realized there was a tactical advantage to flying and operating at night.
Foust also put increased emphasis on the training of his medics. He acquired extra funds for medics to acquire advanced cardiac life support and advanced trauma life support. Some medics became emergency medical technicians, making them some of the best medics in the Army and foreshadowing later changes to the overall Army medic program.

The battalion also gave the crew chiefs rudimentary medical training. Foust’s logic on this was simple: “It’s a second pair of hands and eyes. You get a patient who turns sour on you, you need help.”

While Foust commanded the battalion, Delta Company had a continuing commitment for MAST tasking. He gave launch authority to the company commander or his operations officer. When a mission was assigned, the pilot in command of the crew prepared to fly and then briefed the commander or operations officer on whether the mission was a go or not as per established risk criteria. Foust pushed for that system to be streamlined as much as possible and wanted his helicopters airborne in five minutes. That same requirement existed in combat, and he constantly urged his MEDEVAC commanders to integrate fully with the aviators so that it could happen. Foust commanded the 326th until July 1986, when he left to attend the Army War College at Carlisle Barracks, Pennsylvania. It was, he remembered, a “very successful tour.”

While at Fort Campbell, Foust also actively mentored his young officers and troops. One of those was a young lieutenant named Dave MacDonald, who graduated from James Madison University in Virginia in May 1983, and was commissioned into the MSC. After his basic course he was assigned as a medical platoon leader with the 2d Battalion, 5th Cavalry Regiment, 1st Cavalry Division, at Fort Hood, Texas. MacDonald wanted to fly, but had failed his flight physical when he indicated that he suffered from allergies. After 18 months at Fort Hood, he requested and was assigned to the 101st Division at Fort Campbell where he was placed in command of the clearing platoon of the 326th. He excelled in the assignment and impressed Foust, who subsequently assigned him to be the executive officer of Charlie Company of the battalion. He also asked MacDonald if he had any interest in flying. MacDonald told him about the failed physical. Foust asked him how he knew he had allergies. MacDonald replied that in the summer, he sneezed frequently and just marked on his physical form that he had allergies, but had no medical diagnosis to substantiate it. Foust urged him to retake the physical and not indicate allergies in his medical history. He did as instructed, passed the physical, and then reapplied for flight school. The request went in with Foust’s strong endorsement, and in 1985 MacDonald traveled to Fort Rucker to become an Army pilot.

**Doctrine**

*Field Manual (FM) 100-5, Operations, August 1982*

During the early 1980s, the Army continued its intellectual debate and modified its AirLand Battle concept laid out in FM 100-5 to emphasize that the Army had to be prepared to fight outnumbered and win the first battle of the next war. This
implied that the Army had to ensure that it had a trained and ready peacetime force. The Army rewrote the manual to focus on battle between massed armor forces as the heart of modern warfare, with the tank as the most important weapon in the army arsenal. Four basic tenets were presented: (1) initiative, (2) depth, (3) agility, and (4) synchronization, and would take part in three forms: (1) the deep battle, where U.S. forces would attack enemy elements before they attacked U.S. main force units; (2) the close battle, where those forces would openly engage; and (3) the rear battle, where the enemy would attempt to attack U.S. support elements, logistical units, and C2 centers.

To be successful the armor-centric forces had to be properly supported by the combat, combat support, and combat service support elements. Commanders were taught to seize the initiative, act faster than the enemy, conduct operations extending through the depth of the battlefield over extended time, keep the enemy off balance, and synchronize both ground and air power at the decisive point of battle.

This change also acknowledged advances in technology. AirLand Battle was redesigned and refocused to take advantage of those advances to allow U.S. forces to fight and win against enemies such as the Soviet Union and Warsaw Pact, with its large array of heavy divisions.15

*FM 8-35, Evacuation of the Sick and Wounded, December 1983*

In late 1983, the Army published an updated version of FM 8-35, but it was mostly a repeat of the 1977 version, with an almost total emphasis on patient movement tactics, techniques, and procedures. However, it did include a section on the proper loading procedures for the new UH-60A MEDEVAC aircraft.16

*FM 8-55, Planning for Health Service Support, February 1985*

Two years passed before the refocusing on AirLand Battle appeared in medical doctrine. The first changes, which were noticed in the rewrite of FM 8-55, embraced the new warfighting concept, but noted that, “The opposing forces on that battlefield will rarely fight across orderly, distinct lines. There may be little distinction between rear and forward areas.” It also recognized that to maintain the initiative, subordinate commanders had to act independently based on a clear knowledge of the commander’s intent. The importance of synchronization was highlighted as critical to providing maximum combat power through unity of effort.

The new version also reinforced the point that health service support (HSS) overall played a key role in maintaining combat power. However, the extended battlefield stretched HSS capability. This was especially true of MEDEVAC units because the distances that they flew were longer and potentially over enemy-controlled terrain.

The FM also slightly changed the planning factors for MEDEVAC units. The basis of allowance became one company per four divisions or per task force as re-
quired. Detachments became allotted as two per division, one per separate brigade task force sized element, or one per hospital center.\textsuperscript{17}

**Operations**

*Domestic Disaster Response*

In January 1982, an Air Florida Boeing 737 crashed on takeoff in a heavy snowstorm at National Airport, just south of Washington, DC. It slammed into a major bridge over the Potomac River, killing 78 persons and causing a huge traffic jam. Civilian and military units from throughout the region responded with emergency help. The 400th Med Det (HA), an Army National Guard unit from Washington, DC, joined the recovery force. Crews launched in three of their UH-1s to provide on-scene support, search for survivors in the frigid river, and evacuate survivors to local hospitals.\textsuperscript{18}

*Duty in the Sinai*

In early 1982, an 11-nation task force designated the Multinational Force and Observers (MFO) was created and deployed to the Sinai Peninsula to enforce the cease-fire between Egypt and Israel negotiated by President Jimmy Carter at the Camp David Peace Accords in 1979. The MFO included a U.S. Army infantry battalion, and a support organization, the 1st U.S. Army Support Battalion (1SB), which included an aviation company. Each parent division supplying the infantry battalion was expected to provide the aviation assets for the 1SB on six-month rotational tours.

By 1987, planners realized that the operational environment was too demanding for rotational pilots, and the Aviation Company was converted to a permanent TDA (table of distribution and allowances—literally, units permanently assigned to a specific location) unit, equipped with 10 UH-1 helicopters, and assigned 100 personnel, including medical specialists. Crews were assigned for one-year tours.

The UH-1s were adorned with a white and orange paint scheme for easy international recognition, and the pilots used the call sign “Nomad.” One of their assigned missions was MEDEVAC, and the unit had flight medics attached to it for that mission. Given the genesis of its creation, the activities of the “Nomads” were very politically sensitive. Yet they provided support to all of the various national task forces assigned to the MFO.

The aviation company was split between the two main camps: (1) North Camp at El Gorah, Egypt, just a few miles west of Gaza; and (2) South Camp, located at the far southern tip of the Sinai near the city of Sharm El Sheik.

Most missions were routine. The MFO teams were spread out over the entire expanse of the Sinai, and aviation support was critical to the mission. The Nomads had one of the highest operational tempos of any aviation unit in the Army, with some of the 1969 vintage aircraft logging on average, 2,100 hours of flight time a year.\textsuperscript{19}
Aviation, a New Branch for the Army

Organization

Determining the Need

On 12 April 1983, John O. Marsh Jr., Secretary of the Army, signed the necessary documents approving Army aviation as a separate branch of the service. This event was the end result of tireless efforts on the part of numerous individuals, multiple studies, and the lessons of war. The long conflict in Vietnam conclusively showed the value and importance of tactical aviation. Army aviation grew almost exponentially during that conflict, and the community of aviators to fly all of those aircraft tripled. Aviation showed that on its own, it was a major combat power that no longer needed to be inextricably tied to the ground units.

During that conflict, all officers who wanted to fly had to first serve in their assigned branch, such as infantry, artillery, etc. Many of those officers had advanced in rank and were having difficulty maintaining aviation skills while serving in branch-directed but nonaviation assignments. Additionally, in 1974, Congress passed stringent requirements concerning aviators drawing aviation incentive pay. To address these challenges, many of the Army’s senior aviators discussed the idea of a separate branch for aviation. Additionally, they believed that aviation was unique enough that it needed its own branch to manage the aviators and provide them a structured environment in which they could pursue a full Army career. This discussion made its way to the Army Chief of Staff, Gen. Bernard Rogers, who was personally aware of the problem because his son was an Army aviator and infantry captain. Rogers directed a study, but—more importantly—queried all of his other four-star generals. Although the generals acknowledged the problems faced by the aviators, they were opposed to a separate branch. Rogers chose not to act, but sent a field message addressing “Commissioned Aviator Career Management.” The message said that providing a viable career pattern for commissioned Army aviators required changes to the Officer’s Personnel Management System. Specialty Code (SC) 15 became an entry specialty. New officers were accessed directly into that SC or SC 71, aviation materiel management, SC 15M, military intelligence, or SC 67J MSC. Officers were still required to enter a specific branch. Those desiring the SC 15 were required to select either Infantry, Armor, Field Artillery, or Air Defense Branches. Those selecting SC 71 had to select the Transportation Corps. Those selecting SC 15M were required to select Military Intelligence. Those selecting SC 67J went into the MSC.

In the summer of 1979, Rogers went to Europe to serve as the Supreme Allied Commander of the North Atlantic Treaty Organization and Commander in Chief, U.S. European Command. Gen. Edward Meyer became the Army Chief of Staff. He was also aware of the issue but was unable to address it until 1981. While at Fort Rucker for a conference, he directed Maj. Gen. James H. Merryman, the Commander of the Aviation Center, to develop an aviation branch proposal. Merryman contacted the commander of the Training and Doctrine Command, Gen. Glen K. Otis, for assistance. Otis directed a Training
and Doctrine Command Review of Army aviation that conducted more than 600 interviews, 39 of which were with general officers, and reviewed 22 different major studies done on Army aviation. After the exhaustive review, Training and Doctrine Command recommended that an aviation branch be established. Meyer approved the recommendation on 27 January 1983 and forwarded it to Secretary Marsh, who concurred and signed the enabling documents.

Meyer, in his approval, also directed the Deputy Chief of Staff for Personnel to determine the branch composition in coordination with several other directorates and commands, to include the Surgeon General. This led to some spirited debates because many within the MEDEVAC community believed that this was another attempt by the aviation community to absorb MEDEVAC under their control.

