

FLIGHT ROUNDS

Caustic Alkaline Ingestion and Implications for Out-of-Hospital Providers

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FLIGHT FOR LIFE Case Files:

Flight For Life (FFL) recently transported a toddler patient from a community hospital to a large tertiary-care pediatric center after a small ingestion of a heavy grade degreasing cleaning solution. The patient ingested the product about 90 minutes before FFL arrived at the bedside, where she was found to have irritation and burns to lips, oral mucosa, mild drooling and stridor. Also noted was approximately five percent second-degree burns to the anterior chest, presumably from spillage during the ingestion. It was reported that the patient had vomited 10 times prior to arrival at the emergency department. The patient was otherwise comfortably lying on mom's lap having blow-by oxygen administered by the respiratory therapist. The patient's respiratory rate was appropriate for her age and she had an oxygen saturation of 100%.

Background:

Several substances are classified as caustics and have the ability to burn various body tissues including skin, GI tract, eyes, and lungs. Caustic ingestions are a leading cause of pediatric poisoning, leading to severe burns as well as other morbidity and mortality. Degreaser cleaning solutions are typically alkaline chemical products with a majority containing potassium or sodium hydroxide of varying percentage compositions. The culprit in this exposure contained sodium hydroxide 10% with a pH of 13. As a point of reference, exposure to sodium hydroxide 30% for one second can result in a full-thickness burn. Other common household caustic alkaline products include drain cleaners, oven cleaners, rust removers, swimming pool conditioners and general purpose cleaners.

Pathophysiology:

The major factors that impact the extent of burn injury include the type of product, concentration of the solution, duration of exposure, and the pH, which is why even small ingestions ("just a lick") can be catastrophic. When acidic products (low pH) contact the epithelium, an eschar or coagulum is

Caustic Alkaline Ingestion

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created which limits further spread of the acid. This is commonly referred to as a “coagulation necrosis.” Basic products (high pH) not only disrupt the epithelium but have properties that lead to necrosis and disruption of proteins and fats and are commonly referred to as a “liquefactive necrosis.” Because of these destructive properties, they allow further penetration of alkaline products into the tissue.

Damage from caustics occurs in four steps:

1. Necrosis of tissue occurs followed by invasion of bacteria and white blood cells
2. Vascular thrombosis and bleeding
3. Sloughing of injured tissue occurs over the next two to five days and reduced tensile strength may result for several weeks after the ingestion leading to the risk of delayed gastric perforation
4. Scar tissue develops, potentially leading to a narrowing of the esophagus, stomach or proximal small intestine

Clinical Presentation and Out-of-Hospital Management:

Burns and swelling to lips, oral mucosa and laryngeal structures pose a rapidly progressive airway emergency and can occur within minutes to hours. Cough, difficulty swallowing or speaking, wheezing, drooling and vomiting should clue the out-of-hospital provider to a potentially serious ingestion. Chest pain and abdominal tenderness may be the harbinger of an esophageal, gastric or proximal small bowel perforation.

Early endotracheal intubation may be warranted if airway compromise is suspected. A high index of suspicion for a predicted difficult airway (direct laryngoscopy) must be anticipated. Rapid sequence induction and paralysis for airway control must be balanced with likelihood of success, comfort and access to rescue airway techniques, and proximity to a hospital capable of managing difficult airways.

Some literature suggests giving a cup of water or milk to non-vomiting patients; however, this may complicate rapid sequence intubation and pose further aspiration risk. Emesis induction, nasogastric tube insertion,

activated charcoal administration or gastric lavage are not recommended.

Hemodynamic compromise can occur from bleeding and should be managed with aggressive intravenous fluid administration or blood administration.

Burns to skin and eyes should be copiously irrigated with continuous fluids until pH testing returns to normal range (pH 7). Irrigation helps to reduce liquefactive necrosis and prevent risk of burns to health care providers.

