The 455th aeromedical evacuation unit links the Afghan battlefield to advanced medical care in the West.

By Marc V. Schanz, Associate Editor

The Medical Middlemen

Maj. Paul Stroud’s office, wedged in the back of a “b-hut” just off the flight line at Bagram AB, Afghanistan, began to gear up at about 1 a.m. The week’s aeromedical evacuation craft, a KC-135 aerial refueler of the 791st Expeditionary Aeromedical Evacuation Squadron—had just arrived from Germany.

The tanker came to move the sick and wounded to a place where they could receive advanced care. For the troops at Bagram, it was a big event.

Stroud’s small hut is home to the 455th Expeditionary Aeromedical Evacuation Flight, the only Air Force unit conducting the fixed-wing AE mission in Afghanistan. Stroud knew that, on this night, he would have a full load to put on board the tanker. At least one patient was said to be in critical condition and needed to get airborne just as soon as possible.

The 455th medical personnel and associated AE aircraft provide the vital link between the battle space and large medical facilities in Germany and the United States. US Army and Air Force helicopters bring in the wounded from battle in the rugged, mountainous interior of Afghanistan. The 455th stabilizes these patients and prepares them for evacuation.

In great measure, the phenomenal survival rate of injured personnel in the Global War on Terror—approximately 90 percent—can be traced to the training, integration, organization, and equipping of these aeromedical evacuation airmen. It is a highly demanding job, and many are volunteers: Air National Guard and Air Force Reserve personnel provide the bulk of the force’s 31 AE squadrons, with only four in the active duty force.

Stroud himself came here as a volunteer from the Oklahoma Air National Guard. “Many of my airmen are new second lieutenants,” Stroud said. “I don’t mind volunteering and being away from home. I want to help mentor folks.”

He paused and then nodded. “It’s been an interesting last six months.”

The clock on the wall said it was 1 a.m., local time. The newly arrived KC-135 was getting looked over and refueled for the trip back to Germany. This was the eighth AE trip for a tanker into Bagram this year—a feat not possible even a year ago. At that time, the length and condition of the runway would not have accommodated such a large aircraft.

Now, the runway has been lengthened and improved.

The goal on this night was to get everyone securely on board and into the air within two hours—the unit’s best time so far, said Capt. Christopher Capozzolo, the chief flight nurse. The tanker would refuel, patients would be loaded, and checklists would be cleared, with the aircraft gone well before dawn.

Before the transportees departed the medical center for the aircraft, though, nurses triple-checked their patients, noting everything from dressings to medications. Everything had to be in order before the ambulances could pull up and load patients for the trip to the Bagram flight line.

The late night quiet pervaded the Craig Joint Theater Hospital. A couple of AE airmen entered the emergency room to check the status of patients leaving in just a few hours. Many in the hospital—Americans and Afghans—bore the awful scars of battle. They included victims of roadside bomb blasts, rocket-propelled grenade attacks, and land mine explosions. All were recovering in the intensive care unit of the new $14 million hospital.

Across the room was a sleeping Afghan
child, his midsection wrapped with a large white bandage. The boy’s name was Shahidullah, nine years of age. His uncle, Barhan, sat near the bed. He quietly explained the situation to a translator.

Shahidullah, said Barhan, was hit by a truck near the village of Asadabad and was near death. Relatives took him to the US outpost in town. He was stabilized, then flown to Bagram. He had lost both legs, below the knee, but one of the medical technicians said he was likely to get prosthetic limbs.

At Craig (named for SSgt. Heathen N. Craig, an Army medic who was killed in Afghanistan in 2006) around 150 surgeries and 2,200 outpatient visits occur every month. Col. Bart Iddins, commander of the medical task force (Task Force Med), noted that there have been 250 major operations in just the past three months. More often than not, children and adults are admitted to the hospital after IED blasts or land mine explosions. Burn and blast injuries are common, Iddins noted.

Body Armor Works

While direct fire from enemy forces still kills, Iddins credited the protective equipment used by coalition forces with cutting down on the number of life-threatening gunshot and shrapnel wounds. “Body armor does an amazing job of protecting that soldier,” Iddins said, but he added that civilians caught up in the fight are not as lucky.

Iddins oversees the medical care for coalition forces, Afghan nationals, and others under the purview of Combined Joint Task Force-82. In all, there are five hospitals and six forward surgical sites across the country under the umbrella of Task Force Med.

In the hut, most airmen of the 455’s operations team had been awake for 18 hours, preparing for the night’s mission. A pot of coffee percolated as Capozzolo and his crew prepped for a return to the hospital.

