



1985
40 Years of Care in the Air
2025

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A Revolution in Trauma Care

In 1985, LIFE STAR became Connecticut's first air ambulance, marking a major milestone for Hartford Hospital. This achievement was driven by the vision of then-CEO John Springer and the determination of Dr. Lenworth Jacobs, director of Trauma and Emergency Medicine.

Thirty years later, LIFE STAR made history again becoming one of the first pre-hospital programs in the country to carry and administer blood transfusions on board.

What started as a single aircraft has grown into a fleet of three. In addition to its original base at Hartford Hospital, LIFE STAR expanded with bases at Backus Hospital in 1999, MidState Medical Center in 2015, and Westfield Barnes Regional Airport in Massachusetts in 2017.

Operating 24/7, the fleet serves Connecticut, Western Massachusetts, Rhode Island, and beyond, bringing life-saving care wherever it's needed most.





Dr. Lenworth Jacobs: A Vision, Realized



As a child, Dr. Lenworth Jacobs witnessed something that would shape his future — a moment when his father, a surgeon, rushed to help a victim of a serious car accident. That experience didn't just inspire him to become a surgeon; it set him on a path to revolutionize trauma care.

After graduating from the University of the West Indies Medical School in 1970, Dr. Jacobs trained in surgery at Peter Bent Brigham Hospital and Boston University Hospital before becoming an attending

surgeon at Boston City Hospital and Boston Medical Center. In 1976, Boston's Department of Health & Hospitals recruited him to transform the city's EMS system.

Working alongside his wife, Barbara Bennett Jacobs, a registered nurse, he launched Massachusetts' first advanced life support (ALS) paramedic program. He didn't just improve the system — he rebuilt it. His plan integrated basic and advanced life support-trained EMTs, standardized ambulances, and a strategically designed, computerized 911 call system. He also worked with the

Massachusetts Office of Emergency Management Services to coordinate hospital transports, creating a model EMS system for the city.

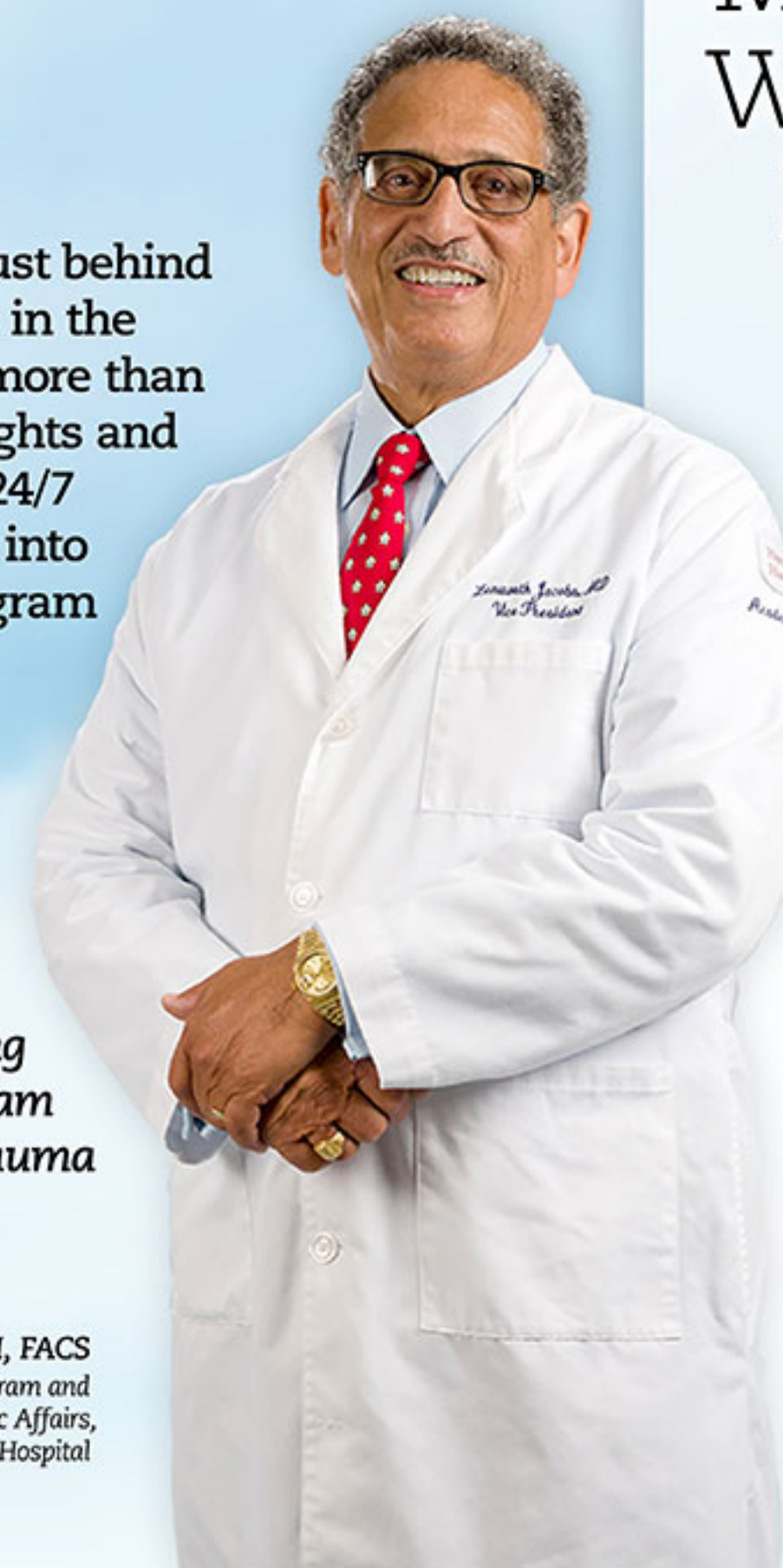
Dr. Jacobs' success in Boston caught the attention of John Springer, then CEO of Hartford Hospital, who was looking to enhance emergency medical services in Connecticut. In 1983, he brought Dr. Jacobs on board as director of Trauma and Emergency Medicine.