**Include MEDEVAC?**

Scofield, who served as the Aviation Consultant on staff of the Office of The Surgeon General, attended an Aviation Branch Composition meeting in the office of Maj. Gen. Norman Schwarzkopf, the acting Deputy Chief of Staff for Personnel, on 7 April. After the meeting, he noted in a Memorandum for Record that “…all aviators (SC15, 67J and 71s) [will] be included in the Aviation Branch.”22

In support of this position, Lt. Gen. Fred K. Mahaffey, Deputy Chief of Staff for Operations and Plans, argued that “Aviation effectiveness can be better realized if every mission element comes under the umbrella of coordinated doctrine, tactics, training, and personnel management. I believe this to be the overriding issue in this controversy.”23

Lt. Gen. Bernard Mittemeyer, The Surgeon General, who passionately nonconcurred, did not object to the creation of an aviation branch, but he did object to the inclusion of the 67Js. Mittemeyer and Scofield had some very earnest discussions about it. They concurred that it would bode ill for the 67Js from a career progression perspective. They also felt that the pure aviators did not understand the imperative of immediate response to wounded soldiers.24

Mittemeyer also had strong personal feelings about MEDEVAC based on his own experiences. In 1968–1969, he commanded the 326th Medical Battalion, 101st Airborne Division, in Vietnam when the 50th Med Det (RA) inactivated and became the air ambulance platoon of his battalion. In a response to Lt. Gen. Mahaffey, he said:

I do not believe the Army staff fully understands the working relationship that exists between the medical and aviation communities. ...The basic flying skills are common among all aviators, regardless of branch. In addition, many of the tactical concepts are essentially the same, e.g., Nap-of-the-earth flight, Night Vision Goggle operations...What is different is the fact that the aeromedical [67J] is an integral part of a medical evacuation system just as is the ground ambulance. The Aeromedical evacuation officer is more than a flyer. His training, both medical and aviation, professional career development, and experience, combine to provide the AMEDD [Army Medical Department] with a highly qualified officer who is an integral part of the finely tuned equation of evacuation, treatment, hospitalization, and command and control. What we are asking is to be allowed to continue a proud, combat proven, and highly efficient system that supports our soldiers the way they deserve to be supported.25
Schwarzkopf carefully reviewed all of the opinions offered. In his response to the Army Chief of Staff he wrote:

I am satisfied that the recommendation of the [Surgeon General] is in the best interests of the Army and will best ensure continued satisfaction of the aeromedical mission. The [Surgeon General] argues persuasively that the commissioned officers assigned to aeromedical units must be professionally developed consistent with AMEDD career programs. Further, the creation of an Aviation Branch will help us correct deficiencies in the conduct of combat related aviation operations. However, the medical evacuation mission is well executed. Therefore, changes to medical evacuation procedures and professional development are not warranted at this time.26

Gen. John Wickham, the Vice Chief of Staff, supported Schwarzkopf. On 25 April, Meyer approved the personnel composition of the branch, which excluded MSC (67J) aviators. Then, on 6 June, he signed the order directing the centralization of proponent responsibility for Army aviation at the U.S. Army Aviation Center in Fort Rucker and issued the Aviation Branch Implementation Plan.27

Aviation Branch Implementation

As part of the Aviation Branch Implementation Plan, the Aviation Branch developed a very comprehensive professional development plan for the aviation commissioned officer. The plan represented a challenge for the Surgeon General because he needed to ensure that his 67Js were able to maintain equivalency from an aviation standpoint while also developing his or her Army Medical Department (AMEDD) potential. To address this thorny issue, he directed the Commandant of the Academy of Health Sciences (AHS) at Fort Sam Houston, Maj. Gen. Robert H. Buker, to modify as necessary the development track for 67Js.

The Commandant formed a working group to review available training and anticipated career assignment flow and to develop a proposal. All newly commissioned MSC officers who desired to become pilots would attend the AMEDD Officer Basic course. Then they would serve in a troop leadership position in a field medical unit for a maximum of 18 months. Their next assignment would be the Initial Entry Rotary Wing Training at Fort Rucker, followed by a three-week Medical Training Course for AMEDD Aviators, also at Fort Rucker.

From there they would be posted to a MEDEVAC unit for operational duty. At about the 4–7 year point, the 67Js would then be sent to the 20-week Aviation Advanced Course, again at Fort Rucker, followed by a shorter six-week AMEDD Aviator Advanced Course at Fort Sam Houston. This educational track highlighted the obvious fact that the 67J officers were effectively dual-branched officers.28

Senior officers within the MEDEVAC community were pleased that they avoided consolidation. Few expected such efforts to cease. Many remembered the repeated attempts in Vietnam. One long-timer, Col. Doug Moore, then serving as
the Executive Officer to the Surgeon General, believed that the weight of opinion was slowly moving toward consolidation and that eventually the MEDEVAC community would become part of Aviation.29

Not too long after the new branch was set up, staff officers visited the MEDEVAC units to explain the dramatic changes coming to Army aviation. Lockard served with the Flatiron Detachment at Fort Rucker then and remembered the visit. After graduating from flight training, she joined the detachment and became a well-qualified UH-1 aircraft commander with several hundred hours of flight time gained on range accident missions and MAST.

Lockard initially had some interest in transferring. She listened to the presentations carefully. The briefing officer explained the projected growth of the branch and potential opportunities, and then asked if any of the MSC pilots would like to transfer to aviation. She pondered it but declined remembering that, “I liked the Army Medical Department and the mission we were doing. I felt … [the] Medical Service Corps was an opportunity for me to be in a field that was fulfilling, saving lives, and we were unique.” Instead of changing branches, she received orders to Fort Lewis, Washington, to join the 54th Med Det (RA).30

Medical Evacuation Battalions?

While serving as the MEDEVAC consultant to the Surgeon General, Scofield attempted to make two more significant changes. He tried to develop an interest in reactivating the medical evacuation battalions that had been created toward the end of the Vietnam War. The intent was to create a unit that provided direct command and control to the MEDEVAC detachments and companies for better coordination and medical control. He also postulated that the large 25-ship companies should be broken up and consolidated with all of the individual detachments to form 15-ship companies with a strong maintenance and logistics support package to make them self-sustaining. A predecessor in the consultant position, Lt. Col. Don Retzlaff, had tried to sell the idea back in the mid-1970s, but had been unsuccessful. While Scofield’s proposals met the same fate, his ideas were heard by other rising officers and would find a more favorable reception in the not too distant future.31

One of the individuals who became aware of Scofield’s ideas was Maj. Bill Thresher. Completing his tour at Fort Sill, Oklahoma, in 1981, he had been posted to Fort Sam Houston to work in the Military Science Division of AHS. He lectured in both the MSC basic and advanced courses, and mentored many young MEDEVAC officers as well as taught the basics of MEDEVAC to a generation of medical officers in general. On a special project he became the lead action officer for the MEDEVAC portion of a Medical System Program Review (MSPR) directed by Maj. Gen. William Winkler, the AHS commander. Winkler believed that the AMEDD was very well organized to refight World War II, but not properly organized to support the evolving Army doctrine.

Thresher attacked the project with gusto. Over a six-month period, he and a team of other specialists conducted a lot of historical research. Recalling Scofield’s
Thresher specifically looked at the operations of the 58th and 61st Medical Battalions during the Vietnam War. For a period of about 18 months in 1970 and 1971, both units acted as provisional medical evacuation battalions. They took operational control of several MEDEVAC units, ground ambulance units, and some specialty medical units, and operated them as an integrated evacuation system. The initiative showed promise, but both units were inactivated as part of the overall withdrawal from the war and never again activated. Based on the positive data that he found, Thresher led several small war games based on a European scenario, and concluded that the concept of a medical evacuation battalion could provide effective command and control of MEDEVAC assets in support of AirLand battle. Additionally, Thresher’s studies showed that the optimum size for MEDEVAC units was 15 aircraft in a company-sized unit with unit level maintenance versus the super 25-ship companies and six-aircraft detachments currently in existence. The companies would be allocated one per division in a direct support role and two per corps in a general support role. The battalions would be allocated one per corps to control and coordinate the companies and allocated ground ambulance companies into an integrated evacuation system to perform all of the classic MEDEVAC functions.

When completed, Thresher wrote his report on a newly purchased Apple IIc computer and briefed his findings to Winkler. In July 1985, Winkler took the entire MSPR briefing to the Gen. Maxwell Thurman, the Army Vice Chief of Staff. Thresher gave the MEDEVAC portion. Thurman approved the changes. They reshaped the AMEDD’s operational concept for the modern battlefield.32

Europe

That same summer, after being promoted to colonel and serving an advisory tour in Saudi Arabia, Col. Jim Truscott returned to Germany to command the 68th Medical Group. It was assigned to the Corps Support Command of the V Corps, then commanded by Lt. Gen. Colin Powell, who took a strong interest in his health service support.

Upon taking command, Truscott tried to have at least one of the MEDEVAC units in the theater assigned to the 68th. Their higher headquarters, the 7th MEDCOM, disagreed. Under operations contingency plans, one or more MEDEVAC units could be attached to the 68th for operational control. Frequently they worked and trained directly with the 68th. Truscott, having learned from his earlier experiences, developed contingency plans with Corps aviation support and logistics units to ensure that when the MEDEVAC units deployed to the field with the group, they would have the necessary support to operate in support of the medical mission.

