

A PUBLICATION OF THE LIFEFLIGHT FOUNDATION · VOLUME 18 · NUMBER 2

DISPATCHES

SUMMER 2020

COMPLEXITIES OF COVID-19



iX2020



Voices FROM THE FRONTLINE

**Coming Soon:
Maine's
Newest
Helicopter**

**Connecting
the Corners
of Maine**

photo courtesy Lyn Burks / Rotorcraft Pro Magazine

You may have heard that we've been raising funds to purchase new helicopters to replace our two oldest models, Echo Mike and Charlie Mike.

These workhorses have flown millions of miles since they arrived in Maine in 2004.

Lima Foxtrot (N901LF), Maine's newest helicopter, coming soon

State-of-the-art avionics mean more calls for help can be answered

With the support of more than 6,000 donors to date, LifeFlight is getting closer to taking delivery of the first of our planned replacement helicopters. While fundraising is ongoing and needs to be completed, our donors have made it possible to move ahead on the over year-long process to build a new medical aircraft as part of our 'next gen' project.

An Agusta109 SP helicopter started its manufacturing journey more than a year ago in Poland, then Italy, and is now in its final stages of completion with Leonardo Helicopters in Philadelphia. Once delivered it will begin serving patients from LifeFlight's Bangor base. Echo Mike, the older Agusta109 E model currently based in Bangor, will become a backup aircraft, available to come online when other helicopters are undergoing maintenance. The new helicopter, tail

number N901LF (Lima Foxtrot), has a larger carrying capacity than our older E models (Echo Mike and Charlie Mike) and its twin engines are able to fly faster and farther on the same amount of fuel.

Most important is the advanced avionics package onboard which will ultimately lead to more critically ill patients getting the care they need when they need it.

A few years ago, the FAA launched a modernization project to move all airspace infrastructure to a system that uses satellite data (GPS) which is much more detailed and accurate than ground-based radar. As the FAA implements this technology, new routes that are more precise can be created at lower altitudes where icing is less common, improving the safety and reliability of LifeFlight in

more weather conditions. In order to access the new low-level flight routes and approaches, helicopters will require advanced avionics technology.

That's where the new Agusta109 SP models come in. Like our third helicopter, Whiskey Mike purchased in 2017, this new helicopter has a 4-axis autopilot and the ability to receive vertical guidance from GPS which are both necessary to operate at low-level precision instrument flight routes. The ability to access these new routes will mean that LifeFlight can safely and reliably answer some calls that we have to turn down today due to the possibility of icing at higher altitudes.

Over the next few months, we will be entering our final phase of fundraising for Lima Foxtrot. If you'd like to support this project, please visit www.lifeflightmaine.org/donation.aspx.

LOW-LEVEL INSTRUMENT FLIGHT ROUTES ARE KEY TO HELPING MORE PATIENTS

LifeFlight and the Federal Aviation Administration (FAA) are collaborating to develop a new, first-in-the-nation low-level instrument flight route system, which is a key element in LifeFlight's next gen project. The FAA is developing the procedures, rules and performance standards necessary for precision routes. The first route to be established in Maine will traverse from Bangor to Bar Harbor, with planned flight testing later this year. The second route will link Bar Harbor to Portland and allow access from the islands. Once these initial routes set the process, LifeFlight and the FAA will fill in the grid with dozens of additional routes which will link all of LifeFlight's existing point-in-space GPS procedures across the state. The FAA expects the finished network will serve as a national demonstration project for other states.



The Islesboro Crossing for LifeFlight open water swim fundraising event has become a summer tradition on the coast of Maine. Since it began in 2013, it has grown more popular among both swimming enthusiasts and LifeFlight fans. Over the years, this group of dedicated supporters have raised more than \$1.7 million for LifeFlight. This year, however, the event will look a little different. With the health and wellbeing of our athletes, volunteers and the entire Islesboro community at the top of our minds, LifeFlight has made the difficult decision to hold a virtual iX2020 to replace the in-person event (note the lower case i... more on that later).

How will iX2020 be different? Most importantly, we will not see the hundreds of swimmers, paddlers and volunteers together in Northport and Islesboro this August. Instead, all of our participants will be creating their own individual crossings (hence the lower case i). How and where you cross is up to you!

You could swim OR paddle in Sebago Lake, Moosehead Lake or Lake Havasu; or maybe Casco Bay, Linekin Bay

or San Francisco Bay; or perhaps you decide to swim the distance from Northport to Islesboro in your local pool (if it's open). It's up to you!

