NOVEMBER 18, 2000: A PARTICULARLY BUSY DAY IN THE LIFE OF LIFEFLIGHT

A tragic house fire in Rumford on November 18 set the stage for a succession of medical emergencies that kept LifeFlight of Maine’s helicopters criss-crossing the state and region, providing their unique blend of medical care and transport for critically ill patients. It was a singular day in which LifeFlight’s pivotal role within Maine’s emergency medical system was “tested hard,” says Executive Director Tom Judge, and “it proved to work even better than we’d hoped.”

The day’s events began to unfold at 10:22 a.m. with a call from the Rumford police to MedComm, the medical communications center in Bangor, relaying the fact that several people had been critically burned and injured in a house fire there. LifeFlight would be needed to transport one person directly from the fire scene, while another person enroute to Rumford Hospital by ambulance would require transport as well.

LifeFlight’s #2 helicopter, based at Central Maine Medical Center in Lewiston, was closest to the scene of the fire. Piloted by Al Sabaka, and with flight nurse Steve Breznyak and paramedic Kim McGraw aboard, the helicopter lifted off from the CMMC helipad just nine minutes after MedComm took the call. A short time later, the aircraft touched down in Rumford, a short distance from the fire scene. The crew’s job would be to transport Sarah Mori, 18, severely burned and badly injured, to the nearest appropriate tertiary care center.

Sarah’s eventual destination would be Brigham and Women’s Hospital in Boston, but LifeFlight first flew her to Portland, landing at the Portland International Jetport, the nearest helipad to Maine Medical Center. From there, a MEDCU ambulance drove...
MISSION STATEMENT
To provide a statewide medical helicopter service that transports critically-ill and -injured patients. LifeFlight will provide the highest quality of care and follow rigorous safety standards.

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LIFEFLIGHT’S ACCOMPLISHMENTS: 1998-2001

Since it was launched in September 1998, LifeFlight has transported 828 critically-ill or -injured patients from community hospitals and accident scenes to specialty-care hospitals in the state and region. Of that total, 564 flights originated from Maine hospitals, 154 from accident scenes, and 32 from remote healthcare facilities or islands. LifeFlight has also provided back-up coverage for hospitals in New Hampshire, Vermont and Massachusetts.

LifeFlight has developed an extensive infrastructure to support hospitals and emergency care providers throughout Maine, including two aircraft (based at Eastern Maine Medical Center and Central Maine Medical Center); a communications center in Bangor, fed by eight radio towers around the state; new hangar and maintenance facilities built in partnership with the Bangor International Airport and the Auburn-Lewiston Municipal Airport; and extensive air support equipment.

LifeFlight has transported patients from every hospital in Maine. EMMC, CMMC, Maine Medical Center, Northern Maine Medical Center in Fort Kent, The Aroostook Medical Center in Presque Isle, Down East Community Hospital in Machias, Penobscot Bay Medical Center in Rockport, Franklin Memorial Hospital in Farmington, Rumford Hospital and Bridgton Hospital have each had more than 25 patients transported by LifeFlight.

With flight destinations determined by the patient’s physicians and Maine EMS and Trauma System protocols, LifeFlight has transported patients to over 20 hospitals in northern New England. EMMC has received the largest number of patients (38 percent); CMMC second largest (22 percent) and Maine Medical Center (21 percent). Sixteen percent of patients have been transported to one of eight different Boston hospitals. Other Maine hospitals receiving LifeFlight patients include The Aroostook Medical Center, Maine General Hospital/Waterville, St. Joseph Hospital in Bangor, St. Mary’s Regional Medical Center in Lewiston, C.A. Dean, and Stephens Memorial Hospital Norway.

The average patient transport was 78 direct air miles. With Maine’s vast size, rugged topography and irregular coastline, the comparable ground distance can be as much as four times greater.

Multiple trauma, severe closed head injuries, and emergency surgical conditions have prompted nearly 60 percent of LifeFlight transports. Cardiac emergencies, accidental poisoning, hypothermia, and the need for high risk obstetric and perinatal care have accounted for numerous transports as well.