Truscott also used his influence to get permission for the MEDEVAC units to use “Dustoff” as their radio call sign. He was a strong believer in the value of heritage and wanted to share that with the younger pilots. Truscott was also still a rated Army aviator. However, he had long since passed his required flight “gates” necessary to continue to get flight pay and rarely flew. As the commander of the
68th, he visited the MEDEVAC units occasionally and was usually successful in “sniveling” a flight or two where the younger officers and warrants allowed him to touch the controls. He also mentored his young officers and encouraged those who were interested and medically qualified to apply for flight school and duty as MEDEVAC pilots. One young officer serving in the 68th, 2d Lt. Randall Anderson, took his advice and became a MEDEVAC pilot.33

**MEDEVAC Proponency**

To ensure proper coordination between the AMEDD and the new Aviation Branch, the Surgeon General directed the creation of a Medical Evacuation (Air/ Ground) Proponency Action Office (MEPAO) at Fort Rucker, with an MSC colonel as its director. However, the MEPAO actually was part of the overall AMEDD Proponency Office located at Fort Sam Houston. It would ensure that the AMEDD remained abreast of current aviation concepts, training, doctrine, combined arms tactics, and force structure developments. Its stated objective was to better prepare medical evacuation personnel for war as highly trained members of the combined arms team, with the clear recognition that medical evacuation was an integral part of the health care delivery system in both peacetime and combat.34

With the approval of the MSPR in July 1985, Col. Eldon Ideus, the initial director of the MEPAO, and his deputy, Lt. Col. Bill Kruse, were very proactive in advocating these positive changes. They took Thresher’s proposals for the evacuation battalions and the standardized 15-ship MEDEVAC companies and developed the overall doctrinal concept of MEDEVAC support for AirLand Battle. In support of these changes, unit actions occurred almost immediately. The first battalion to activate for this role was the 52d Medical Battalion (Evacuation) in Korea in 1985. As it activated, it took command of the 377th Med Co (AA).35

The MEPAO was collocated at Fort Rucker with the U.S. Army School of Aviation Medicine. That same summer, the U.S. Army School of Aviation Medicine started a specific course (91B2F) to train the medics assigned aboard the MEDEVAC helicopters. Heretofore, all flight-specific training for the medics occurred at their units. This move relieved the units of that training requirement and standardized the training across the entire service.36

Within a few years, the MEPAO became the Medical Evacuation Proponency Division (still at Fort Rucker). Its director was also formally assigned the responsibility of advising the commandant of the AHS and the Surgeon General on all medical evacuation proponency matters.37

In August 1985, 1st Lt. Dave MacDonald arrived a few weeks early at Fort Rucker for flight school and was assigned in casual status to the MEPAO, where he met Ideus and Kruse. He performed mundane office work that also allowed him to observe some of the larger issues affecting the MEDEVAC community as Ideus and Kruse struggled with the changes sweeping the community from both the medical and aviation perspectives. He then attended the flight course and graduated in May 1986.
MacDonald’s follow-on assignment took him to the 377th Med Co (AA) in Korea. That unit was now equipped with UH-60s, and MacDonald was held over at Fort Rucker for aircraft transition. While waiting for that course, he went across the base and flew UH-1s with the Flatiron detachment. When he subsequently finished his UH-60 qualification, he departed in December 1986 for Korea.

**Females**

To reflect the increasing role that women were assuming in MEDEVAC, the 24th Med Co (AA) of the Nebraska Army National Guard claimed a first. While encamped at Fort Chaffee, Arkansas, for summer training in 1986, the unit launched an all-female crew in support of ongoing training operations. In command was the third platoon commander, 1st Lt. Jan Harrington, a student at the University of Nebraska at Omaha. She was assisted by WO1 Joanne Votipka, the only other female pilot in the unit. The crew chief was Sgt. Linda Plock from Lincoln. She had also set an individual record of sorts by becoming the first female crew chief in 1973. The medic was Sgt. Laura Mruz, also a student at the University of Nebraska at Omaha. Somewhat taken aback by the press interest in their exploit, Harrington said, “I thought it was great. We had a great flight and crew.” All had flown with one another, but never all as one crew. Asked about the role that the women were playing in the unit, the commander, Maj. David Meyers said, “Any position in the company, including mine, can be filled by a woman. I see no problem with having significant numbers of women in our unit.”

Capt. Pauline Lockard did not find the same reception when she arrived at the 54th Med Det (RA) at Fort Lewis. She quickly adjusted to life in the beautiful northwest and loved the flying. The unit had a heavy MAST commitment, and some of the patients picked up at automobile accidents were severe. Many missions were mountain recoveries and required challenging hoist operations. The unit also manned a detachment at the large Army training center at Yakima, where soldiers were injured in field maneuvers on a regular basis.

While at the 54th, Lockard served as the operations officer. She developed a keen appreciation for what her helicopters and crews could and could not do as they responded day and night, in good weather and bad, over the mountains, plains, and bays of the area for all manner of calls. It was, she said, “an enriching experience.”

She also experienced some “gender challenges,” noting that:

> We had a lot of Vietnam type of guys who were not used to things, used to women being in their aircraft. There is an aviator I used to fly with. He said I was the best smelling aviator he ever flew with since he’s been in Vietnam. I took that as a compliment rather than take it as a sexual harassment comment.

> I literally went eye to eye with anybody who just challenged me in any type of discriminatory visual type of mode. A little wink. Especially a junior enlisted or something like that; I would challenge that on the spot. … I just did my job and if issues came up, I faced them. It was draining, but I had to get the work done, and I had to keep a level head.
Acutely aware that she was one of the first females in her field, she also was quick to mentor other female soldiers, noting that:

I spent many, many, many hours talking with other women who were either thinking about coming into the service or specifically aviation. My biggest recommendation was “Just be yourself but also maintain composure as much as possible. If you are going to break down, do it somewhere else. Wait—go for a really long run; do something, whatever. But you have to maintain your composure.”

It was advice that she needed many more times in the future. After two years in the 54th, she was selected to command the 423d Medical Clearing Company at Fort Lewis. This was a nonflying position, but it gave her an early opportunity to command. The unit also had a high ratio of women. Slots for women were still restricted then, and as more enlisted, they were increasingly focused in medical units. Lockard had to point out to her superiors that, in general, women did not have the same physical strength as men and her unit needed to maintain a balance of men and women to perform its wartime taskings. She took those taskings very seriously by stressing field training and physical fitness for all of her soldiers.

Operations

MAST

After completing a three-year tour of duty in Hawaii where he commanded a ground medical unit, served as the flight operations officer of the 68th Med Det (RA), and flew numerous MAST missions, Capt. Dan Gower was transferred to Fort Hood to command the 3d Platoon of the 507th Med Co, equipped with six UH-1Vs.

When he reported to the platoon in August 1981, he found a very active unit that maintained three aircraft on alert at all times and received a steady call for recoveries on the huge training ranges. The collocated 1st Cavalry and 2d Armored Divisions on the base had received new M1 Abrams tanks and M2 Bradley infantry fighting vehicles. The training load was heavy, and there were many accidents.

The platoon was also a MAST unit, and those calls arrived at a steady rate. Gower was just a year into the assignment when the unit flew its 1000th MAST mission, which drew some local press coverage.

Gower also found a downside to MAST. The previous commander had allowed some of his officers to use the constant MAST commitment as an excuse not to develop a unit training plan or significant safety program. Additionally, the unit failed its last Aviation Resource Management Survey. Gower determined that changes were necessary.

Working with several of his key unit leaders, such as his safety officer CW4 Ron Crotty, he moved swiftly to correct deficiencies. He told his warrant officers, “You are in charge of this program. You have responsibility and you have authority to do your job. Let’s do the best we can.” Then he let them get to it, and
checked that it was getting done.

Primary responsibilities previously had resided mostly with the commissioned officers, and the warrant officers were viewed merely as pilots. By expanding responsibilities among all of the officers (warrant and commissioned), Gower expanded the pool of expertise to manage and direct all of the relevant programs required to meet all of the aviation-related regulations.33

Gower also pushed all of his pilots to achieve and maintain instrument flight proficiency. He was impressed with the performance of one crew in particular who launched one evening under visual flight conditions to transfer a patient from Fort Hood to a hospital in Waco. Once airborne the weather closed in and the crew had to switch to instrument procedures without mishap. Other units had lost aircraft and crews under similar conditions.

Gower attended one of the first aviation risk management classes offered by the Army. None of his local superiors were aviators, and as the senior aviator responsible for flight operations, he needed to be as trained and qualified as possible. He wanted to find that best balance between mission imperative and the laws of flight physics. He also flew as much as he could, believing that leadership was also necessary in the cockpit. He established and displayed guidance and limits for his crews, and later remembered that:
I saw that in the accidents that happened in the ‘80s ...the drive to save a life overshadowed the skill necessary to accomplish it under the conditions that the aviators were facing. We overcame that to a certain extent with this cockpit resource management concept... My safety officer and I took this opportunity to instill in the pilots what the commander thought so that they knew where their limits were and were comfortable turning around, rather than overstep- ping those limitations.⁴⁴

Also concerned that his troops were using MAST to avoid significant tactical training, he held local tactical training exercises and directed his troops to orga- nize and run a field exercise at Fort Hood, which included elements from all of the platoons in the 507th.

Gower served three years with the platoon and oversaw a total turnaround in the unit. The unit passed its next Aviation Resource Management Survey, and by the end of this tour, were the recipients of the Army Forces Command Commander’s Aviation Safety Award. He left the 507th in 1984 for duty at Fort Rucker with the U.S. Army Aviation Research Lab. He never returned to MEDEVAC duty. He later fondly remembered his time with the 507th, recalling that:

During the ‘70s and ‘80s we fought the battle of the MAST program. For those who captured it, it was good crew training. For those who wanted to hide behind it, it was a way to just do your mission and not prepare for war. And I saw both of those. I saw that in the unit I took over at Fort Hood; I saw that a little bit in the unit in Hawaii. You could hide behind the MAST mission, do lots of good stuff, get lots of press, but you weren’t really ready to go to war. And you really had to do both, but all through that, we also learned during those times that bravery without skill and thought process often was the difference between being a hero and being a martyr.⁴⁵
Like most from his generation of MEDEVAC crewmembers, Gower knew that MAST was their war. They engaged it with the same determination and professionalism that was the hallmark of their predecessors in Korea and Vietnam.

Another young trooper who flew his share of MAST missions was 1st Lt. Scott Heintz. After graduating from flight school in late 1981, he reported to the 498th Med Co (AA) at Fort Benning, Georgia. Assigned as a flight platoon leader, he began his mission checkout and immediately realized how much he had to learn about flying. Again, he encountered stalwart mentors who had the patience necessary to mold a promising young officer. CW2 Huey Driggers and CW2 Bryant Harp took him through his required qualification syllabus, gave him his tactical training, and taught him the nuances of flying the UH-1. The unit had a continuing requirement to cover training sites for the Ranger School in northern Georgia and the panhandle of Florida.

The 498th was also heavily committed to MAST, and Heintz sat alert for and launched on numerous missions. They covered the gamut from patient transfers to point-of-injury recoveries at automobile crashes. He saw the value of the training for his troops.

In 1984, Heintz completed his assignment with the 498th and returned to Fort Sam Houston for the MSC advanced course. He encountered another group of MEDEVAC veterans who again provided him with timely and valuable mentoring. His class received a presentation on the establishment of the Aviation Branch. The briefing officer extolled the virtues of the change and the assignment opportunities that would develop. His pitch included an implicit invitation for the MEDEVAC pilots to switch over. Maj. Frank Novier and Maj. Merle Snyder were serving as instructors and patiently helped the young officers like Heintz to work through the issues and realize that they needed to stay where they were.46

WO1 Bob Mitchell was another young pilot who logged many MAST missions. He had entered the Army through the warrant officer program in late 1982 after playing football for four years at the University of Toledo in Ohio. Mitchell already had his pilot’s license and wanted to learn to fly helicopters. After attending the flight course at Fort Rucker, he went to the 82d Combat Aviation Battalion at Fort Bragg, where he flew OH-58s as a scout pilot for two years.

