

# DISPATCHES

A PUBLICATION OF THE LIFEFLIGHT FOUNDATION  
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## LifeFlight and Telemedicine

### Working Hand in Hand



**After his recovery, Zach came back to EMMC and LifeFlight for a visit. He especially enjoyed checking out the helicopter, with help from flight nurse Charlie Beller, RN.**

*Over the last 10 years, LifeFlight has transported more than 800 kids to trauma centers in Maine, Boston and New Hampshire.*

**By Melissa Arndt  
Marketing and Educational Outreach**

When Zach celebrated his 5th birthday on October 23rd, his family had no idea that only 3 short days later, Zach would be in critical condition at Eastern Maine Medical Center (EMMC) in Bangor, fighting for his life.

Zach was born premature and battles chronic sinusitis, reflux, allergies and asthma, to name a few. Although he had been fighting a cold for about a week, he appeared to be generally fine on October 25th and went shopping with his family. The next morning however, Zach could barely move or speak, and he cried when his parents touched him. His doctor couldn't see him until later that afternoon, so his parents made the decision to take him to the emergency room at Sebecook Valley Hospital (SVH) in Pittsfield. The staff at SVH worked hard to help Zach, but they quickly realized he needed more treatment than they could provide.

The nurses and physicians contacted the Pediatric Intensive Care Unit (PICU) at EMMC and set up a telemedicine video conference with staff there. The telemedicine technology allowed Dr. Amy Movius to see and talk to everyone at SVH, including Zach. The emergency team focused on managing Zach's airway and Dr. Movius provided advice on medication and intubation techniques. She was also able to access Zach's chest x-ray

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**Pictured here with the helicopter that transported Zach are, from left: Crystal Stratton, sister; Nikki Neal, sister; Michelle Neal, mom; Zach; Calvin Neal, dad; and Bethany Neal, sister. Missing from the photo, though not the visit, is Calvin Neal, Jr, brother.**



## INSIDE



**During Zach's nearly 6-week stay at Eastern Maine Medical Center, he spent a considerable amount of time in a special bed, pictured here. Reminiscing with Zach are, from left, Jay Hughes, RN; George Payne, MD; and Charlie Beller, LifeFlight Nurse.**

## LifeFlight and Telemedicine

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via telemedicine, which provided her with additional information for treatment. By 11:00 am the team had decided that Zach needed to be airlifted to EMMC and Dr. Movius continued to assist in Zach's care until a LifeFlight helicopter could be dispatched to transport him. Once the LifeFlight crew arrived, they worked collaboratively with the emergency department staff, administering fluids and medication and hooking him up to a special pediatric ventilator they carry for patients like Zach. After more than an hour, Zach was stable enough to leave the hospital and make the short, 13-minute flight back to the PICU.

When he arrived at EMMC's PICU, Dr. Movius and her colleagues treated Zach for septic shock, a serious condition typically resulting from a previous infection. He had taken antibiotics for a

sinus infection from late August to early October, but the PICU doctors believed the infection never went away. Instead, it spread to his lungs, resulting in one of the worst cases of pneumonia they had ever seen. It also spread through his entire body, giving him full body sepsis. They treated him with antibiotics and he remained on a ventilator for nearly a month while his body recovered. When he was finally discharged from the PICU, he moved to the pediatric floor and underwent two additional weeks of rehab.

"Zach is doing well today after a very long road. The first night at EMMC, his heart actually stopped. We will be forever grateful to LifeFlight, the emergency room at Sebecook, the physicians, nurses and staff at EMMC PICU for saving Zach. He is truly a miracle boy," said his mother, Michelle. 

## Profile | Kalem Malcolm



While growing up in Gardiner and New Sharon, Kalem always enjoyed science classes and first aid and he's been following that love ever since. He took an EMT class during

high school, then joined the Navy where he worked as a corpsman in the Cardiac ICU at the National Naval Medical Center. He also earned degrees from Montgomery County Fire/Rescue Training Academy in Maryland, and the University of Maryland, Baltimore County.

After completing his service in the military, he returned to Maine and worked as a paramedic in several places including Franklin Memorial Hospital, Community Emergency Services in

Livermore and Sugarloaf Rescue. While at Franklin Memorial Hospital in Farmington, he helped implement the transition from five individual services to one service now known as NorthStar EMS. Kalem also worked as a dispatcher before moving to West Virginia to attend Critical Care Paramedic School and work in the ICU. Then in May 2007, he returned to Maine to accept a position as a flight paramedic for LifeFlight of Maine.