Together, they launched Connecticut's first helicopter emergency medical service program, what we now know as LIFE STAR.

Dr. Jacobs wasn't just behind the scenes; he was in the air, taking part in more than 100 patient-care flights and remaining on call 24/7 to grow LIFE STAR into the life-saving program it is today.

"My goal in developing the LIFE STAR program was to bring the trauma bay and the ICU to the patient."

— Lenworth Jacobs, MD, MPH, FACS
Director Emeritus, Trauma Program and
Vice President Emeritus, Academic Affairs,
Hartford Hospital



A Lifelong Mission and Worldwide Impact on Trauma Care

For Dr. Lenworth Jacobs, trauma care wasn't just part of his job, it was his life's work. In addition to establishing LIFE STAR, he played a key role in Hartford Hospital earning its Level 1 Trauma Center designation, ensuring the highest level of emergency care for critically injured patients.

But his influence didn't stop there. Troubled by the rise of mass shootings in the U.S., Dr. Jacobs took action. He brought together trauma surgeons, military medical experts, and leaders from government and the private sector to form the Hartford Consensus.

Their mission? To launch STOP THE BLEED, a national program aimed at teaching bystanders how to control life-threatening bleeding before emergency responders arrive.

"Dr. Jacobs' accomplishments during his tenure at Hartford Hospital are emblematic of an individual with passion, insight, and an incredible ability to move an idea from thin air into a reality."

His contribution to trauma care is immeasurable as he has left an imprint worldwide for generations to come."

— Jonathan D. Gates, MD, MBA, FACS
Chief of Trauma and Chief of Surgery Emeritus,
Hartford Hospital



In just 10 years, STOP THE BLEED has trained more than 2.6 million people in 138 countries, and its bleeding control kits are now a common sight in public buildings. Thanks to Dr. Jacobs' leadership, countless lives have been saved.



In 2014, Dr. Lenworth Jacobs was presented with the White House Medical Unit Medallion in recognition of the work of the Hartford Consensus group.



Dr. Jacobs and Salem Fire Chief Gene Maiorano talk about the LIFE STAR program as part of an educational tour with public safety officials...



...while continuing to join flights as the program developed.



Construction on the helipad atop Hartford Hospital began in 1989. The completion of the helipad and hangar cleared the path for other construction projects on campus.



Dr. Jacobs and Hartford Hospital CEO Emeritus John Springer connect at an event.