In 1985, his unit transitioned its lift company to UH-60s, and Mitchell was one of the first to retrain for it. After he was qualified, he received a call from Capt. Ken Crook, the commander of the 57th Med Det. The 57th had also recently converted to UH-60s, and it needed pilots. Crook recruited him for 60 days of MEDEVAC duty.47

Mitchell was immediately on the flight schedule, flying MAST and training range recovery missions. After a few weeks, Crook saw that the young warrant was a very capable soldier and made him the assistant operations officer. Crook also encouraged him to apply for a direct commission into the MSC. Mitchell did so. A few months later when he received his commission, he also received orders assigning him to the 57th. He subsequently served in the unit for three years, qualifying as a pilot in command, and then served as a section leader and assistant operations officer. He also qualified as an instructor pilot on the UH-60, which
was a rare accomplishment for a detachment-level MSC pilot.

Leaving the 57th in 1989, Mitchell then attended the aviation officer’s advanced course at Fort Rucker. He met many officers with whom he would later serve on subsequent tours. After completing that course, his experience as both a warrant and commissioned officer pilot led to him staying at Fort Rucker and serving as the Chief of the Utility Branch of the Directorate of Evaluation and Standardization at the Aviation Center. He was the sole MSC pilot in that organization.

Mitchell’s office was responsible for worldwide standardization of Army flight procedures. Traveling to almost every flying unit that the Army possessed, he saw firsthand the strengths and weaknesses of the Army aviation and MEDEVAC communities. He also saw how much the MEDEVAC units relied on aviation units, especially on deployments. Yet the commanders seemingly refused to forge the necessary relationships at home base to facilitate coordinated operations. He sensed that many MEDEVAC officers held an elitist attitude that in some cases led to a palpable schism between the MEDEVAC and aviation communities at some bases. He remembered that:

When I was with [the standardization and evaluation team] going around the world inspecting all of the MEDEVAC units, inspecting all of the lift units, inspecting all of the Chinook units, … there was a common theme out there. “MEDEVAC? Yeah, they are on the other side of the ramp and we don’t know who they are. …They don’t want to play.”

Mitchell concluded that it only made intuitive sense for MEDEVAC to eventually become part of aviation. He saw the reasons on his inspection trips. When he expressed those opinions, though, he received a lot of negative feedback from other MEDEVAC guys, who felt that he was a maverick and “smoking dope.”

**MAST Continues to Expand**

In the summer of 1986, another MEDEVAC unit, the 229th Med Det (RA), was activated at Fort Drum, New York. It had an area mission and supported both the tactical units and the garrison in general. In addition, its commander immediately began scripting the paperwork necessary to provide MAST service for the local community.

In October 1987, the 229th’s MAST request was approved, and it assumed MAST alert duties as the 25th unit to do so. Since operations had begun in 1970, the combined units had flown more than 78,000 hours on more than 35,000 missions that had transported more than 37,000 patients, medical personnel and equipment, blood, and organs for transplant. More than one-third of the sorties had been at night, and almost one-half of the missions involved moving patients from the point of the accident or injury to a major medical facility. MAST was proving to be one of the most successful and durable programs of military and civilian cooperation. Each community benefited in so many ways from the service. However, the missions allowed the MEDEVAC units locally to practice their military purpose. Except for the added exigencies of combat, the needed skill sets
were the same. De facto, MAST was a full-time training program for the military crews, just as Spurgeon Neel had foreseen many years earlier.

Strong bonds developed between the units and the communities they supported. MAST now covered parts of 19 states and constantly received favorable press coverage. It was a public relations gold mine for the Army. Perhaps more importantly, it allowed the people to see the tangible results produced at no extra cost to the taxpayers. Yet it was the soldiers who made it happen. Their selflessness and dedication was visible to all.51

The concept also spread into the civilian side of aviation, just as originally planned. By 1988, private companies supplied air ambulances at 45 hospitals nationwide. One of the chief protagonists of this spread was Craig Honaman. A former MEDEVAC pilot with the 57th Med Det (RA) in Vietnam, Honaman had been awarded the Distinguished Flying Cross and 21 Air Medals for his service there. After leaving the Army, he became a hospital administrator and was deeply involved in the development of aeromedical standards and safety programs at both the state and federal level. Honaman also directly led efforts at two different hospitals to establish air ambulance services for each. In recognition of his accomplishments, he received the MBB Golden Hour Award presented by the MBB (Messerschmitt-Boelkow-Blohm) Helicopter Corporation in 1988.52

Tactical Training – Operation BRIGHT STAR

In June 1982, Maj. Art Hapner arrived at Fort Bragg to take command of the 57th Med Det (RG). The unit was beginning its transition to the new UH-60A, and he attended upgrade school en route. As the unit worked through the transition, he was notified that they would deploy to Egypt in the spring of 1983 with elements of the 82d Airborne Division to participate in Operation BRIGHT STAR, a large combined training exercise there.

Hapner was impressed with the Black Hawk, and in combination with other MEDEVAC and aviation unit officers, he formulated a plan to self-deploy their aircraft from Fort Bragg to Egypt. They devised a concept of operations and supporting training plan and briefed it all the way up to the Vice Chief of Staff of the Army. The plan called for the helicopters to fly up the east coast of the United States, to Newfoundland, over to Greenland, Iceland, Scotland, down through Germany, Austria, Italy, Greece, and then across the Mediterranean to their deployment bases in Egypt. The challenging part was crossing the Mediterranean. It was the longest leg of the journey and appeared to be just too far. They approached the U.S. Navy Staff for support and were told that an aircraft carrier would position itself so that it could be used as a mid-point refueling stop.

The total plan was approved, and Hapner readied his unit. Literally within hours of departure, the commander of the XVIII Airborne Corps informed him that a tense situation was developing with Libya and the self-deployment mission had to be cancelled. However, the deployment to BRIGHT STAR was still on, so Hapner had to get his aircraft up to Dover Air Force Base (AFB), Delaware, for packing and shipment to Egypt.
The 57th flew in support of the exercise until August, and then it returned home to Fort Bragg. Subsequently, it took three more weeks before all of their aircraft were returned. The desert environment was hard on the new aircraft, and all needed repair. The maintenance troops worked overtime to make necessary repairs because of events occurring in the Caribbean that were being watched very closely by U.S. leaders.\textsuperscript{53}

\textit{Grenada – Operation URGENT FURY}

In October 1983, for the first time since Vietnam, a sizable U.S. Army task force departed home shores for a major contingency operation to the Caribbean island of Grenada, located approximately 1,200 miles southeast of Miami, at the southern end of the Lesser Antilles.

A communist style dictatorship had taken over the nation. It had established a strong relationship with Cuba, and a contingent of Cuban military advisors and an engineering unit were dispatched to build a 12,000-foot runway and airfield that would be used by Soviet long-range aircraft. Grenada was also home to St. George’s Medical Center, a prominent medical school that enrolled more than 800 American students. In early October, leftist opponents killed the Prime Minister.
President Ronald Reagan and his senior leaders watched the situation closely. Reagan had taken office on the heels of the nightmare experienced by his predecessor, President Jimmy Carter, when the Iranians had seized 52 American hostages in November 1979. He wanted no replay of that debacle. Sensing that the American students were at risk of becoming hostages, he directed that American forces invade.

On the early morning of 25 October, the American joint task force descended upon the island. Two battalions from the 75th Ranger Regiment jumped onto the Point Salines Airfield followed shortly by soldiers from the 82d Airborne Division. Concurrently, special operations forces and U.S. Marines from the 2d Marine Division assaulted other island locations. Their assigned tasks were to evacuate U.S. citizens, neutralize any resistance, stabilize the situation, and maintain the peace. An aviation task force from the 82d Airborne Division also deployed to the island of Barbados, 160 miles to the northeast, and supported the operation from there. Combat operations only lasted a few days. All of the medical students were evacuated. An estimated 70 Cubans and Grenadians were killed and 394 were wounded. Of the U.S. forces 19 were killed and 115 were wounded.54

In support of the operation, the 57th Med Det (RG) was alerted for deployment. Hapner received the phone call on the evening of the 24th. He recalled his unit, and by early the next morning, he had three of his aircraft at Pope AFB, next door to Fort Bragg, ready for deployment aboard Air Force cargo aircraft. That day, the aircraft, equipment, and a detachment of unit personnel were loaded and flown to Barbados, where they joined up with the division’s 82d Combat Aviation Battalion.

The next morning, all three aircraft were ready, and the unit detachment flew forward to Point Salines Airfield, linked up with the 307th Medical Battalion, and initiated MEDEVAC operations. Within an hour, their first task was to pick up a wounded Marine. Fortunately, MEDEVAC calls were few, and in the first month, the 57th only flew about 25 missions. They supported recovery operations for two downed aircraft and recovered 12 injured from a fratricide incident when a U.S. Navy A-7 strafed a friendly position. Missions were also flown to support the local populace. Several pregnant Grenadians were delivered to hospitals. One young boy, injured by a grenade, was MEDEVACd.55

When Hapner and his troops landed at Point Salines, there was no fuel available so he had his helicopters land aboard the two U.S. Navy helicopter carriers deployed for the operation. They also delivered several patients to the USS Guam, and overall, provided the bulk of MEDEVAC capability because no ground MEDEVAC units were deployed. The total medical package deployed was not sufficient for the operation. Fortunately, the crews in the 57th were trained to land aboard ships and were able to move the wounded to those facilities.56

The single biggest problem was the lack of communications connectivity between the different parts of the joint task force. When the 57th arrived at Point Salines, it had to coordinate ad hoc with local units to develop a crude communications plan.57
The 57th element stayed until February, supporting the stabilization operations. Then the detachment and its aircraft and equipment were returned to Fort Bragg.  

**Europe**  

In Europe, the MEDEVAC units were mostly still in their previous locations. The 421st Med Co (AA) was still at Nellingen with its 1st and 3d Platoons. Its 2d Platoon was at Schweinfurt, and its 4th was at Darmstadt. The 421st now had assigned to it a total of 49 helicopters and 321 personnel and served as the controlling headquarters for Dustoff Europe under the 7th Medical Command. It still had assigned to it the 15th Med Det (RA) at the Grafenwöhr training complex; the 63d Med Det (RA) at Landstuhl and primarily performing intratheater transfers; the 159th Med Det (RA), which had relocated north to Garlstedt to provide MEDEVAC support for a growing U.S. Army presence in that area; and the 236th Med Det (RA), still at Augsburg. Effectively, the 421st functioned as a battalion.  