LifeFlight responds to flight request 24 hours a day. Peak activity has occurred in the afternoon, with 40 percent of flight requests made between 2 p.m. and 8 p.m.

Nearly a century spans the difference in age between LifeFlight’s youngest and oldest patient, from four days to 98 years of age. Thirty percent of flight requests were for patients 16 to 40 years old, while 15 percent were for patients under the age of 16.

LifeFlight has fulfilled 63 percent of the flights requested, a figure equivalent to the national average for air transport services. Weather and safety concerns precluded 13 percent of requests, while others were not undertaken as clinically unnecessary or because both aircraft were on other missions. LifeFlight follows the most stringent safety and medical necessity criteria in responding to flight requests.

On ten occasions both LifeFlight aircraft have been sent simultaneously to a single traumatic incident such as a major fire or motor vehicle accident. A single LifeFlight aircraft has twice made multiple transports from a single accident. LifeFlight has transported several patients for organ transplants, including one person to a hospital in Pittsburgh for a life-saving kidney transplant.
Sarah to the medical center, where trauma surgeons performed the stabilizing measures that are necessary to preserve life in severe burn cases.

Meanwhile, the LifeFlight#1 helicopter based at EMMC had been notified of the Rumford fire while en route to a training mission in the Greenville area. Pilot John Marino, flight nurse Paula Rouleau, and paramedic Paul Knowlton were directed to fly to Rumford Hospital, where Adam Richard, 25, also severely burned and injured, was receiving emergency treatment after being transported there by emergency responders from MedCare Ambulance.

At 1:27 p.m., Marino and his crew lifted off with Adam for the burn center at Brigham and Women’s Hospital in Boston, with an intermediate stop at CMMC. There, Adam was treated by a trauma team that gave him critical fluids and treated his badly injured legs. The helicopter lifted off from CMMC at 3 p.m. and arrived at the Boston hospital just under an hour later.

With both LifeFlight aircraft in use, MedComm summoned a DHART (Dartmouth-Hitchcock Air Response Team) helicopter based in New Hampshire to Maine. DHART’s assistance resulted from LifeFlight’s mutual aid pact with five other air transport services in the region, a group known as the New England Air Alliance. It was anticipated that Adam Richard’s son Nathaniel, also critically injured, might need air transport. Tragically, the toddler died at the fire scene.

DHART’s presence in Maine proved invaluable when MedComm received a call at 12:45 p.m. from Calais Regional Hospital seeking air transport to EMMC for a young man who’d suffered a head injury in a fiery car crash. The DHART helicopter quickly took off for Calais. After completing that mission, the crew was directed to Portland to take Sarah Mori on the second leg of her trip, to the burn center at Brigham and Women’s.

With DHART helping out in Maine, the LifeFlight#2 aircraft headed to Laconia, New Hampshire to provide coverage for New Hampshire and Vermont. But when MedComm got a call at 2:48 p.m. that help was needed in Machias, the helicopter and crew took off for eastern Maine, landing in the late afternoon at Downeast Community Hospital. Clinical concerns about the patient’s flight safety due to the nature his head injury eventually ruled out this transport. By evening, all three helicopters and their crews had returned to their home bases.

The eventful day perfectly illustrated LifeFlight’s capacity to “glue together” the many pieces within Maine’s emergency medical system, from public safety officials and ambulance services to community hospitals and the state’s three trauma centers. Another overarching layer of teamwork brought together the six New England air transport programs that work together on behalf of the entire region.

“When you’re designing an operation like LifeFlight, you always hope that when it’s fully tested, it will work well,” says Tom Judge. “Even when all the elements are in place – hangars, fuel, communication, crews, hospital emergency departments, and ambulances – the real art is to choreograph them in such a way that they really make a difference in the life of the patient. On this day, it was clear that we all succeeded.”
Emergency Scene Response and Transport by County
9/98 to 4/01