Expert Care— Anywhere

Every LIFE STAR flight is staffed by a highly trained crew, including a pilot, a flight nurse and either a flight respiratory therapist or a paramedic.

To ensure the highest level of care, all flight nurses and respiratory therapists also hold paramedic licenses. These experts are trained to perform complex, life-saving procedures mid-flight, including surgical and non-surgical airway management and the administration of critical care medications.

They respond to the most serious emergencies, from major car accidents to strokes, heart attacks, and cardiac arrest.



Intubating a patient in the helicopter requires a deft touch and a steady hand. Pilot Mike Kwas takes a call.

Beating Under the Rotor Blades



Dr. Jason Gluck with the heart-lung bypass (ECMO) machine

In 2013 Jason Gluck, DO, a heart transplant specialist and Medical Director of the Mechanical Circulatory Support Program, ECMO, and Emergency Cardiac Care at Hartford Hospital, launched a program in which the LIFE STAR team accompanies a physician and perfusionist to hospitals to deploy the heart-lung bypass, known as ECMO (extracorporeal membrane oxygenation)— a machine that takes over the job of the heart

and lungs by pumping and oxygenating blood outside of the body.

LIFE STAR crews are also equipped to manage patients on sophisticated cardiac support devices, including intra-aortic balloon pumps, mechanical heart pumps, ventricular assist devices, and temporary pacemakers. No matter the challenge, they bring expert critical care wherever it's needed.





Barbara Bennett Jacobs, MPH, PhD, RN, HEC-C
Pioneers Air Medical Training

Nurses Take Flight

When Hartford Hospital trained its first LIFE STAR flight nurses in 1985, Barbara Bennett Jacobs, MPH, PhD, RN, HEC-C, was at the helm. She designed the curriculum and led three flight nurse training programs in the early years, setting the standard for excellence in air medical care.

Her expertise in EMS education started in Boston, where she and her husband, Dr. Lenworth Jacobs, trained EMTs to become paramedics and launched the city's first advanced life support pre-hospital system. As the nurse coordinator for the Massachusetts Office of EMS, Barbara also developed a statewide certification program for hundreds of Emergency Department nurses.

A leader in trauma nursing education, she co-authored Emergency Patient Care: Pre-hospital Ground and Air Treatment Protocols and co-edited Emergency Care Quarterly, a journal dedicated to EMS providers. She also shared her knowledge as a nursing faculty member at the University of Saint Joseph and the University of Connecticut School of Nursing.

With the rise of air ambulance systems came the need for rigorous training and professional development, something Barbara championed from the start. Her foundational work helped shape the high standards of care that define LIFE STAR today, ensuring that every patient receives expert, life-saving treatment in the air and on the ground.



Dr. Lenworth Jacobs with daughter Jennifer and wife Barbara during a LIFE STAR public relations event.



Communications specialist Lucy Plumey, manually plotting the flight path of a LIFE STAR call.



Flight nurse, Lynn Piacentini Hayes, providing on-site trauma care.



First graduating class of flight nurses trained by Barbara Bennett Jacobs, MPH, PhD, RN, HEC-C



On June 18, 1985, LIFE STAR got its first call. In six minutes, LIFE STAR landed — the patient survived.



LIFE STAR crews can reach patients in difficult-to-access areas and transport them to the care they need.



An Elite Crew Excellence & Teamwork

Joining the LIFE STAR team is a significant feat. It's a testament to skill, dedication, and teamwork. Crew members work together, combining their expertise to deliver top-tier care to critically ill and injured patients during transport.

Becoming a flight crew member requires intensive training and

strict certifications. The journey begins with a demanding 20-week orientation that includes classroom learning, high-fidelity simulations, hands-on clinical rotations, and in-flight training. This structured process ensures that new team members are fully prepared for the challenges of providing critical care in an air medical environment.

Safety is always the top priority. During training, crew members learn about flight physiology, survival skills, aircraft fire suppression, emergency procedures, and even how to shut down an engine in an emergency. They're also trained to operate key avionics, including GPS navigation and ground communication radios.

Beyond the technical skills, LIFE STAR thrives on strong teamwork. The program fosters a culture of autonomy, compassion, and collaboration, ensuring that every crew member is ready to perform at their best, no matter the mission.

Patient care in the air requires vigorous training

The LIFE STAR crew provides patients ICU-level care.