During 1982, 421st units flew more than 8,000 mission flight hours performing MEDEVAC duties to include support for the annual REFORGER exercises. Starting in 1983, the 421st and subordinate units began to transition to the new UH-60 helicopters. The conversion presented the unit with a huge training challenge, yet the units maintained crews on continuous alert to provide all weather support to the soldiers and dependents in the theater and their German neighbors.  

They also maintained a forward operating location at the large Hohenfels maneuver complex southeast of Nürnberg. Crews from the various units rotated through for periods of up to a week to provide 24-hour coverage for troops on the field. Crews prepared their own meals or would occasionally order pizza or other fast food from local franchises. By tradition, new troops paid when they had their first patient mission. Scrambles were rare. Occasionally their efforts would save a life. Capt. Randy Maschek and his crew were launched one evening to recover a soldier who had fallen asleep in a tank. The soldier had been sleeping next to a leaking battery and breathed in hydrogen sulfide fumes from it. They delivered him to a hospital before any permanent damage was done. Another crew picked up a pregnant woman who had gone into labor. She was full-term and had some complications that required her movement to a specific hospital. As they flew her to it, she went into labor. The baby came rapidly. As they touched down the baby was delivered. Medics were waiting and quickly took the mother and child into the delivery room. The crew shut down the aircraft and went into the hospital to check on them both. Mother and daughter were fine, and the MEDEVAC crew toasted them with coffee poured into urine sample cups.  

However, real “keeper” missions were actually the exception. Most tours consisted of reading, sleeping, exercise, videos, or the random scribbling of notes and missives on any manner of subjects, all recorded in the totally unofficial *Dustoff Follies Notebook*, never destined to leave the alert facility at Hohenfels.
In response to the Panama Canal Treaty signed between the United States and Panama in September 1977, the U.S. Army assumed responsibility for health care within the former Panama Canal Zone. The Panama Canal Zone had a Medical Department Activity (MEDDAC) with two hospitals: (1) the Gorgas Hospital on the Pacific side, and (2) the Coco Solo Hospital on the Atlantic side. To allow for more expeditious evacuation to or between the two sites, an air ambulance section was created with three UH-1V aircraft and crews on duty at all times to perform the classic MEDEVAC duties of patient movement, and the transport of whole blood, and essential medical personnel and equipment. They could also provide crash rescue support to Howard AFB, also in the Canal Zone.

Secondarily, the unit supplied local support in many forms. It provided support similar to MAST for local civilians or injured sailors aboard ships using the Panama Canal. The 210th Aviation Battalion at Howard AFB provided maintenance, logistical, and aviation support. The 210th had been in Panama since 1973 and had on many occasions performed casualty evacuation missions as needed.61

In June 1984, the 214th Med Det (RG) was reactivated with UH-60s at Fort Kobbe, Panama Canal Zone. It replaced the air ambulance section and provided direct support to the MEDDAC. The 210th Aviation Battalion also supported the 214th Med Det.62

At about the same time, Joint Task Force Bravo was activated at Palmerola Air Base in Honduras. The United States had maintained a steady presence in Central America, and it was the latest and largest in a series of task forces formed in that area of Central America at the request of local governments in response to developing internal and external threats. It served as the basis for the deployment of larger forces of any variety, and it also supported civic action operations over a wide area.63

The next November, two aircraft and crews from the 214th were deployed to Colombia as part of Task Force 210 to provide humanitarian relief for the victims of a volcano eruption. The ensuing mud slides and flooding caused by the rapid melting of snow pack inundated 14 villages and towns. An estimated 23,000 were killed, and another 22,000 were left homeless. Because of the high trees in the area, many of the recoveries were by hoist.64

In October 1987, the 210th Aviation Battalion was inactivated, and the 1st Battalion, 228th Aviation Regiment, was activated at Fort Kobbe, as part of the 128th Aviation Brigade. The 214th Med Det (RG) was attached to the 1st Battalion, 228th Regiment. Its missions were varied including providing general support to local units—both on post and in the field for training—and also supporting civic action missions in Panama and other Central America nations. The 214th crews would fly medical teams out to local villages to provide on-site medical care.65

In the summer of 1989, Joint Task Force Bravo activated the 4th Battalion, 228th Aviation Regiment, at the Soto Cano Air Base (formerly Palmerola) in Honduras. It had a MEDEVAC detachment assigned to it. While still forming, it provided support to operations conducted in Panama, later that year.66
Preparing for War on the Plains of Europe

Doctrine

Field Circular (FC) 8-45, Medical Evacuation in the Combat Zone, October 1986

With a third revision of its keystone warfighting doctrinal publication, Field Manual (FM) 100-5, ultimately published in 1986, the Army finally crystallized its concept of AirLand Battle. This version integrated the use of intelligence assets to “see deep” into the enemy’s rear areas to further facilitate the deep battle. It emphasized the “operational art” of synthesizing all facets of military operations to fight and win the right battle at the right place and time.

This iteration stimulated a rewrite of medical doctrine to support it. Incorporating the concepts laid out in the earlier MSPR, the AHS at Fort Sam Houston published its new concept, now titled “Health Service Support for AirLand Battle,” in April 1986. Reflecting the earnest work and advocacy of Lt. Col. Tom Scofield and Maj. Bill Thresher, and with the hearty support of Col. Eldon Ideus, still serving as the chief of the MEDEVAC Proponency Office, the AHS also published FC 8-45, Medical Evacuation in the Combat Zone, in October 1986, which defined how MEDEVAC would support Health Service Support for AirLand Battle with its evacuation battalions and 15-ship companies. This FC was intended as an interim change, subject to comments and recommendations from the field. As such, it would expire in 1989, if not subsumed earlier by an overriding FM.

With AirLand Battle as its basis, the rewrite acknowledged that the extension of the battlefield stretched theater HSS to its limits. Medical commanders needed to understand the objectives and intent of their superior maneuver commanders. They had to be prepared proactively to maintain the initiative, agility, and synchronization necessary to preserve fighting strength, evacuate the wounded in an expeditious and efficient manner, and handle mass casualty-type operations that could occur in the expected intense combat operations or use of weapons of mass destruction. Moreover, medical commanders had to have command and control of medical assets to maximize care and to locate medical units so that casualties could be evacuated as quickly as possible.

The FC also postulated that the principal threat was the forces of the Union of Soviet Socialist Republics, with that threat most dramatically arrayed in Europe or southwest Asia. Medical evacuation units with forces opposing these in any scenario faced a variety of lethal threats from air defense weapons; field artillery; the guns of massed armored vehicles and tanks; tactical aircraft, both rotary and fixed-wing; nuclear, biological, and chemical weapons; and even unconventional warfare, across the depth of the battlefield. Yet, the air ambulance units had to operate in all areas and make maximum utilization of passive countermeasures, nap-of-the-earth flight techniques, and overall threat avoidance, and make sure that the Red Cross marking was always clearly visible.

The FC validated the reestablishment of the Vietnam era medical evacuation battalions and defined their role. Within a theater of operations, such a battalion
was assigned to the medical command or to a medical brigade. Its function was
to serve as a central manager of ground and air evacuation assets as part of the
overall HSS plan. Three to seven ambulance companies (air or ground) for com-
mand and control were attached to the battalion, which was best located where it
provided such command and control. Its staff was organized with a headquarters
section, an S1 section, and S2/3 section, and an S4 section. Air ambulance medici-
cal companies were assigned to it on the basis of one company in direct support of
a division or equivalent force, and one air ambulance company in general support
of the corps for each two divisions assigned or fraction thereof.

The MEDEVAC companies were capable of around-the-clock operations with
15 air ambulances, each with a flight medic capable of providing treatment and
surveillance of patients. The companies were manned with an aviation unit main-
tenance section that performed organizational maintenance on all aircraft, avion-
ics, and organic equipment, except specialized medical items. The company also
provided air crash rescue support (less fire suppression) and up to three forward
support MEDEVAC teams of three aircraft and crews each. A forward support
MEDEVAC team was designed directly to support a maneuver brigade. The re-
mainning aircraft performed area support MEDEVAC. In the field, the company
relied on other units for higher levels of support, in particular, aviation intermedi-
ate maintenance.70

These changes were designed to reorganize the air ambulance MEDEVAC as-
sets more efficiently to support the dynamic nature of AirLand Battle. FC 8-45
pointed out that:

The increase in the speed and lethality of combat formations has served to increase the impor-
tance of evacuation as the key link in the continuum of care….The AirLand Battle will be con-
ducted day and night under all weather conditions….The evacuation system must be prepared
to operate in the added dimension of the integrated battlefield.71

The newly designed medical evacuation battalion was the key to the theater
evacuation system and operated as per the following principles:

1. The purpose of evacuation is to rapidly transport the sick and wounded
soldiers to a medical treatment facility to minimize fatalities and speed their
return to duty by:
   a. Clearing the battlefield to allow the commander to continue his mission.
   b. Building the morale of soldiers by demonstrating that care is quickly
      available.
2. Evacuation is performed by the higher echelon of medical care going forward
   and evacuation from the lower level.
3. Evacuation assets must have the same mobility as the units supported.
4. The medical commander responsible for evacuation is the primary manager
   of medical evacuation assets. There must be one single dedicated medical
   command authority to manage all assets. The evacuation mode is based on:
   a. Patient’s condition.
   b. Availability of resources.
c. Destination medical treatment facility.
5. On-board care of casualties is essential for optimum success.
6. Bypassing echelons of care is detrimental to the medical support system and wounded soldier. It causes over-evacuation of less critically wounded soldiers, delaying their return to duty, and removing evacuation assets from critical areas for longer periods of time.\(^7\)

Overall, FC 8-45 was a significant change for the MEDEVAC units. If followed to fruition, it would require a complete reorganization of MEDEVAC assets as part of ultimately a larger reorganization of medical units so that all had a go-to-war mission. Eventually, the entire restructuring effort for all of the medical units would be renamed the Medical Force 2000.\(^7\)