FLIGHT FOR LIFE Management:

The FFL medical crew, in consultation with the emergency department and anesthesiology attending physicians, suspected that progressive airway edema may occur. Since the patient remained tenuous but stable, rapid helicopter transport to a tertiary care center was thought to be the best plan. They were prepared for airway stabilization or needle cricothyrotomy in flight if needed. Through early notification by the FFL Communication Center, the patient was immediately transferred to the operating room where pediatric anesthesiology was able to insert the endotracheal tube using specialized fiber-optic equipment. Hospital course may include an endoscopic examination of the upper gastrointestinal system, bronchoscopy, antibiotics and observation in the intensive care unit.

References:

Marx, J. Rosen's Emergency Medicine: Concepts and Clinical Practice, 5th edition; 2002. 2115-2119.

Disclaimer: This material should not be used as a basis for treatment decisions, and is not a substitute for professional consultation and/or peer-reviewed medical literature.

Safety Concerns in the Air Medical Industry Addressed

This past year has been a difficult one for those of us in the air medical industry. We have witnessed the loss of friends, colleagues, and patients in a number of air medical accidents. These accidents have also brought about an intense amount of scrutiny by the National Transportation Safety Bureau (NTSB) and Federal Aviation Administration (FAA), as well as some of our national legislators. Flight For Life welcomes this attention as we hope that as an industry, it will improve safety nationwide.

Throughout 2008 there have been articles and “exposés” in local and national news outlets providing erroneous information to the public about the spike in the accident rate and factors contributing to this increase. This misinformation has created concern and anxiety among the general public as well as hospital and EMS providers regarding the use of air medical transport. Referring and receiving agencies are questioning whether it is really safe to fly patients. The purpose of this document is to provide accurate information about the accident rate, factors that have brought about changes in the air medical industry and NTSB recommendations as well as proposed regulatory changes.

Accident Data:

Ira Blumen, MD and his team from the University of Chicago Medical Center have published the most definitive helicopter EMS safety report to date. The report, first published in 2002, is an on-going analysis of safety in the air medical industry. The following information comes directly from the latest revision of the report through October 15, 2008:

- 2008 (thru October 15): 9 fatal accidents with 29 fatalities
- 1972-2008: 264 accidents, 98 of which had fatalities
- 1998-2008: 146 of the 36 year total occurred in the last 10 years (55% of total accidents)
- 51% of the accidents occur in daylight and 49% at night
- Probable causes for accidents:
 - Human Error 77%
 - ◆ Weather related
 - ◆ Collision with objects
 - Mechanical 17%
 - Undetermined 2%
- In a 29 year study by Dr. Blumen, of **4.3 million** patients flown, 34 died in helicopter EMS accidents resulting in a death rate of 0.76/100,000 patients flown. Conversely, according to the National Safety Council 2007 data, 1.2/100,000 patients each year die due to complications and misadventures of surgery and medical care.

Changes in the air medical industry and healthcare:

55% of the total helicopter EMS accidents occurred in the last 10 years (1998-2008). There have been numerous changes within the air medical industry and healthcare since 1998. Some of those changes are as follows:

- Doubling in the number of air medical helicopters (nearly 700 according to Blumen)
- Increased number of patient flights
- Increased Medicare reimbursement for air medical transport
- Shift from the traditional hospital based helicopter program to the for-profit model
- Decline in the number of rural hospitals (including decline in specialty services at other hospitals such as Neurosurgery)
- Movement away from the Certificate of Need (CON) process for new helicopter bases
- Change in the emphasis of “Centers of Excellence” concept

NTSB Recommendations and Flight For Life's Commitment to Safety:

While there is no one "silver bullet" that will solve the safety issues that the air medical industry is facing, there are a number of recommendations that the NTSB has made to address these concerns. As a point of clarification to the reader regarding the difference between the NTSB and the FAA: the NTSB investigates accidents, finds their causes and makes recommendations to prevent future accidents while the FAA is responsible for development of regulations and their enforcement.

It is important to learn from these accidents and to put into place safety-enhancing technology and initiatives that will lead to greater safety in the air medical industry. We certainly cannot remove all risk from what we do, but we can mitigate that risk while still providing air medical transport. Safety must remain our number one priority - this is our obligation to our patients, staff and the communities we serve.