Constant training at CESI and national facilities keep the crew on the leading edge of trauma care.



Mechanics Behind the Mission



Erica Holland, one of the skilled LIFE STAR technicians.

Behind every LIFE STAR flight is a team of highly skilled aviation maintenance technicians who ensure the safe and proper function of our fleet's three twin-engine helicopters operated under the control of Air Methods Corporation.

They undergo extensive training in airframe structures, electrical systems, and turbine engines. Combined with their years of hands-on experience, their training helps them to quickly assess and repair any maintenance issues that arise. They perform routine inspections, servicing, and safety evaluations to keep our aircraft mission-ready at all times.

Available 24/7, LIFE STAR's expertise keeps our crews and patients safe, allowing LIFE STAR to continue delivering lifesaving care across the region.



LIFE STAR technician Tom Barclay shares decades of experience and insights with his colleagues.

Skilled Hands Guide Every Flight

Flying any aircraft is an impressive accomplishment, but piloting an air ambulance takes even more skill, precision, and experience. LIFE STAR pilots are the backbone of each mission, ensuring patients receive care as quickly and safely as possible. While they don't provide direct medical treatment, their role is critical in delivering life-saving care.

Before joining LIFE STAR, pilots must accumulate extensive flight experience, either through long civilian careers or military service. They log thousands of hours in the air, mastering aircraft systems, weather patterns, airspace navigation, and federal regulations.

Only after meeting these high standards can they apply to become an air medical pilot.

Once selected, new pilots undergo weeks of rigorous operational training, decision-making standardization, and simulator-based testing. Even after they begin flying, the training never stops. Every LIFE STAR pilot completes annual testing to maintain the highest safety standards.

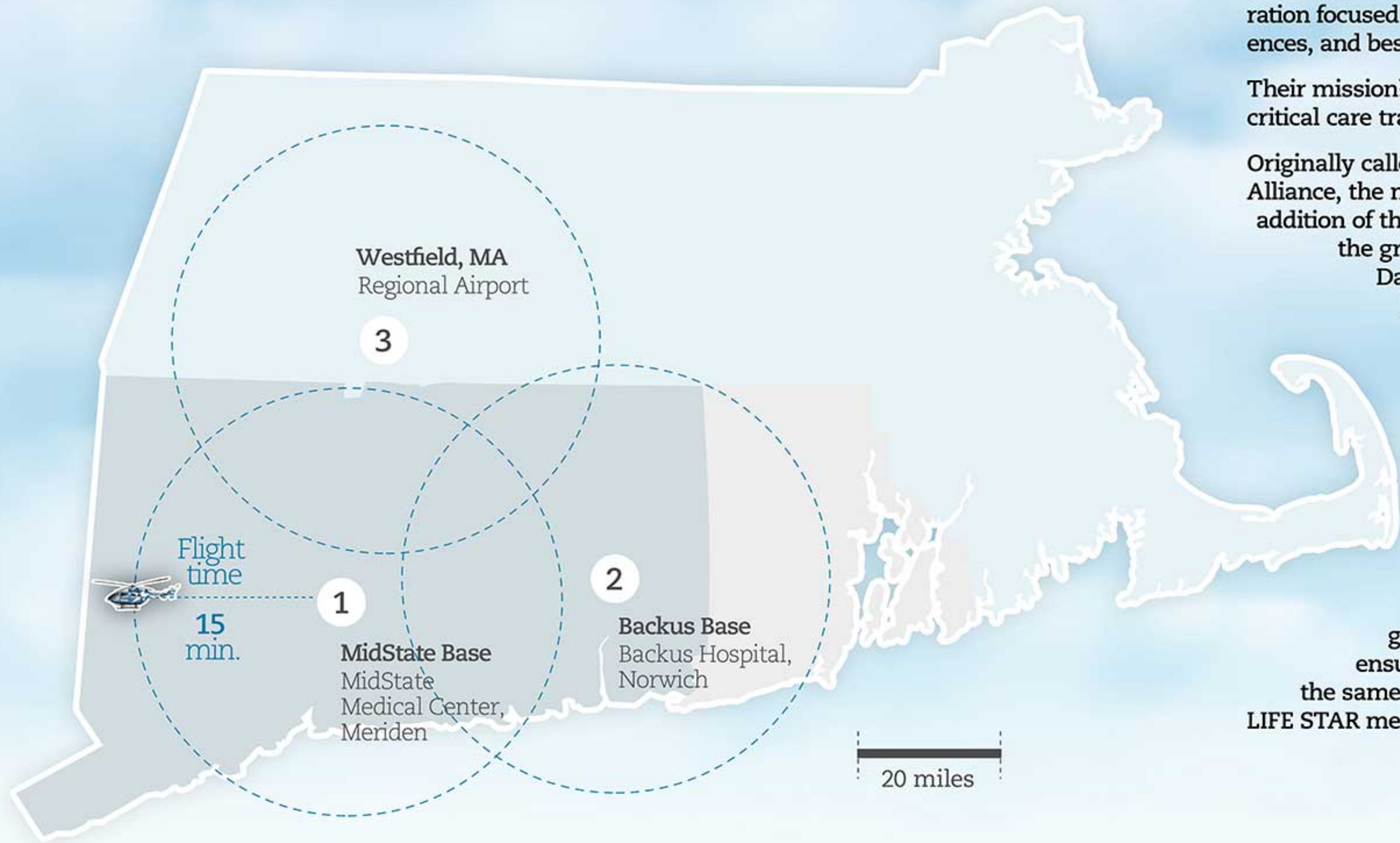
When the call comes in for a scene response, intercept, or interfacility transport, they are ready to act alongside their medical crew partners, ensuring every mission is carried out with precision and care.