**Organization**

*New Aircraft*

Parallel to the changes in doctrine was consideration of a new aircraft for MEDEVAC. Since the early 1950s, aircraft designers had worked on the concept of tilt rotor aircraft that could combine the best features of both rotary-wing and fixed-wing design. Sensing the military potential for such a vehicle, Army designers conceptualized such an aircraft in 1982 and labeled it JVX. In 1985, the Joint Chiefs of Staff published a Joint Services Operational Requirement for the JVX called the Advanced Vertical Lift Aircraft. This aircraft provided the various services the ability to conduct combat, combat support, and combat service support utilizing vertical take-off and landing capabilities. The JVX replaced a number of aging and near obsolescent aircraft and provided for expanded mission capabilities. For the Army, this aircraft was well fitted for medium cargo lift and medical evacuation. In the MEDEVAC configuration, the aircraft was capable of functioning on a high-threat battlefield with an 80% mission capability rate, while incorporating the latest developments in survivability and crashworthiness improvements, operating continuously (day/night operations) in all weather, utilizing a cruise speed of 250 knots, and carrying 12 patients and two medics in the cabin with the latest comfort and load convenience items.\(^7\)

The prime candidate for this aircraft was the V-22, which was produced by Boeing Aircraft in Philadelphia, Pennsylvania. The Army was well represented on the various working groups established to bring the aircraft to fruition as the JVX. By 1986, the Army had developed a plan for acquisition and utilization of the aircraft. The Army wanted 231 V-22s, of which 64 would be assigned to MEDEVAC to equip eight companies. This released 135 UH-1s and UH-60s for retirement or shift to other missions. Like the helicopters it replaced, the aircraft could be loaded onto C-5s for deployment. However, the aircraft could also self-deploy. It could be flown to Europe in about 30 hours, needing only one stop for fuel and crew change. This capability was something that MEDEVAC crews had desired for a long time.\(^7\)
The acquisition plan forecast that the aircraft would be delivered between 1994 and 2001. Potential MEDEVAC modifications to the cabin included a scheme for racking 18 litters with plenty of room remaining for medical equipment. However, in a progress review in 1988, Army leaders withdrew from the program, ostensibly to use the money for upgrades for the CH-47, UH-60, and AH-64, and the development of a new light helicopter (LHX). The UH-60 became the standard and primary MEDEVAC helicopter, although the LHX did have a MEDEVAC variant. The next year, the Secretary of Defense reviewed the entire V-22 program. With the departure of the Army from the project, the only service still interested was the Marine Corps. However, at $32.8 million per aircraft, the Secretary could not justify the cost of the planned fleet “for the narrow mission of moving marines from ship to shore” and suspended the program.76

Europe

In the summer of 1985, Maj. Frank Novier had completed two nonflying assignments and the Armed Forces Staff College, and he reported to Landstuhl, Germany, to command the 63d Med Det (RA). His first assigned duty was to convert the unit to UH-60s. Unfortunately, just after he arrived, the entire Army
Black Hawk fleet was grounded for a mechanical problem with a key component. To meet its mission taskings, the unit kept its old UH-1s. Known as “International Dustoff,” the unit pilots regularly flew patient transfer to hospitals all over Europe or picked up sick or injured for movement to the huge hospital at Landstuhl. The unit also trained for its wartime mission in support of the 3d Armored Division and its requirement to defend the Fulda Gap. Unlike his earlier tour in Europe in the 1970s, Novier’s unit and troops had real defined missions to which they regularly trained, were aware of the changes in warfighting doctrine, and had watched the arrival of new and superior equipment—like their own Black Hawks. Novier could clearly see the difference it made in their cohesion, sense of purpose, and morale.

When the Black Hawk fleet was released for flight duty, Novier literally had to reconvert his unit, and do it quickly. Fortunately, he had great troops like Capt. Scott Heintz, who had also joined the unit not long after Novier arrived. Novier took his best pilots and made them pilots in command on the Black Hawks because he was not given any extra crewmembers to make the transition. Then he assigned them to missions and never missed any tasking. It was a risky move. Yet he trusted his crews, and they did not let him down. After 18 months, his tour as the detachment commander ended and he was transferred to the 7th MEDCOM headquarters at Heidelberg to serve as the aviation staff officer.

Novier arrived at a propitious time. The European MEDEVAC units were reorganizing under the concepts laid out in FC 8-45. By the end of the year, the 421st Med Co (AA) was reorganized as the 421st Medical Battalion (Evacuation). In a poignant ceremony, Company Commander Lt. Col. Merle Snyder passed command to Lt. Col. Art Hapner as the Battalion Commander in October 1987. The 421st had three companies and three detachments assigned to it: (1) the newly reactivated 45th Med Co (AA) [last active in Vietnam], which was formed from the 1st, 2d, and 3d Platoons of the 421st Med Co (AA), and was co-located at Nellingen; (2) the 159th Med Co (AA), formed from the 159th Med Det (RG) and the 4th Platoon of the 421st Med Co (AA), relocated to Darmstadt; and (3) the original 15th, 63d, and 236th Med Dets (RG), which were still separate. This streamlined overall evacuation command and control, and provided for more efficient unit level training. Hapner commanded the 421st until July 1990, when he passed command to Lt. Col. Ray Keith, a former unit mate from the 57th at Fort Bragg.

Disaster at Ramstein Air Base, Germany

As the European units went through their realignments, their community was struck with tragedy in a most unexpected way. Every summer, the huge U.S. Air Force Base at Ramstein, located just three miles from the large medical center at Landstuhl, hosted a tremendous international airshow. It was a favorite with the local community and drew massive crowds. More than 300,000 visitors crowded onto the base on 28 August 1988 to watch flying demonstrations put on by teams from all over the world. It was a beautifully clear day as 10 jets from the Italian Air Force acrobatic team, Frecce Tricolori, took off to perform their amazing
maneuvers that culminated with their signature event, the “pierced heart.” The maneuver required the team to do a steep vertical climb and then separate so that two groups traced a heart with their smoke trails. When this was done, another member flew through the smoke to pierce it. The maneuver required split second timing. The team had done it many times and it was always a crowd pleaser. Unfortunately on this day, the solo pilot mis-timed his piercing maneuver and collided with two of the aircraft. Some of the flaming wreckage fell on the crowd. Chaos swept them as they tried to scramble to avoid the wreckage and falling flaming fuel. A MEDEVAC UH-60 from the 63d Med Det (RG) was on alert at the air show. Tragically, some of the wreckage slammed into the helicopter, severely damaging it and killing one of the pilots, Capt. Kim Strader.

Medical personnel immediately sprang into action. Within minutes, other MEDEVAC helicopters from Landstuhl and Wiesbaden were en route, and German aircraft also responded. All totaled, 72 spectators were killed as well as three performing pilots. Additionally, 346 were seriously wounded. Over the next few hours, 120 were evacuated to Landstuhl. Others were moved to additional local hospitals. More were dispatched to other medical facilities spread across Germany or even MEDEVACed to other countries. Crews from all of the MEDEVAC units were busy transporting the patients.80
Two years later, the 236th Med Co (AA) was formed from the 15th, 63d, and 236th Med Dets, and consolidated at Landstuhl, also under the control of the 421st. The European MEDEVAC units had now completely reorganized under FC 8-45.81

Capt. Scott Heintz had finished his tour with the 63d Med Det (RG) at Landstuhl, just prior to the horrible accident at Ramstein, and was at Fort Sam Houston when he heard the terrible news that his unit buddies had been killed and injured in the ensuing fire. He was now assigned to instructor duties with the Military Science Division at the AHS, where he taught the career basic and advanced courses for all of AMEDD. Primarily, he taught basic subjects to company grade officers such as map reading, physical fitness, and even marching. He also flew as an attached pilot with the co-located 507th Med Co (AA), and initiated some rudimentary MEDEVAC field demonstrations for the classes.

While instructing at Fort Sam Houston, one of Heintz’s students was newly commissioned MSC 2d Lt. John Lamoureux, who had attended Embry Riddle Aeronautical University in Florida and was interested in a career in aviation. His mother spent many years working in hospitals, and Lamoureux wanted to see if he could find a career that would combine aviation and medicine. Heintz took

Marker at the 236th Med Co (AA), Landstuhl, Germany, commemorating Capt. Kim Strader, killed at the Ramstein Air Base Airshow in 1988.
Source: Author
Lamoureux under his wing. Acting as an advisor and mentor, Heintz convinced him to consider MEDEVAC. Flight school slots were few then, but Lamoureux had a solid record and was selected. He started flight school at Fort Rucker in September 1989.82

On 1 April 1990, Heintz was promoted to the rank of Major. With the promotion came a new assignment to command Delta Company, 326th Medical Battalion, 101st Division at Fort Campbell. He arrived at Fort Campbell in late June and took command of “Eagle Dustoff” on 12 July 1990.83

**Operations**

**Korea**

After his tour at Fort Sam Houston, Maj. Bill Thresher reported to the Eighth U.S. Army in Korea to command the 377th Med Co (AA), located at the Army Air Base just south of Seoul. It was one of the large 25-aircraft units recently re-equipped with new Black Hawks and under the direct control of the 52nd Medical Battalion (Evacuation).

The Eighth Army had designated the 377th as a top priority unit. Thresher had more than 50 pilots assigned to the company, including 16 MSC officers and three test pilots. With more than 190 enlisted troops assigned, unit operational readiness never fell below 80%. The unit was also issued ANVIS-6 NVGs, and all pilots trained on them, including Thresher, who logged almost 800 flight hours while he was in the 377th.

The aviation maintenance section was particularly robust—very similar to an aviation battalion—and could handle almost any aircraft problem. The maintenance troops were dedicated and worked extra hours when necessary to support the mission. They all shared that sense of urgency that Thresher had learned many years before at Fort Bragg.

Unit elements were scattered across four locations to provide coverage to the entire peninsula. They routinely supported the 2nd Infantry Division at Camp Humphreys and flew to locations within the Demilitarized Zone. Special flight procedures were necessary to do so, and all unit pilots were required to maintain the qualification to fly in there night and day and under any weather condition. The 377th crews also flew transfer missions for soldiers needing medical movement anywhere on the peninsula.84

Finishing his tour as a scout pilot in Germany in 1985 with more than 1,500 hours of flight time, CW2 Pete Smart received orders to Fort Rucker to attend the Warrant Officer Advanced Course and attend transition training to become a fixed-wing pilot flying the OV-1 Mohawk. Once qualified, he stayed at Rucker flying the Mohawk and he met some MEDEVAC pilots. When he mentioned that he always had a desire to fly MEDEVAC, they encouraged him to apply for a direct commission into the MSC. The next MSC board selected him so he traded in his warrant officer bars for his 2d Lt. rank, went through UH-60 transition and main-
Call Sign – Dustoff

Ten maintenance officer’s school, and then received orders to the 377th Med Co in Korea.