When he's not on the helicopter, you can probably find him outside enjoying such activities as hiking, camping, hunting, fishing and spending time with friends and family, including 9 nieces and nephews (with three more on the way). He also enjoys reading, movies and ice cream. Kalem lives in Bangor with his two cats. 

# Sunday River Ski Patrol: Keeping the Mountain Safe

**By John Roy, CCEMT-P**  
**LifeFlight of Maine-Lewiston Base**

In the EMS world, we think of extrication as a 10-55 (motor vehicle accident) with entrapment, separating twisted metal from our patients as they are removed from the wreckage. At Sunday River, the ski patrol looks at extrication a little differently. Their typical off-trail extrication consists of removing a skier that is entrapped in a group of trees 2,340 vertical feet above the base of the mountain. If you thought getting people out of a vehicle on a backboard was tough, an icy slope with unfriendly trees can make extrication even more difficult.

*LifeFlight has safely transported 24 people from Sunday River Ski Resort and 13 from Sugarloaf Resort over the last 10 years.*

The ski patrol responds to roughly 2,000 calls a year, covering miles and miles of trails and approximately 500,000 annual visitors that come to ski. Sunday River hosts national ski events in the slalom and giant slalom, where they can have racers traveling at speeds up to 80 mph.

The Sunday River ski patrol employs 22 paid staff, as well as 60 volunteers. Volunteers are rewarded for their time and effort through a ski pass program. The more they work, the more points they accumulate toward a family ski pass, according to Steve Boulanger, Assistant Patrol Director, who has been on the patrol for 12 years.

The job requirements are:

- Expert skier with an extra 2-3 weeks training with the sled (used to take an injured person off the mountain)
- Minimal first aid, OEC (Outdoor Emergency Care) course
- 72-hour WFR (Wilderness First Responder) course
- EMT and paramedic certification a plus, but OEC is still a requirement.

Depending on demand, there are 12-30 ski patrolers on the mountain at any given time. The patrol

is divided into groups that are spread out in a series of heated “top houses” on the mountain. They carry radios, standard first aid supplies, extra board straps and ankle straps. The ski patrol headquarters are located at the bottom of Barker Mountain, where they receive calls and dispatch the ski patrol from the closest top house. A typical call cycle starts when a skier notifies a lift operator who then calls ski patrol dispatch. From there the closest top house responds and administers the appropriate treatment or calls for help. Patients are then brought to the first aid station where they can be treated or moved next door to the Western Maine Mountain Clinic, operated by Stephens Memorial Hospital. If a patient needs more care, paramedics from Pace Ambulance staff the mountain, and can transport the patient to the hospital or to a designated landing zone where LifeFlight of Maine will transport the patient to a trauma center.

The patrol can be very busy at times, especially during big races and special events held at the mountain. “You have to cover the race and all the skiers as well. At times, the mountain is divided into two sections because the race course makes response times a little more challenging,” explains Boulanger.

The ski patrol does a lot more than just bring injured skiers and snowboarders to safety. Their day starts with the morning trail check, making

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**If you are interested in joining the patrol, contact Assistant Patrol Director Steve Boulanger at [sboulanger@sundayriver.com](mailto:sboulanger@sundayriver.com)**

*Photo courtesy Bill Reynolds*

## Profile | Andy Turcotte



Andrew Turcotte began working as a flight paramedic for LifeFlight's Lewiston base after spending time at AirCare MedEvac in Fairfax, VA and the Old Orchard Beach Fire Department.

Originally from East Millinocket, Andy earned his paramedicine degree from Southern Maine Community College. "I knew at an early age that I wanted to pursue a career in public safety. The adrenaline of the job and satisfaction in knowing you are part of a team that can truly make a difference between life and death is incredibly rewarding," explains Andy. Indeed, public service must run in the family since Andy's twin brother,

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Aaron, is a state trooper in western Maine.

Andy has had some health challenges recently that have kept him from flying, but he has remained committed to public service. He dedicates much of his time these days educating and mentoring those that have a genuine passion for emergency medical services, mostly through the Human Patient Simulator program, owned by Maine EMS and operated by LifeFlight of Maine. He serves as a facilitator, guiding participants through the 90-minute sessions, and is the lead contact person for the southern half of the state.