Rich Magner has been a LIFE STAR pilot since the program began in 1985.



LIFE STAR Has You Covered



LIFE STAR, Boston MedFlight, and UMass Life Flight came together in 1989 to form the North East Air Alliance (NEAA), a collaboration focused on sharing knowledge, experiences, and best practices.

Their mission? To ensure safe, high-quality critical care transport across the region.

Originally called the New England Air Alliance, the name was changed with the addition of three air medical programs to the group – Life-Flight of Maine, Dartmouth Hitchcock Advanced Response Team (DHART), and Albany Med Flight-LifeNet of New York. SkyHealth is the newest member of NEAA.

When weather or other factors prevent LIFE STAR from flying, the team's lifesaving work doesn't stop. They work closely with local EMS providers to coordinate ground ambulance transfers, ensuring patients still receive the same expert care from the LIFE STAR medical team.



Communication Specialists: The Voices Behind the Mission

The LIFE STAR communication specialists play a critical role in coordinating lifesaving responses, and their work extends far beyond their helicopter. Based in the Emergency Communication Center, they also manage Hartford Hospital's Public Safety and Fire Safety Departments, as well as Connecticut Children's Public Safety and the Pediatric/NICU Critical Care Transport Teams.

To take on this multifaceted role, communication specialists must hold a valid EMT certification through the State of Connecticut and complete the Certified Flight Communicator course through the International Association of Medical Transport Communication Specialists. This specialized training equips them with essential skills like aviation map reading, interpreting topographical obstacles,

understanding aviation weather reports, and managing potential aircraft emergencies.

At the heart of it all, their top priority is ensuring the safety and seamless coordination of every mission making sure crews, patients, and first responders are exactly where they need to be when every second counts.

Hartford Hospital remains the home of LIFE STAR. The program, which has a total of three aircraft, expanded to include additional bases in Meriden, Norwich, and Westfield, Mass.

LIFE STAR serves all Hartford HealthCare acute-care hospitals and free-standing Emergency Departments, as well as other health systems and first responders requesting life-saving care across Connecticut, Massachusetts, Rhode Island, and beyond.