New 2d Lt. Smart arrived at the 377th in the summer of 1987. Thresher made him the unit maintenance officer for the 25-aircraft unit with those machines spread out at four different sites, and a flying authorization for almost 7,000 hours a year.

Smart was immediately consumed with the myriad details of keeping those aircraft air worthy. He flew mostly on maintenance test flights, but would occasionally pair up with Thresher and go to one of the sites to sit MEDEVAC alert.

The pressure to keep the aircraft mission-ready was constant and almost all consuming. Smart remembered that:

"There is a tremendous amount of pressure—not pressure, but a sense of urgency that exists to keep the aircraft up. And when they do go down, you can’t send everybody home and say, “Well, we’ll get it Monday; it can wait.” … [MEDEVAC] guys can get their missions any time…"

On many occasions when a maintenance crew was sent to one of the remote sites to fix an aircraft, Smart would fly it regardless of the weather or time of day. Consequently, he became very proficient at flying instrument procedures. Maintenance officers were generally not noted for their instrument proficiency, and Smart took special delight in that, especially when one of the flight examiners told him, “You know you are a pretty darned good instrument pilot for a maintenance guy.” But it was more than ego that drove him. He had been a warrant officer and remembered several commissioned officers who were not good pilots. He knew how much the warrants resented that and resolved that he would always maintain his pilot skills as he expected them to do. It was a matter of professional pride.

Also serving with Thresher in the 377th, 1st Lt. Dave MacDonald served as the 2d platoon leader at Camp Humphreys. Compared to southeast Alabama, flying in Korea was a bit more challenging, and MacDonald learned quickly from his warrant officer pilots, crew chiefs, and medics. He also latched on to Thresher’s sense
of urgency remembering that, “Every mission you go out on is real and there is always a sense of accomplishment … that you have actually been saving a life.”

He finished his tour there in February 1988 and returned to Fort Rucker for the Aviation Advanced Course, learning early that:

“We have to know and understand the aviation business and what Army Aviation is all about as well as to know and understand the medical business and what the Army Medical Department is all about, and to be able to marry those two [to] effect the mission.”

Thresher also ensured that his unit was prepared to carry out its wartime missions. In addition to supporting the 2nd Division, the unit built transportable containers that could be sling-load carried by the helicopters. All necessary equipment and parts could be loaded into these containers so that the unit could move at relatively short notice. For one exercise, the majority of the unit did deploy to a field site. When they were settled at their assigned location, Thresher was almost overtaken with pride to see 22 of his aircraft arrayed in a large field and ready to receive taskings.

His unit responded when a U.S. Marine CH-53 helicopter crashed on a mountain side with 32 personnel onboard. The unit had just finished participating in a mass casualty exercise and launched recovery aircraft from three sites to support the disaster. Thresher’s crews recovered 16 badly injured marines and flew them to hospital ships. Several of his troops received air medals for that action, and the unit was awarded a Navy Meritorious Unit Commendation.

As a commissioned officer, Smart also had unit supervisory briefing and release authorities. For guidance, Thresher provided very specific procedures for handling launch authority. He explained:

In Korea, the Army had instituted … mission briefing requirements. The way we handled it was … we would do a day mission. We would go out and assess the worst conditions that were anticipated to be met that day, and then we would conduct essentially a mission brief that talked about the high temperature, the weather, whatever it was going to be, and then the various mission modes that somebody could find himself. And then I authorized launch under those conditions up to a certain level of risk. And so they didn’t have to sit around and punch buttons and figure all stuff out …. And then we would try to maximize those conditions under which the aircraft commander or the pilot in command could self-authorize. Above that, I was the authorization authority. If it was a high risk, then the battalion commander became the authorization.

He also spent a lot of time and effort teaching his troops the proper focus on risk management. He said:

I was able to help instill what MEDEVAC ought to really be about and why training was so important; why risk management—not avoidance of difficult jobs and dangerous flying environments—but risk management of difficult jobs and dangerous flying environments was the right way to go.

He also harkened back to his own training as a young officer when he was mentored by a MEDEVAC legend, Maj. Gen. Pat Brady, who told him:
That focus on risk management and a sense of urgency were the hallmarks of his style of leadership and his younger officers benefited from it. Smart found his tour with the 377th so rewarding that he stayed for a second year.\textsuperscript{92}

Thresher was immensely proud of his unit and very pleased with his tour in Korea. He departed the 377th in August 1989 for another tour with the AMEDD Center and School at Fort Sam Houston. He would never again be directly associated with MEDEVAC units. He had developed a fine appreciation for the young troops that he had trained and mentored, so he took a behind-the-scenes but active role in trying to encourage them and find ways to further their careers and develop their skills for higher levels of responsibility and command. However, he always told them that “There is no job security out there except your ability to achieve.”\textsuperscript{93}

**Growing Conflict in Central America**

*Operations*

*Panama – Operation JUST CAUSE*

In 1989, events in Panama drew the attention of the American leaders. For decades, Panama had been a backwater as the United States focused on other threats overseas. After a military coup in 1968 overthrew the last elected government, a series of military dictators had ruled the country. The latest was General Manuel Noriega, an intelligence officer, who eventually seized power.

Noriega assisted the United States through the Central Intelligence Agency when it conducted covert operations against Nicaraguan and El Salvadorian leftists. However, Noriega’s operations eventually became so extreme that he was indicted in a Florida court for involvement in the drug trade, the smuggling of weapons to antigovernment rebels in Colombia, and collusion with Cuba to evade U.S. economic sanctions. Within Panama, he also conducted a bloody and brutal campaign against any and all opposition. He used his power to nullify national elections and survived a coup attempt, declaring himself “Maximum Leader for life.”\textsuperscript{94}

As Noriega consolidated his power, relations between the Panamanians and U.S. personnel soured. Missions to other nations in the region stopped as the military shifted focus to the political situation within Panama. Life slowly deteriorated, as businesses closed and public services fell into disrepair.

When American leaders questioned Noriega’s harsh tactics, he ordered his heavily armed Panama Defense Force and paramilitary forces to harass U.S. troops. All military personnel and dependents were ordered to move on base, and in many cases they had to double up with other families in on-base housing.
When several Americans were detained and killed, and one man literally had to fight his way out of a possible hostage situation, President George H.W. Bush decided to take action.95

Panama was within the area of responsibility of Southern Command. Its commander, Gen. Maxwell Thurman, had watched these developments with growing unease and had directed increasingly more detailed planning for military intervention. He slowly but steadily moved more military combat units into the country. When directed by President Bush to act, he initiated Operation JUST CAUSE. Its stated purposes were to secure the Panama Canal, protect U.S. personnel, restore the Panamanian government to its elected officials, and take Noriega into custody to stand trial on drug-trafficking charges.96

As part of a joint task force, the XVIII Airborne Corps deployed 13,000 soldiers from the 82d and 7th Divisions, the 75th Ranger Regiment, several other special operations units, and the 44th Medical Brigade, which was commanded by Col. Jerry Foust. After commanding the 326th Medical Battalion, Foust attended the Army War College and did another tour in the Headquarters, Health Services Command, at Fort Sam Houston, before reporting to the brigade in June 1989. His

A 214th Med Det (RG) Black Hawk during Operation JUST CAUSE.
Source: United Technologies Corporation
and the other units were airlifted into Panama to join locally assigned forces and 13,000 more soldiers from other units and marines who had quietly moved there in the preceding months.\textsuperscript{97}

The 128th Aviation Brigade at Fort Kobbe formed Task Force Aviation directly to support the operation with all of its assigned and attached units. It provided all of them the necessary intelligence, weather information, air traffic control coordination, and intermediate maintenance necessary to operate in the theater. It also had attached to it, the 4th Battalion, 228th Aviation Regiment, which self-deployed from Soto Cano Air Base, Honduras. This was the battalion’s first significant event since forming that summer, and they adopted the motto “Born Under Fire.”\textsuperscript{98}

The 214th Med Det (RG) was directed to provide MEDEVAC support. Like all local units, it had planned and trained for such an operation for almost a year. As the reinforcing units arrived, the 214th dispatched its officers out to them to meet the commanders and perform any pre-coordination at the tactical level. The tempo of operations increased, both to get the new units acclimatized and familiar with the area and to desensitize the Panamanians to the movement of U.S. forces. Serving in Panama with the 214th Med Det (RG) at the time was Capt. Vinny Carnazza. He had joined the unit right out of flight school in 1987, and he was now well familiar with the area.\textsuperscript{99}

However, the 214th Med Det (RG) only had five helicopters because one had been destroyed in a water crash in September, killing the medic, S.Sgt. Adrian Rosato. For projected operations, it quietly established refueling points at several locations and established operational procedures and communications with all local medical facilities.\textsuperscript{100}

In the early morning hours of 20 December, U.S. forces attacked the Panamanian Defense Forces and “Dignity Battalions” of street thugs at locations and facilities across the country. They overwhelmed the Panamanian forces in the attacks that only lasted five days before all objectives were met and Noriega was captured. Most of the intense combat only occurred within the first eight hours. But there were casualties, and the medical warriors of the 44th Medical Brigade immediately went into action to care for the wounded soldiers, sailors, airmen, and marines.

During the operation, the 214th Med Det (RG) was attached to the 44th or the 142d Medical Battalion, also subordinate to the 44th. The 214th was augmented with two complete crews from the 57th Med Det (RG) at Fort Bragg. However, during JUST CAUSE, it was the only MEDEVAC unit in theater.

The pace of MEDEVAC missions reflected the intensity of the fighting. At one point, Capt. Carnazza brought out a load of 12 wounded but ambulatory soldiers. Foust authorized the 214th to take the patient litter carousels out of their aircraft to accommodate quicker loading and provide room for more wounded. The crews had to be sure to wash out the blood that stained the aircraft cabins between missions so that it did not affect the morale of the fighting soldiers.\textsuperscript{101}

With only five aircraft, the 214th was very busy providing area support for all units and transporting patients who were soldiers, marines, dependents, Panama
Canal Commission and Department of Defense employees, local Panamanian nationals, and enemy prisoners. The 214th also moved medical personnel and equipment, and delivered whole blood, biologicals, and medical supplies.\textsuperscript{102}

The unit was also on call to support aircraft crash and rescue operations and search and rescue operations in low threat environments. They provided humanitarian assistance to the Panamanian Government to help the 5,000+ refugees who
either fled the fighting or lost their homes in the melee.