Hospital Transports 9/98 -04/01

- NMHC ................................................... 33
- Cary .................................................. 18
- TAMC .................................................. 32
- Houlton .................................................. 13
- Jackman .................................................. 9
- Millinocket .................................................. 13
- C.A. Dean .................................................. 12
- PVH .................................................. 6
- Mayo .................................................. 6
- Calais .................................................. 18
- EMMC .................................................. 46
- St. Joseph .................................................. 1
- Red.-Fairview ............................................ 18
- SVH .................................................. 8
- Downeast .................................................. 34
- Maine Coast .................................................. 7
- MDI .................................................. 11
- Blue Hill .................................................. 8
- WCGH .................................................. 22
- PBMC .................................................. 39

- MGH-Waterville ............................................ 7
- Inland .................................................. 3
- Franklin .................................................. 37
- Rumford .................................................. 28
- Stephens .................................................. 6
- Miles .................................................. 6
- St. Andrews .................................................. 3
- CMMC .................................................. 43
- St. Mary’s .................................................. 6
- Bridgton .................................................. 33
- Parkview .................................................. 2
- Mid Coast .................................................. 1
- MMC .................................................. 15
- Mercy .................................................. 1
- Goodall .................................................. 3
- SMMC .................................................. 1
- York .................................................. 3
- Togus .................................................. 1

TOTAL FLIGHTS — 564
LifeFlight Chief Complaint Trauma Transports 9/98 to 4/01

- Severe Closed Head Injury — 171
- Multiple Trauma — 191
- Acute Surgical — 145
- Acute Medical — 92
- Acute Neurological — 62
- Cardiac — 116
- Burns — 36
- Obstetrics/Perinatal — 11
- Environmental — 4

LifeFlight Transports: Hospital Destinations

- Eastern Maine Medical Center — 313
- Central Maine Medical Center — 179
- Maine Medical Center — 170
- Boston Hospitals — 126
- New Hampshire/Vermont Hospitals — 30
- MaineGeneral Hospital-Waterville — 2
- St. Joseph's Hospital — 2
- St. Mary's Regional Medical Center — 2
- The Aroostook Medical Center — 1
- Stephens Memorial Hospital — 1
- C.A. Dean Memorial Hospital — 1
- Out-of-state Hospital — 1
On March 31, 2000, as New Sharon postman and Fire Chief David Grant waited on Route 2 to turn into a local store for his morning cup of coffee, he was completely unaware that a life-altering event was about to occur. Without warning, a tractor-trailer loaded with wood chips plowed into the rear of Grant’s sport utility vehicle, which then catapulted into two other vehicles.

Pinned inside the accident wreckage, Grant had suffered multiple fractures to his ribs and spine, a crushed knee, and internal injuries. Store owner Larry Donald immediately called 911 after witnessing the crash through the window. Grant — who as the town fire chief was often among the emergency responders at similar accident scenes — was then extricated by members of his own department and paramedics, from Lifestar Ambulance in nearby Farmington.

The Lifestar crew rushed Grant to Franklin Memorial Hospital in Farmington, where they were met by a helicopter and critical care team from Lifeflight of Maine, the state’s air ambulance service, which had been called from the scene of the accident.

“The teamwork of the emergency crew, the hospital staff, and LifeFlight was phenomenal,” recalls Lifestar Director Peter Wade. “Two Franklin physicians jumped into the back of the ambulance when we got to the hospital. They relocated and immobilized the fracture, then we rolled the ambulance around the corner to where the LifeFlight helicopter was waiting. It was literally a matter of a couple of minutes . . . the pilot never even had to shut the craft down.”

Grant was then airlifted by LifeFlight to Central Maine Medical Center, the nearest Maine trauma center with capabilities for handling his multiple injuries, where he would spend nearly a month undergoing treatment for his complicated injuries. His arrival, only 52 minutes after the accident, illustrated the best in teamwork among the multiple agencies that make up Maine’s trauma system.

Today, thanks to the skills and teamwork of the Maine emergency system of which he’s a key member, the 47-year-old is back at work for the post office and gratefully looking forward to many more years of serving the people of New Sharon and neighboring towns. "I can’t say enough good things about LifeFlight. They did a great job. . . . I’m very glad they were there," Grant says gratefully.