Flight For Life met a number of the recommendations prior to the NTSB publishing their report in 2005, and is in the process of meeting the remainder of their latest recommendations as we transition into our new EC145 aircraft. Below, the latest recommendations are listed along with Flight For Life's compliance with those recommendations:

Develop and implement flight-risk evaluation programs and training procedures, and consult with others trained in EMS flight operations when weather risks reach a predefined level. Formal Risk assessment is done by the Flight For Life pilot on each and every flight prior to lift-off. The pilots have the ability to confer with the other bases' on-duty pilots concerning weather decisions as well our aviation vendor, Air Methods, operations center.

Use formalized dispatch and flight-following procedures that include up-to-date weather information and assistance in flight-risk assessment decisions. The Flight For Life Communications Center provides formalized dispatch and flight following along with up-to-the-minute computerized weather information by National Association of Air Communications Specialist (NAACS) certified personnel. We also utilize satellite tracking on all three aircraft and our operator has the ability to monitor the aircraft with predefined parameters for intervention if deemed necessary.

Use increased weather-minimum and pilot-rest duty requirements on all medically staffed flights. Flight For Life ceiling height and visibility minima already exceed the base minimums determined by the FAA. Duty pilots must adhere to CFR 14 FAR135.271 (b) duty requirements and are provided with an environmentally controlled quiet area where they can rest while on duty.

Install helicopter terrain awareness and warning systems and train flight crews to use them. Flight For Life will have the Enhanced Ground Proximity Warning System (next generation H-TAWS) in our new aircraft.

Flight For Life has also invested in a number of other safety enhancing technologies and initiatives that we feel are important to the safety of our transport service. They are listed below:

- Weather reporting via: on-board XM Weather, Flight Communications Center, Air Methods Operations Center
- Satellite tracking that is monitored by our Flight Communications Center and our aviation vendor's Operations Center
- Wire Strike Protection System (new aircraft)
- Commission on Accreditation of Medical Transport Systems (CAMTS) voluntary accreditation since 1996
- Flight For Life Safety Officer responsible for all three sites along with a multidisciplinary safety committee at each base
- Air Medical Resource Management (AMRM) training is required for all crew. It involves the principles of communication, decision-making and teamwork.

- Safety culture where the pilot determines whether it is safe to take the flight based on the weather but any of the crew on board the aircraft as well as the communications specialist have the ability and responsibility, with no adverse consequence, to terminate the flight if there is any question concerning the safety of the flight.
- Night Vision Goggles (new aircraft)
- Weather radar (new aircraft) to support future IFR flight
- Commitment to operate under Instrument Flight Rules (IFR) whenever possible (new aircraft)

Oversight and Change for the air medical industry:

What does the future hold for air medical transport? First and foremost there can be no more “business as usual” for our industry. The industry has tested the trust and faith that has been placed in us by those who have placed their patients in our care. Not only are the NTSB and the FAA scrutinizing HEMS, so are the local and national media, the public and our legislators in Washington. 2009 will bring greater oversight and change in how we operate. A brief summary of what is being done now is found below.

- The NTSB, FAA and other stakeholders met in Washington, DC in October at a forum sponsored by the Helicopter Association International (HAI) to address the current situation. From this meeting came a number of suggested FAA Operations Specification changes that will certainly be adopted in at the end of the comment period (early 2009). These changes involve flight planning and increased weather minimums. The FAA has determined that safety in air commerce and the public interest requires additional hazard mitigation for Helicopter EMS (HEMS) operations.
- The NTSB has called a special public hearing on air medical safety to be held in Washington, DC, February 3-5, 2009. Initial plans for the hearing call for the inclusion of witnesses and safety experts from the air medical community, including aviation operators, medical personnel, researchers, FAA officials, and state EMS officials. The topics range from aviation procedures to safety equipment, training practices and pilot experience, and issues created by competition and the financial reimbursement of air medical services. While it is possible that this hearing could result in further safety recommendations by the Board, the informational nature of this hearing is very different than the 2006 hearing, which did not include witness testimony or the availability of questions or comments from air medical professionals.

Conclusion:

The Flight For Life Transport System has provided 25 years of safe transport. The Mission Statement of Flight For Life states that we will provide safe, efficient, high quality, customer oriented patient care, transportation, and education. As an organization, it is paramount that Flight For Life maintain the faith and trust that consumers have placed in us. We must remain focused on doing what has helped us to remain safe while, at the same time, continually review and revise our process of doing business in order to maintain that position.