We want to see how many different places in Maine (and beyond) we can cross. Just like LifeFlight, we will be connecting the corners of the state with each individual crossing. Maybe we can cover the entire state! We're also opening the event to paddlers in addition to swimmers – you can cross in the water or on the water. Each participant will have from August 1 to August 16 to complete his or her crossing.

The mission of LifeFlight does not stop. However, we also understand these are trying times for everyone, so we are removing the fundraising minimum and opening the event to anyone who wants to join us as a swimmer or paddler. Swimmers and paddlers who complete their crossing will receive t-shirts and finisher medals. We've created a unique fundraising incentive plan with lots of great gifts at levels from \$150 to \$20,000 plus a special gift for our top fundraiser.

Open to swimmers and paddlers all across Maine and beyond!

Will we have people crossing in all 16 counties? Can we cross as many miles as one LifeFlight helicopter flies in an average summer week (that's about 1,800)?

Join the cause and register today!
www.islesborocrossing.org



Flight crew members at LifeFlight's Bangor base practice loading a patient onto the airplane while wearing full PPE (personal protective equipment).

COMPLEXITIES OF COVID-19

Transporting patients during a pandemic

Providing critical care in a transport environment, especially an aviation environment, has always been a complicated endeavor. Here at LifeFlight we like to say that there are “a lot of moving parts.”

To mitigate the risk inherent in aviation operations, LifeFlight has embedded safety into the organizational culture at every level. One way we do that is through intensive training and simulation which helps crew members develop safe habits and build muscle memory around desirable actions. Caring for patients with COVID-19, or even transporting those patients who might be infected, has added an unexpected layer of complexity to LifeFlight's mission -- as

it has across the entire healthcare spectrum. Flight Nurse Chuck Hogan, LifeFlight's Director of Clinical Operations, shared that one of the challenges brought about by the pandemic is the additional time spent on the overall planning of these missions.

“Deliberate and careful planning is absolutely essential to maintain the safety of our crews, patients and our hospital and EMS colleagues,” he said. “Our crew members must correctly don the appropriate level of PPE and maintain that barrier throughout the transport. Any supplies or equipment we might need must be carefully considered. And then there's all of the cleaning and disinfecting that comes after the transport.”

To maintain a high degree of safety, the flight crew must master all of these new tasks and details. Nothing is left to chance. With that in mind, LifeFlight has developed new checklists to help instill habits and muscle memory. The checklists include guidelines for cleaning the helicopters, airplane and ground ambulances, as well as a detailed process for performing a mission involving a known or suspected COVID-19 patient.

After more than 3 months of caring for patients during a pandemic, Chuck noted that the experience has served as a reminder that attention to detail is critical in such a complex work environment. And that we can't forget to take care of each other.

Voices FROM THE FRONTLINE

Voices from the Frontline is a personal look at what it's like to take care of critically ill and injured patients in Maine during the coronavirus pandemic. This limited audio series features conversations with LifeFlight crew who are transporting some of the sickest patients in the state, including those battling COVID-19. Visit www.lifeflightmaine.podbean.com to hear full episodes.



I think we've seen tremendous compliance with the recommended behaviors. People are doing what they're supposed to do--staying home and wearing masks. There are always exceptions, but from my experience it seems as if people are truly making the effort to do what they're asked for the benefit of the greater good. That's always impressive to see because we spend so much of our time in our country, especially in the last few years, tearing each other apart for all of the minimal differences we have. In times like these, it's heartening to see people come together.

Tom Gutow, Flight Nurse



We have to keep the same safety standards in place, but we've added on this other layer of complexity. We have to keep in mind how we operated pre-covid while also implementing these new procedures that can be distracting. We've learned that there's no emergency in a pandemic, which basically means we don't move fast. We move deliberately. We're thinking critically about everything we touch and every piece of equipment we're going to need. We're protecting ourselves before stepping into the patient room.

Katie Sturgis, Flight Nurse



“There's a human element of what we do that has been taken away from us. When I'm taking care of these patients who may have a breathing tube in, they may be awake, they may be looking at me. I can no longer give them those subtle cues and clues that I used to be able to give with my facial expression or my tone of voice because I'm so covered in this PPE that it takes away that aspect of patient care. So it's been a little difficult for me personally to try to figure out how to convey to my patients that I do still care and that I'm trying to help them when I'm behind 5 feet of plastic.”

John Malcolm, Flight Paramedic



Sharing COVID-19 updates and insights

Recognizing the seriousness of the coronavirus pandemic, as well as the scarcity of dependable science about such an unknown disease, LifeFlight has been gathering, vetting and sharing sources of information on its website. Under “For EMS and Hospitals” there are COVID-19 Guidelines intended for our healthcare colleagues. These include guidelines for the transport and management of patients, process checklists and current research. Under the “News and Events” tab there is useful information intended for a non-healthcare audience including a list of reliable sources and things you can do to help. We work to keep this information as up-to-date as possible and encourage you to use these links to help understand COVID-19 and how to navigate our collective “new normal.”