Accustomed to being an emergency services provider, New Sharon Fire Chief David Grant suddenly found himself on the receiving end following a violent accident on Route 2.
Young, carefree, lighthearted... that’s how we like to remember childhood. But on occasion, a child’s youthful exuberance can lead to frightening consequences, as the Martin family of Monroe discovered one day last August. Fortunately, they also learned that when an unexpected accident happens, LifeFlight of Maine’s critical care air transport services may make the difference between a child’s promising future and a life cut tragically short.

Twelve-year-old Rachel Martin was enjoying a fast, “no hands,” bike ride down a local hill when she veered into the shoulder to make room for a passing car. Losing control of her bike, she fell onto the road’s guardrail, suffering life-threatening deep gashes to her right leg and abdomen.

To Rachel’s great fortune, good samaritan John Skillings of Brooks stopped to help, using his shirt to wrap Rachel’s badly lacerated leg. An ambulance was summoned, and emergency medical providers rushed Rachel to Waldo County General Hospital in Belfast, where it was quickly determined that repairing Rachel’s right femoral artery was an urgent priority.

LifeFlight flight paramedic John Wardwell, flight nurse Sandy Benton, and pilot Don Dorsey were on duty at Eastern Maine Medical Center (EMMC) that day. Summoned to the Belfast hospital, they landed just 28 minutes after receiving word that Rachel needed their assistance, then returned with their young patient to EMMC for emergency surgery by the hospital’s trauma specialists.

Thankfully, Rachel’s injuries left no permanent damage. She did require extensive physical therapy to regain full use of her leg, but it was a small price to pay indeed. The LifeFlight crew were among those most delighted by Rachel’s positive prognosis. “We’re always ready to help any patient who needs our combination of air transport and critical care,” says Sandy Benton. “When the patient is a child, it’s especially meaningful to know that they are recovering well.”

Rachel and her family are grateful for the excellent care she received from medical providers at EMMC and Waldo County General Hospital, as well as the transport provided by the LifeFlight crew. “Dr. Flannigan [Rachel’s surgeon] told me that Rachel was a very lucky girl and could have easily bled to death if it weren’t for the quick thinking of John Skillings and the speed of LifeFlight,” says Joan Martin, Rachel’s mother. “Though I was very worried, I felt better when I saw LifeFlight take off with Rachel. I knew she was getting the care she needed, and getting it fast. I’m so very grateful to everyone.”
MAINE BEFORE LIFEFLIGHT: A PATCHWORK OF RESCUE SERVICES

Prior to the creation of Lifeflight of Maine, Maine was the only state in the country without an air ambulance service. Maine’s citizens had to rely on a patchwork of air rescue services, most of them unequipped to handle medical emergencies. National Guard helicopters were occasionally used in medical emergencies, and despite the speed with which they could transfer a patient to the hospital, potentially lifesaving minutes were lost without a trained emergency medical crew and equipment aboard.

The perception existed for many years that Maine was too poor and rural to afford air medical transport. But in fact, as the fourth most rural state in the country, with its rugged topography, irregular coastline, and challenging weather, Maine badly needed such a service. Meeting the emergency care needs of the state’s residents and vacationers, dispersed over more than 33,000 square miles, posed a uniquely formidable task in the absence of critical care transport.

Lt. Pat Dorian, who directs search and rescue operations for the Maine Warden Service, describes the advent of an air ambulance service as “long overdue.” “For example, in the last ten years, there’s been a phenomenal increase in the number of snowmobile accidents in northwestern Maine,” Dorian says. “Before LifeFlight, it could take as many as nine hours for us to get to the scene and get the injured person to a hospital. Now with LifeFlight, the time can be cut significantly.”

Together with Maine’s EMS providers, Eastern Maine Healthcare and Central Maine Healthcare understood that air medical transport was the critical missing link in meeting the emergency medical needs of those who live, work, and play in Maine. With the creation of LifeFlight in 1998, Eastern Maine Healthcare and Central Maine Healthcare made the commitment to bring Maine’s highly coordinated emergency medical response system to a level comparable to every other state in the country.

www.lifeflightmaine.org