

Air Force ECMO team speeds to Puerto Rico to save the life of a Coast Guard lieutenant's infant son



Wings And a Prayer

**Story by Staff Sgt. Matthew Rosine
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Seth and Stephanie Parker held each other's hands and waited. As the plane touched down at 12:05 a.m., July 22 at Lackland Air Force Base, Texas, they smiled at each other and looked at their son.

Four-day-old Stuart lay across from his parents on a medical cart surrounded by doctors, nurses and medical technicians. He was the newest patient for the Extracorporeal Membrane Oxygenation, or ECMO, team that was double- and triple-checking everything to ensure he was ready for the next leg of his journey.

Shortly after his birth, doctors told the Parkers that moving Stuart from the third floor

of the Hospital Auxilio Mutuo in San Juan, Puerto Rico, could be fatal. But now here he was — being loaded off a C-17 Globemaster III into an ambulance headed for Wilford Hall Medical Center.

"Once we landed, I knew everything was going to be alright," Stephanie said.

One hundred and six hours and 19 minutes earlier, Stuart Scott Parker was born. He was 20.5 inches long and weighed 7 pounds, 13 ounces.

His proud papa, a U.S. Coast Guard lieutenant stationed at Sector San Juan, stared into the hazel eyes of his second child. Stuart has a 2-year-old sister, Sydney.

◀ **JOINT SERVICE SAVIORS** Army Lt. Col. Mark Croley, far left, a neonatal doctor, Air Force Lt. Col. Christopher Coppola, a pediatric surgeon, and Air Force Maj. Melissa Tyree, a neonatal doctor, prepare 3-day-old Stuart Parker for surgery to place him on a transportable Extracorporeal Membrane Oxygenation (ECMO) unit, July 21. An Air Force ECMO team from Wilford Hall Medical Center, Lackland Air Force Base, Texas, flew to San Juan, Puerto Rico, to transport the baby back to the United States for more advanced care. Stuart is the son of Coast Guard Lt. Joseph and Stephanie Parker.

▼ **SAVING STUART** Senior Airman Kris Vensel, a respiratory therapist, attaches probes to monitor the heart of Stuart Parker after he was placed on a transportable Extracorporeal Membrane Oxygenation (ECMO) unit, July 21.



▲ **ECMO EXPLAINED** Maj. Melissa Tyree discusses Extracorporeal Membrane Oxygenation procedures with Coast Guard Lt. Seth Parker. Tyree is a neonatal doctor and the team chief of the Air Force ECMO team that flew to San Juan, Puerto Rico, to treat Parker's son, Stuart, after he developed persistent pulmonary hypertension — a condition that didn't allow his lungs to work properly.





Photo by Master Sgt. Scott Reed, USAF

▲ PRE-MOBILE MONITORING Air Force Lt. Col. Kirk Milhoan, a pediatric cardiologist, checks the heart function of Stuart Parker prior to the baby being placed on a transportable Extracorporeal Membrane Oxygenation unit, July 21. Comprised of Air Force medical specialists from Wilford Hall Medical Center, Lackland Air Force Base, Texas, the ECMO team flew to San Juan, Puerto Rico, to transport the son of Coast Guard Lt. Joseph and Stephanie Parker back to the United States for more advanced care. The team is the only institution in the world with the capability to do ECMO on a worldwide basis.

Everything had gone perfectly. It was a “perfect” pregnancy — no problems at all. It was a “perfect” cesarean delivery. Stuart had even received a 9.9 out of 10 on his Apgar score, the quantitative rating test used to measure the vital signs of a newborn.

Holding his crying son for a few brief moments, he handed Stuart back to the nurses who began their usual newborn care. Stephanie, still recovering from the delivery, wasn’t able to hold him yet.

About two hours later, the Parkers received the news that every family dreads after the birth of a child — there was a serious problem.

“We were all just in shock,” Stephanie said. “It was all such a surprise, even to my doctor.”

At first, doctors thought Stuart had pneumonia. He was moved to the neonatal intensive care unit for observation. Later that evening, the Parkers learned that Stuart’s lungs were not working properly.

The baby was moved to the Hospital Auxilio Mutuo, another

local hospital, where he received what the doctors called a “miracle gas” treatment. This nitrous oxide gas system stimulates the lungs to help patients breathe on their own.

“I left that night with a great feeling,” Seth said. “I told my wife he was showing great signs of improvement — it looked like it was working.”

But the next morning Seth got an urgent call to sign the paperwork for a blood transfusion. It was then that he discovered his son had battled through a roller coaster night. His oxygen levels plunged dramatically. Stuart had fought for nearly two hours to restore them — only to crash again 20 to 30 minutes later.

After signing all the paperwork and not being allowed to see his son, the lieutenant, a search and rescue controller, drove to the hospital his wife was in, about five minutes away.