Moving around sick and wounded persons is no snap, especially when they’re being placed on a 10-hour nonstop flight out of a combat theater. “There are several stresses of flight on the body,” Stroud noted.

Noise, heat, and pressure can all conspire to affect a patient’s condition, depending on the type of injury or type of medical treatment. Crews and critical care airmen have to keep track of barometric pressure in a patient’s abdomen, for example, because a change can send a stable patient south in a hurry. One of the benefits to getting tankers in the rotation: It offers more space for high-technology life support equipment, which helps medical airmen better monitor patients.

All of these procedures are part of improving “en route care”—that is, continuing to treat patients as they move through the pipeline from Afghanistan to Germany and not leaving them in the combat zone until they are stable. This is no simple task, but the AE airmen have mastered it.

“It has reached a state of the art here,” Iddins said.

Each step of the process—hospital to flight line, flight line to critical care teams on the aircraft, from the aircraft to medical centers in Landstuhl, Landstuhl to the US—adds a new increment of medical care. Aircraft and medical technology used in the transportation of patients are linked together like never before.

Stroud emphasized the emergence of the concept of Critical Care Air Transport Teams. “It has created an ICU on board any aircraft we use,” he said. The three-person teams help to evacuate patients who are not yet stable but are in need of fast and sophisticated medical attention.

These new teams can reconfigure the passenger compartments of a variety of mobility airframes—C-130, KC-10, KC-135, or C-17—for installation of critical care equipment. While AE crews wear wings and CCATT members do not, their contribution has been revolutionary, said the commander.

Most severely wounded service members are moved to Germany then back to a Stateside hospital within three days.

On this particular night, the KC-135 was primed for a straight 10-hour shot from Afghanistan to Ramstein Air Base in western Germany. Plans called for it to pick up the patients and get moving.

The radios in the hut signaled that the tanker was fully fueled. There was a full
complement of 20 patients. Most of their medical problems were not directly related to combat. One was a cardiac patient, but a few would require specialized en route care, which would be continued after they arrived at the Army’s Landstuhl Regional Medical Center in Germany. One patient was recovering from head trauma as a result of an improvised explosive device (IED) explosion.

Pace Picks Up

Capozzolo paused to go over a checklist one more time, and then headed out of the emergency area to pick up the rest of the AE crew for the mission. Activity at the hospital began to pick up momentum.

Several patients were in the hallway leading to the ambulance parking area. Some were in chairs, others on stretchers. Three critical care airmen prepped an Army sergeant who had suffered a heart attack. Two other medical airmen walked over to the triage area and explained the flight rules to patients.

Two Army ambulances idled outside the loading dock while stretchers were wheeled out and loaded by the hospital personnel. The dock, empty and quiet just a few minutes ago, had filled up with uniforms and was humming with the steady pace of moving the sick and wounded out of the hospital.

Two more ambulances had lined up next to the first two, awaiting the rest of the patients and the AE team that was going to Germany. Capozzolo left to prepare the Halvorsen aircraft loader in advance of the patients.

The ambulance then headed for the flight line. Tonight’s AE crew was augmented; it had two additional flight nurses and three technicians because of some special needs. In addition to cardiac patients, there was also a psychiatric patient and one with a serious kidney ailment.

Loading a KC-135E with patients takes considerable time. The Halvorsen loader, not the standard aircraft ramp, served as the intermediary bridge between the ambulance and the passenger compartment. Using the loader required close coordination between the multiple ambulances.

Meanwhile, the flight crew was back at the aircraft, making sure everything was in order. The flight commander, Maj. Chuck Remboldt of the 190th Air Refueling Wing, Kansas ANG, made his way past the floodlights that were illuminating the tanker to one of the AE trucks. “We were looking for a mission about a month ago, and when we had an opportunity to do this, we jumped at it,” Remboldt said. The unit had never done an Afghan run.

He said that the crew had been going over their AE procedures in preparation for getting the wounded back, trying to keep the aircraft’s cabin pressure low and the altitude steady and level. “You have to keep your mind on the people in the back above all else,” he noted.

One of the AE airmen shouted out the time—3:15 a.m.—just as the final ambulance pulled away from the Halvorsen. Remboldt consulted briefly with the AE crew, and then climbed up on the last lift of the Halvorsen. The loader slowly backed away.

Fifteen minutes later, the operations team was back at the hut, waiting for takeoff. “It went pretty well, right?” Capozzolo asked. “I’ll admit, this is a tough plane to load for young crews.”

Over the radio, the tower gave the tanker clearance. Two minutes later, the KC-135 slowly lifted off in the darkness with the patients bound for Germany and, eventually, home.