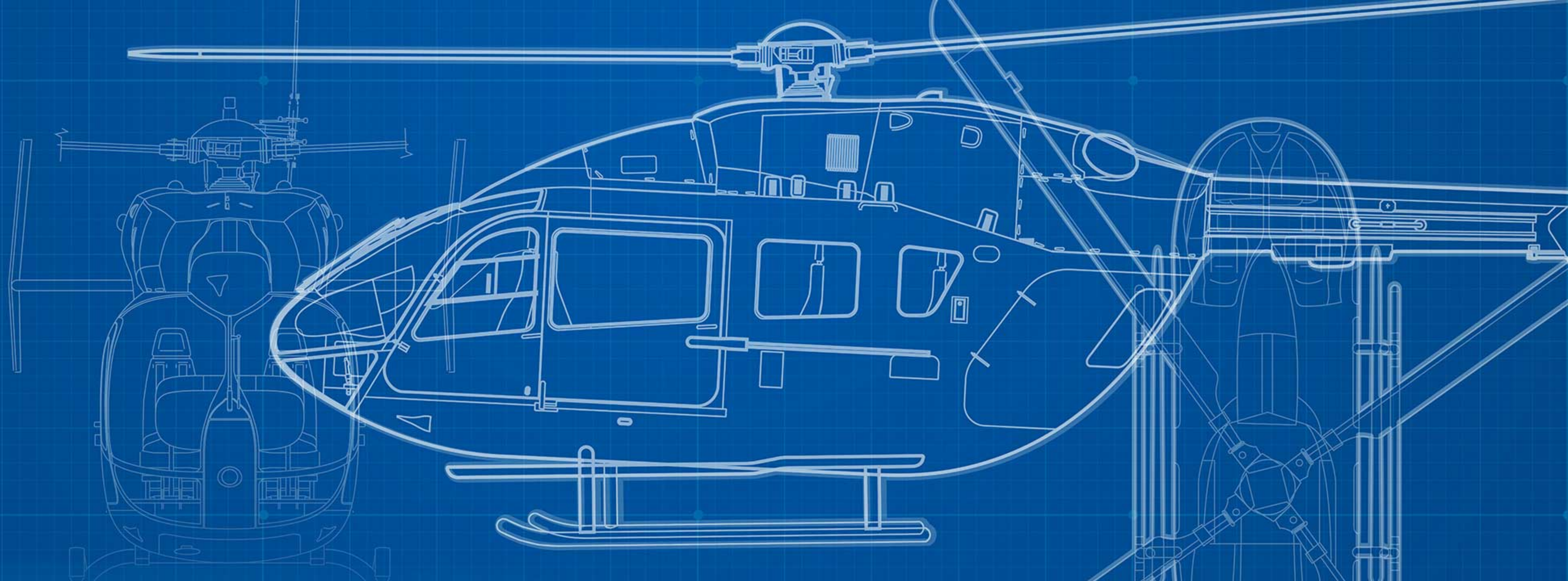


Lessons FROM LOSS

A LIFE STAR Tragedy Shaped Flight Protocols Nationally

Aviation is one of the most heavily regulated industries in the world, and for good reason: when an aircraft is in flight, lives are at stake. Despite strict protocols, accidents can still happen. And while rare, these tragedies often lead to even stronger safety standards.

In 1992, LIFE STAR experienced a crash that not only changed the program but influenced safety protocols nationwide. As a result, flight crews across the country now benefit from improvements in uniforms, equipment, and procedures.



Changes in on-board procedures after tragedy:

Landing zone reconnaissance

Crews now assess landing zones at both high and low altitudes to identify potential hazards.

Better landing lighting

Traditional searchlights have been replaced with the more powerful Nightsun system.

Stricter landing zone requirements

Scene call landing zones must meet higher safety standards.

Fire-resistant flight suits

Once made of cotton, flight suits are now long-sleeved and crafted from fire-resistant Nomex material.

Protective footwear

Crew members must wear above-the-ankle boots for added safety.

Stronger aviation training

Crews receive enhanced education on aviation terminology and aircraft systems.

Water survival training

All new flight crew members must complete water survival training during orientation.

Enhanced radio communications

Dispatchers have improved monitoring of aircraft locations and recording of transmissions.

Annual safety training

A dedicated safety training day is now required for all LIFE STAR personnel.

More stringent weather minimums

Weather conditions must now meet higher thresholds before flights can be approved.

Helmet upgrades

Standard headsets have been replaced with protective helmets.

Expanded crew resource management

Crew members now assist pilots with tasks like inputting coordinates, tracking fuel levels, finding nearby airports, and communicating with landing zone personnel, allowing pilots to focus on flying.





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Each time LIFE STAR takes to the air, teams of people on the ground spring into action. Nurses, respiratory therapists, emergency physicians, surgeons, radiologists, anesthesiologists, and ICU specialists — all ready themselves to respond to a patient's needs.

Since 1985, LIFE STAR has transported more than 40,000 people, saving thousands of lives.