When he's not helping others, Andy also likes to spend time with family and friends playing soccer and baseball. 🏈

## Mobile Hands-On Training Available by Request

The Human Patient Simulator program, owned by Maine EMS and operated by LifeFlight of Maine, will be traveling across the state again this year, bringing advanced medical training directly to rural communities in Maine. This mobile training lab features a life-size mannequin capable of breathing, talking and reacting to healthcare provider interventions. Through this program, facilitators from LifeFlight are able to provide a unique, hands-on experience fully customized to meet the medical education needs of any hospital, EMS service or educational institution.

Education and scenarios are constructed to meet practitioners needs and can include:

- Didactic/Practical education
- Integration into certification classes like ATLS, PALS, TNCC and PHTLS
- Customized scenarios
- EMS-specific topics
- Physician-specific topics

The RV-housed simulator lab brings high quality, hands-on education directly to your home area. The state-of-the-art HPS mannequins (adult, pediatric, infant) simulate a lifelike patient who will improve or deteriorate based on treatment by the practitioner. Programs offer CEUs for nurses and respiratory therapists, CEHs for paramedics, and Category 1 CMEs for physicians and mid-levels. The HPS is facilitated by Lifeflight nurses and paramedics with statewide physician oversight to ensure best practice teaching points.

Call The LifeFlight Foundation at **207-785-2288** to schedule sessions or for information.

You can also visit **[www.lifeflightmaine.org](http://www.lifeflightmaine.org)** to view scheduled areas and for more information.

# LifeFlight Helicopter Mechanic Wendell Stadig Named Transport Mechanic of the Year

Since LifeFlight of Maine began operations nearly 10 years ago, helicopter mechanic Wendell Stadig has maintained a level of quality and safety that is the foundation of the organization's spotless reputation. So it came as no surprise to his friends and colleagues when the national Association of Air Medical Services awarded Wendell Transport Mechanic of the Year. This award of excellence recognizes an individual who has made significant contributions to the safe operation or improvement of safe maintenance procedures of medical transport vehicles.

Wendell is originally from Soldier Pond in northern Aroostook County, and after serving in the Marines, he returned to Maine to work in the field of aviation mechanics. Starting as the second mechanic in the operation, Wendell soon found himself in a leadership role, managing maintenance for both of LifeFlight's aircraft at bases more than 100 miles apart.

Referred to as "one of the best field mechanics ever" by the maintenance leadership at two of the country's leading helicopter services, no job is too big or small for Wendell.

His careful attention to detail, uncompromising work ethic and dedication have helped to establish the safest helicopter program possible, which has gained national recognition in the air medical sector.

In addition to his maintenance role at LifeFlight, Wendell developed and leads an annual, statewide safety conference jointly sponsored with the FAA for all helicopter operations in Maine. He also stepped forward to become a volunteer technician to maintain and certify newly installed weather reporting systems in some of the state's most rural areas. The systems are part of an effort to create a comprehensive weather reporting grid which will assist not only LifeFlight's helicopters, but every other aviation operation in Maine.

His colleague, pilot Dave Burr, sums it up best, "Always available, always ready to help, always ready to go the extra mile and a half, whether it is 2:00 in the afternoon or 3:00 in the morning. His tireless efforts, dedication to duty and attention to detail mean the helicopters are ready when they are needed most." 



# LifeFlight's Director Named to National Advisory Council

LifeFlight of Maine's Executive Director, Thomas Judge, has been appointed to the newly-established National Emergency Medical Services (EMS) Advisory Council. The Council will provide advice and recommendations on national EMS issues to the National Highway Traffic Safety Administration (NHTSA).

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"I am honored to have been chosen to join this new Federal effort. Delivering a high quality EMS system is a promise that we hold out every time someone calls 911. It is essential that our Federal partners and policy makers understand the challenges we face on a daily basis," said Judge.

The National EMS Advisory Council, appointed by Mary Peters, Secretary of the Department of Transportation, is made up of 25 members, representing perspectives from every component of the EMS community. This broad-based membership helps assure that the Council has sufficient expertise, as well as the geographic and demographic diversity to accurately reflect the EMS community as a whole.

The EMS issues considered by the Advisory Council may include: national EMS needs assessment and strategic planning; development of standards, guidelines, benchmarks



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*Delivering a high quality EMS system is a promise that we hold out every time someone calls 911.*

and data collection relating to EMS; development of methods for improving community-based EMS; strengthening EMS systems through enhanced workforce development, education, training, exercises, equipment and medical oversight; and improved coordination and support of EMS activities among Federal programs. 

## Sunday River Ski Patrol

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sure trails are safe before they open for the public. They ski the trails, identify hazards, place fences and sometimes call the groomers back to resurface an area. The rest of the day, the patrol is busy with guest interactions, patrolling and making sure everybody is acting in a safe manner.