Collaboration is critical to understanding COVID-19

Since LifeFlight of Maine was launched more than 20 years ago, its leaders have worked to create an environment of learning through open, honest dialogue. This culture has been a clear asset for the organization over the last few months as everyone has played a role in learning from and teaching others during the COVID-19 pandemic.

Healthcare and scientific communities have only had six months to study and understand the novel coronavirus. This isn't nearly enough time to conduct traditional research like random control studies. Although the research is incomplete, patients still need treatment today. Frontline healthcare teams must look to other sources for guidance and information. Specifically, they've relied on

each other to share experiential knowledge.

LifeFlight's medical directors have participated in regular phone calls with air medical transport partners across New England and attended numerous webinars hosted by national organizations like the American College of Emergency Physicians (ACEP) and National Highway Traffic Safety Administration (NHTSA). They collaborate with Maine EMS through the Medical Direction and Practice Board and regional ground EMS agencies, as well as the state's regional medical centers (Northern Light Eastern Maine Medical Center, Central Maine Medical Center and Maine Medical Center). Information gleaned from these avenues provide a foundation on which to build new

protocols addressing clinical treatment and operational logistics.

Then, LifeFlight crew members and managers meet weekly to hear how it's going on the frontline -- what's working, what isn't, what unexpected challenges have come up. Armed with the real-time feedback, Medical Director of Quality Assessment and Performance Improvement Pete Tilney DO, Medical Director Norm Dinerman MD and Director of Clinical Operations Chuck Hogan RN, with consultative input from Associate Medical Director Kelly Klein MD make updates to the protocols, checklists and processes. Each iteration of these guiding documents helps the flight crew develop safer and more effective clinical and operational practice.

Rallying to Respond

Hundreds of donors help LifeFlight provide cutting edge care for COVID-19 patients

On March 17th, LifeFlight was called on to transport its first patient suspected of having COVID-19. Although it's been less than four months, March feels like a lifetime ago. Over these last several weeks the LifeFlight crew has adjusted to a new way of caring for patients which includes new equipment and new protocols. They've done so with grace and resilience, and have been helped enormously by the hundreds of donations made in response to the pandemic's arrival to Maine.

Since the first of May, more than 260 individuals, businesses and foundations have made gifts to LifeFlight to support the COVID-19 response. One long-time donor pledged a \$50,000 matching gift. He and his wife both had bouts with COVID-19

and understood first hand how important frontline healthcare workers are in the fight against this unrelenting disease.

In all, our supporters have given more than \$300,000 to help LifeFlight respond to this pandemic and care for those most affected by COVID-19.

Like it has for many of our healthcare partners, responding to the novel coronavirus has come with an unexpected price tag. However, thanks to our donors we can implement procedures and purchase equipment that allows us to treat and transport known or suspected COVID-19 patients safely. We've been able to provide training and simulation practice for flight teams to build muscle memory around evolving best practices.

We've even worked with manufacturers to develop brand new biocontainment systems specifically for our aircraft and our air critical care mission (like the isopod in the photo below).

These practice changes are necessary not only to give COVID-19 patients the best chance at recovery, but also to ensure LifeFlight crew members can protect themselves and their families from this highly infectious, unpredictable and serious disease. In June alone we transported more than 25 patients with known or suspected cases of COVID-19.

It's ongoing work that requires flexibility and constant adjustment. The support we receive from donors is a crucial element in our ability to overcome this extraordinary challenge.



Flight crew members at LifeFlight's Lewiston base practice loading a COVID-19 patient onto the helicopter using a new biocontainment system manufactured specially for aircraft. Photo by David Berez.

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.

The Foundation also supports the development 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.

The Foundation's office is located in the town of Camden at 13 Main Street, 2nd floor.

You can reach us at 207-230-7092 or by email at info@lifeflightmaine.org.

Donations are tax-deductible.

LIFELIGHT OF MAINE

LifeFlight of Maine is a nonprofit statewide critical care medical helicopter service jointly owned by Northern Light Health and Central Maine Healthcare Corporation. LifeFlight's airplane, three helicopters and dedicated ground ambulances, based in Bangor, Lewiston and Sanford and operated by SevenBar Aviation, 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. More than 28,000 patients have been safely transported since LifeFlight's founding in 1998.

LifeFlight was fully re-accredited by the Commission on Accreditation of Medical Transport Systems in 2019.

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