As he was coming up to see her, Stephanie was getting out of the shower. The phone rang. It was around 11 a.m. and Stuart was

now 21 hours old.

The voice on the other end delivered the news — the Parkers needed to come to the hospital right now to say goodbye — their son was going to die.

“It was ultimate shock,” Stephanie said.

Minutes later, still recovering from the previous day’s surgery, Stephanie walked through the lobby of her son’s hospital in pajamas and slippers, her hair still dripping wet from the shower she had just taken.

Stuart’s hospital, while one of the best facilities in Puerto Rico, couldn’t provide him with the care he needed. The doctor said the next step for Stuart would be ECMO.

The ECMO machine provides partial heart-lung bypass to infants and children suffering from severe cardiopulmonary failure. It is made to do the work of the heart and lungs — to oxygenate the blood. This procedure is accomplished by surgery on the baby’s throat that takes blood from the patient to a “lung” where it is filled with oxygen

and then returned to the patient.

Because there are no ECMO machines in Puerto Rico, one of the doctor’s colleagues suggested the Wilford Hall Medical Center’s ECMO team. Among all ECMO teams around the globe, the Wilford Hall team is unique.

Since it was created in 1985, Wilford Hall’s ECMO team has treated 172 patients; 63 required transport on the ECMO system. According to Wilford Hall officials, less than 20 percent of patients who need it would survive without ECMO treatment.

“We remain the only institution or team in the world with the capability to do ECMO — transportable ECMO — with the geographical distribution that we can do,” Maj. Melissa Tyree, a neonatal doctor said. “In short, we are the only worldwide ECMO team.”

After evaluating Stuart’s condition over the phone and determining he was a good candidate, the emergency response Airmen answered one of the Parkers’ prayers.

They would arrive within the next 24 hours.

The team arrived in a C-17 Globemaster III at 3:07 a.m. on July 21 at MuAir National Guard Base, Puerto Rico. Stuart was now 85 hours and 21 minutes old.

“I knew they were coming but I didn’t expect so many of them,” said Lorena Malarat, a respiratory therapist at the Hospital Auxilio Mutuo.

The Lackland AFB team always travels with extra people to fill every position on the team — just in case. “I think it is great so many people getting together for the welfare of a baby,” Malarat said.

At 3:40 p.m., Lt. Col. (Dr.) Christopher Coppola, an ECMO surgeon, made the first incision in preparation for transferring Stuart to the mechanical ventilator.

“We are just blessed,” Stephanie said. “It is a major miracle that he is even alive. We are just saying our prayers that everything will go well on the flight back to San Antonio.”

At about 7:30 p.m., Stuart Parker and the ECMO team left Puerto Rico.

Despite most of the ECMO team working without sleep for more than 30 hours, they maintained a

constant vigil over Stuart and the life-giving machines keeping him stable.

“It is blowing me away,” Seth said. “My particular job in the Coast Guard is a search and rescue controller — being on the other end of the stick and providing assistance and rescue where needed to people in life-threatening events. To be on the receiving end, particularly from another branch like the Air Force, is truly amazing. I can’t be thankful enough.”

“He is truly a miracle son. Hopefully one day we’ll be able to make him proud to say that the military saved his life,” Seth said. “I owe it to the fellow men and women in the military — they have truly made me proud to be a member of this joint force.”

“The humanity and professionalism displayed by Lt. Col. Kirk Milhoan and his team of physicians, nurses, aircrew and technicians personified what is

best about our military,” Capt. James Tunstall, the Sector San Juan commander, said. “They saved the life of a young child while gaining our peoples’ admiration and respect.”

Sector San Juan medical officer Lt. Mark Osborn said that the combined efforts of the Coast Guard, Air Force and local hospital professionals allowed for the flawless execution of this complex logistical operation and credits HS1 Chuck Anderson with coordinating the logistical issues.

“Anderson orchestrated this very complex series of events. There were multiple persons involved, but he’s the one who made it happen the way it ought to have happened,” Osborn said.


“Lt. Col. Milhoan conveyed to me that their motto is, ‘we never leave a child behind.’ That was evident in their heartfelt care of young Stuart, and Sector San Juan is forever grateful,” Tunstall said. 



Photo by Master Sgt. Kimberly Yeargan-Stiers, USAF

▲ PARKER FAMILY PORTRAIT Lt. Seth Parker poses with his wife Stephanie, two-year-old daughter Sydney and two-month-old Stuart in the family’s temporary quarters near Wilford Hall Medical Center in San Antonio, Texas. An Extracorporeal Membrane Oxygenation team from nearby Lackland Air Force Base, flew to San Juan, Puerto Rico, to provide the care needed to save Stuart’s life. Following a two-month stay in Texas, the Parkers are returning to Puerto Rico with a recovering Stuart.