For three weeks, the 214th provided two aircraft in direct support of Special Forces elements from the Joint Special Operations Command. Capt. Vinny Carnazza was the team leader for that effort and went to work in the hangar commanded by the Special Forces Task Force as its command center. His crews then answered specific calls from those forces and supported several intense operations, including the rescue effort for Kurt Muse, an American civilian who had been imprisoned by Noriega for running a clandestine antigovernment radio station. One of Carnazza’s crews MEDEVACed eight wounded Navy SEALs from the ill-fated attack on the Paitilla Airfield.\textsuperscript{103}

Another detachment of one aircraft and crew was also assigned in direct support of the 2d Brigade 7th Infantry Division for operations at Fort Sherman, Rio Hato, and Santa Fe. Overall, casualties were light with 26 Americans killed and 325 wounded. The Panamanians had 314 killed and thousands wounded or captured.\textsuperscript{104}

The 214th suffered from personnel shortages and limitations during the conflict. The pilots, overall, were inexperienced, with a flight time average of 750 total hours and 380 in the UH-60. One instructor pilot position and the safety officer position had been unfilled since September. Two of 12 unit pilots were readiness level (RL) 3 and had only been in the unit for two weeks. Of the five medics assigned to the unit, one was on leave and two were newly graduated from the flight medic’s course. Six crew chiefs were available, but two were directly from the basic aircraft mechanics course. Most, but not all, crewmembers were qualified with NVGs. However, they met all taskings and logged 283 missions in the campaign, carrying 470 patients. The 142d Medical Battalion evacuated another 233 patients by ground evacuation. The 214th crews also transported 146 medical personnel, and 17,740 lbs of medical supplies. A majority of missions were flown at night with NVGs. Probably as a consequence, only three aircraft sustained damage, with all being repaired within 24 hours.\textsuperscript{105}

The 214th Med Det (RG) wrote a detailed after-action report that was consolidated into overall medical lessons learned by the AHS at Fort Sam Houston. Several MEDEVAC observations were listed:

1. MEDEVAC must be integrated into operations in the pre-mission planning.
   a. Medical units were not given dedicated frequencies in the communications electronics operating instructions.
   b. The 82d Airborne Division lost a pallet of retransmission communications equipment during an airdrop.
   c. MEDEVAC units must have access to planned flight routes for flight plan coordination.
   d. No plans were made for armed escort of MEDEVAC helicopters into areas where enemy fire was a possibility.
2. The command and control structure for MEDEVAC must be clear, and there must be one central agency to collect and disseminate medical evacuation information.
a. The air ambulances coordinated through the joint operating center.
b. Ground ambulance coordinated through the forward casualty collection points and the joint casualty collection point.
3. Accurate mission information must be passed for the most efficient utilization of MEDEVAC assets.
4. Ground units only have limited knowledge of MEDEVAC procedures and limitations under hostile fire.
5. Some troops do not understand that helicopters displaying the Red Cross cannot be used for utility or combat purposes.
6. MEDEVAC helicopters do not have defensive weapons capability and may require fire suppression in hostile environments.
7. The UH-60s need more Kevlar floor protection or armor around the crewmembers.
8. The 214th Med Det should have been augmented with more personnel and aircraft.
   a. Lack of aircraft required the use of ground vehicles.
   b. Many casualties were brought in by nonmedical vehicles.
9. The new UH-60 casualty carousels were removed to provide more room for wounded.
10. NVGs were effective and made night flight more safe and practical.
11. Medics and AMEDD officers in direct support of infantry units engaged in combat should be awarded the Combat Medical Badge.
12. Fixed facility medical (TDA) facilities were not equipped with tactical radios necessary for field MEDEVAC operations.106

One last point was noted. Unlike most MEDEVAC units, this unit performed its combat mission from its home station. The crews were there with their families and knew that while they were out flying their missions, their families were at risk. Family support was critical to making this mission work.

Residual operations in Panama quickly shifted to peacekeeping as the legitimately elected government was restored to power. In most quarters, the American forces were welcomed as liberators, which greatly facilitated the restoration of law and order. Those forces dispatched for the operation were soon sent home, and the locally assigned units returned to normal operations tempo. Within the next few years, all would leave as the Canal Zone finally reverted to Panamanian control. One month after the termination of hostilities, Carnazza transferred to the 498th Med Co (AA), at Fort Benning. He was dispatched as a team leader to take three aircraft, crews, and a small maintenance team to reinforce the 4th Battalion, 228th Aviation Regiment, at Soto Cano Air Base, Honduras. One of their aircraft and crew further deployed as a support package for Vice President Dan Quayle, his wife, Marilyn, and entourage as they visited Managua, Nicaragua, for the inauguration of the freely elected new President, Violeta Barrios de Chamorro, as she assumed power from José Daniel Ortega Saavedra. That MEDEVAC helicopter was one of the first U.S. military aircraft allowed back into that country in 14 years.107
Tactical Training at the National Training Center

At the National Training Center at Fort Irwin, California, the combat maneuver battalions and task forces regularly cycled through to train under the AirLand Battle concept. MEDEVAC elements from the various units supported each rotation, as combat teams from all continental U.S. divisions and brigades waged battle with the 32d Guards Motorized Regiment, the notional “opposition force,” clearly structured and equipped as per Soviet standards, in the hot, dry valleys of the high desert. It was as realistic and intense as modern training could be without actually exchanging live rounds.108

The 247th Med Det (RG) was still stationed at Fort Irwin to support the National Training Center. Its purpose was not to train, but to provide MEDEVAC for any soldiers actually hurt in the sometimes accident-prone maneuvering of the heavy forces. Every brigade task force contained up to 4,000 soldiers, and injuries were inevitable. Operating in the summer temperatures as high as 120 degrees, the helicopters and crews were on call as necessary to cover the training. The terrain varied from a few hundred feet to higher than 6,000 feet and the hot temperatures could drive the density altitude much higher. Originally, the unit had been given single-engine UH-1 helicopters. However, they were grossly underpowered for these conditions and the winds through the valleys could regularly exceed their 15-knot limit. To provide better capability, the unit was given UH-60s in 1987. With two powerful engines, this machine was more suited to the conditions and averaged more than 400 missions a year.

The 247th was a good assignment for new pilots because they could accumulate flying time quickly in a tactical environment during both day operations and at night with NVGs. However, the base was remote and afforded little social life. However, the harsh environment took its toll on the helicopters. The unit, which had no local battalion to provide intermediate maintenance or parts support, relied on a support base 50 miles away, which meant that the aircraft were frequently not flyable.109

The training for the combat brigades in the high desert was intense and realistic. The Army began collecting and disseminating lessons learned based on what the units experienced. In November 1989, the Army Center for Lessons Learned at Fort Leavenworth, Kansas, published an edition focused on the tactical view of medical evacuations. The report highlighted several key points:

1. Violent high-tempo combat often results in areas of heavier combat action with resulting heavy casualties.
2. As areas of casualty density move away from hospital/aid station locations, routes of casualty evacuation lengthen.
3. Units should task organize and allocate evacuation assets in relation to projected casualties.
4. Units conducting the main effort will have the highest casualty load. Weigh the main effort.110
Such precise tactical focus showed that even tactical commanders were now thinking about MEDEVAC. Since the publication of FC 8-45 in October 1986, the MEDEVAC units themselves reorganized to provide that support if needed. However, a Medical System Program Review held at Fort Sam Houston in January 1989 showed that progress was slow. While the AHS had published a White Paper that captured the necessary changes specified in FC 8-45, the modernization of the MEDEVAC fleet languished. The Aviation Materiel Modernization Plan allocated 528 aircraft (430 UH-60s and 98 UH-1s) for MEDEVAC. At that point, only 121 UH-60s had been received with only 36 more slated for the fiscal year 1993–1997 time period. MEDEVAC UH-60s were assigned to overseas locations and to units identified for early deployment for contingencies. The additional aircraft were clearly needed to replace the aging UH-1 fleet.

**The Middle East**

As the decade entered its later years, the Army was involved in almost continuous BRIGHT STAR exercises in Egypt and now NIGHTHAWK exercises in Jordan. MEDEVAC detachments supported both deployments. The 36th Med Det (RG) from Fort Polk, Louisiana, which was newly equipped with UH-60A aircraft, supported both in the fall of 1989 and logged 120 flight hours. However, even though both were training exercises, the unit did carry 16 actual patients who had been injured in the maneuvers.

**Domestic Disaster Relief**

MEDEVAC units also received requests and orders to support domestic relief operations. One of the largest and most dramatic was the response to the grounding of the oil tanker *Exxon Valdez* on a reef in the Prince William Sound, Alaska, in March 1989. The estimated fuel spill was 11 million gallons of crude oil. It was a huge ecological disaster, and the nation responded on many levels. All U.S. military services supported the cleanup operation. The Army task force included MEDEVAC support. Within two days of the grounding, C-5s loaded three helicopters and crews from the 498th Med Co (AA) from Fort Benning for the long flight to Alaska. For the next 21 weeks they operated out of the Seward Airport and supported the operation of Army, Air Force, Navy, Coast Guard, and civilian contractor crews working to contain the damage. Many of the 498th crews were ship landing qualified and worked off of Navy and Coast Guard ships. They flew more than 70 medical missions and also provided VIP support for many politicians who came to review the effort.

**...**

It was a busy decade and period of change. The U.S. Army had completely rewritten its battle doctrine and begun reequipping and reorganizing to fulfill it. The MEDEVAC force, which had encountered those same challenges, avoided...
becoming consumed by the newly formed Aviation Branch and deployed units to support short combat operations in Grenada and Panama.

Thankfully, the requirement to fight the AirLand Battle against the Warsaw Pact on the Plains of Europe never arose. On 9 November 1989, the world was treated to the spectacle of ecstatic East Germans breaching the Berlin Wall. That structure—so long the symbol of division of Europe, and even the world between the United States and its allies and the Soviet Union and its allies—fell as the communist governments of Eastern Europe and then the Soviet Union itself collapsed. Two generations of American soldiers had stood watch along that dividing line. The cold war ended and the governments of the United States and its allies embraced plans for dramatic reductions in military spending, a “peace dividend” as it was labeled. Programs were almost immediately developed for wholesale reductions in force structure and manpower.¹¹⁴

During the decade, instead of AirLand Battle on the plains of Europe, the hot challenges had appeared elsewhere and in different forms. However, the Army and its MEDEVAC community met those challenges. Other challenges were about to appear, and perhaps the concept of AirLand Battle would be validated in another arena before that “peace dividend” could be claimed.