If you ski or snowboard at Sunday River, you can be assured you are protected by a group of highly motivated technical specialists that have a lot of pride in their work. From my first hand experience working with the patrol, they are the best and have always been very professional no matter what task is at hand. 



**Sunday River Ski Patrollers practice loading an injured skier onto a backboard, which is then placed on a sled the patrollers use to bring the patient off the mountain safely.**

*Photo courtesy Bill Reynolds*

# Clinical Corner: protocols, medications, techniques

**By Kevin Kendall, MD**  
**LifeFlight Medical Director of Quality**

Welcome to the Clinical Corner, a new column tasked with presenting updates on protocols, medications, devices or techniques that make an impact on patients transported by LifeFlight.

When someone at LifeFlight, be it crew or medical director, wants to consider adding a new medication or technique, the idea is first brought to the Clinical Practice Committee (CPC). The CPC is a large body of multidisciplinary physicians that tracks state-of-the-art clinical care from around the world. The group meets quarterly to discuss and review current treatments and protocols, as well as new medications, devices and techniques appropriate to the care that LifeFlight gives. This may impact one protocol, or if it is a widely used medication, it could impact many protocols.

The new medication or technique is presented to the group, which includes intensivists, surgeons, emergency doctors, pediatricians and many other specialists, by one of the CPC members.

This month, the CPC reviewed the first 9 months of data from LifeFlight's post cardiac arrest Therapeutic Hypothermia protocol. Hypothermia after cardiac arrest is the first new therapeutic intervention since defibrillation, and has been demonstrated in numerous recent scientific articles to improve survival and

neurological outcomes in victims of sudden cardiac arrest.

The basic goal of the protocol is to achieve a body temperature of 33° C as soon as possible after the event, and to maintain that temperature for 24 hours. This is primarily accomplished through the rapid infusion of 30 ml/kg of 4° C Lactated Ringers IV fluid; in addition to the placement of cold packs to the groin, axilla and neck. Further cooling methods are introduced at the destination hospital.

To date, LifeFlight of Maine is only the second air medical service in the nation to start this simple, inexpensive and safe procedure for prehospital and interfacility transfer patients that have been successfully resuscitated from cardiac arrests. Central Maine, Eastern Maine and Maine Medical Centers have all developed post-resuscitation hypothermia protocols.

Since implementation of the procedure, seven patients have benefitted and the outcomes are truly impressive. New research has also begun to show that therapeutic hypothermia may be effective in treating patients with traumatic brain and spinal cord injuries as well. As part of our outreach, LifeFlight would be happy to visit your hospital or service to discuss the current literature and protocols, and answer any questions you may have about this simple and effective intervention. To schedule a visit, contact The LifeFlight Foundation at 207-785-2288 or [info@lifeflightmaine.org](mailto:info@lifeflightmaine.org). 

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**One of seven patients who have been treated with Therapeutic Hypothermia on board the LifeFlight helicopter, 36-year-old Albert Nutter made a complete recovery less than three weeks after his heart suddenly stopped after he hit a homerun during a men's league baseball game.**

## LIFELIGHT FOUNDATION

DISPATCHES is a publication of The LifeFlight Foundation, which provides fundraising and public relations support to LifeFlight of Maine, the state's only medical helicopter service.

The LifeFlight Foundation is a nonprofit, tax-exempt organization under Section 501 (c)(3) of the Internal Revenue Service Tax Code. It is governed by an elected board of trustees who represent medical, business, legal and educational fields throughout the state.

LifeFlight also aids the development, training and funding of Maine's major air medical needs, such as trauma training statewide, construction of hospital helipads, and installation of weather reporting, navigational and communications systems across the state.

The Foundation's office is located in the Town of Union in the Thompson Community Center at the corner of Routes 17 and 131.

## LIFELIGHT OF MAINE

LifeFlight of Maine is a nonprofit statewide critical care medical helicopter service jointly owned by Eastern Maine Healthcare Systems and Central Maine Healthcare Corporation. LifeFlight's two helicopters, based in Bangor and Lewiston, cover the entire state and offshore islands. LifeFlight complements and supports the work of local EMS and hospital personnel in caring for the critically ill or injured. Each base is staffed by a highly qualified team of pilots, mechanics, flight nurses and paramedics. Over 7,000 patients have been safely flown since LifeFlight's founding in 1998.

**LifeFlight is fully accredited by the Commission on Accreditation of Medical Transport Systems.**

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