Flight For Life is concerned that misinformation rampant in our service area is leading to unfounded anxiety regarding the decision to choose air medical transport for critically ill and injured patients. The intent of this document is to provide accurate and factual information about safety within the air medical industry, as well as highlight what Flight For Life does to ensure safety within our own organization. Every mode of patient transport comes with a certain amount of risk to the patient and the crew. When humans and machines are involved, things can go wrong, regardless of the type of transport vehicle. What we can say is that we are dedicated to doing everything possible to mitigate risk in the transport environment for the safety of the patient, our crews and the communities we serve.

Scene Safety

by Bill Anderson, Waukesha/Milwaukee Base Pilot

With Flight For Life rapidly approaching 25 years of patient transports, we continue to evaluate our process to ensure that safety remains a priority on each and every flight. Air medical transport programs, not only in the Wisconsin and northern Illinois regions but nationwide, must ensure that the ugly word “complacency” is not lurking in the back of our minds.

Let’s look at a few facts. Many departments have worked with Flight For Life (FFL) since the program’s inception in 1984. It doesn’t matter if your department is busy, or quiet (and usually agencies are getting busier) - you have undoubtedly seen your share of helicopter responses. We should always take time to step back and assess how we do things. Ask yourself, “Is that LZ getting smaller? I am familiar with the pilots - I have worked with them numerous times; I believe he/she can land there. Did I give FFL the best LZ description? Did I look for those small crossing wires? Did I look for rocks, or stumps in the high grassy open field? Do I have enough personnel to control the LZ completely, so no one walks, or drives through the LZ whether or not the helicopter is running “hot” while landed or shut down?”

We would like to suggest: Go Back To The Basics. Check that the landing zone (LZ) kit has everything prepared for someone who is new so they can set up a safe and adequate LZ. Check the pre-determined landing zones on a regular basis to ensure they are clear from obstructions and ready for future use on short notice. Check that all new employees are taught and mentored to do the correct setup for a helicopter landing. Or, is it time for your agency to have another helicopter safety inservice refresher?

So - review your protocols; be sure you are ready to dot the i’s and cross the t’s for your next helicopter landing. Requesting a helicopter response to your location causes a fluid environment, from both the operational and clinical perspective. When everyone involved - emergency responders or security personnel, and Flight For Life staff - are prepared and ready, we know things will occur in a safe and organized manner.

If you have any questions, or need any help with helicopter safety classes, please give us a call and we will be there to help. See you soon, and have a safe and happy holiday season!

New **FLIGHT FOR LIFE** Medical Director Introduced

Flight For Life, provider of air medical transportation for Wisconsin and Northern Illinois, is pleased to introduce Dr. M. Riccardo Colella as its new Medical Director. Effective July 1, 2008, Dr. Colella assumed medical leadership of Flight For Life’s 60 nurses, paramedics and flight physicians.



Dr. Colella has been a faculty member of the Medical College of Wisconsin Department of Emergency Medicine since July 2007, which he joined following an appointment at the Johns Hopkins Medical Institutions in Baltimore. While at Johns Hopkins, Dr. Colella was the medical director for The Center for Transport Medicine and Lifeline Critical Care Transportation Service, the institution’s helicopter, fixed wing and ground transportation service. Dr. Colella was also active in his residency’s flight program at the Medical College of Georgia and has more than twenty years of experience in emergency medical services.

“I am looking forward to leading the skilled and talented staff of Flight For Life as their medical director,” stated Dr. Colella. “This is a very exciting time for all of us as we are increasing the reach of our services. We are committed to maintaining the highest level of care and safety standards that the people of Wisconsin and Illinois have come to expect from Flight For Life,” he continued.

Flight For Life has provided air medical transport services for more than 26,000 patients since 1984 and opened a new base in Fond du Lac and expanded to a new base/corporate headquarters at the Waukesha County Airport this past summer.

FLIGHT FOR LIFE Establishes Customer Service Advisory Board

Throughout its 25 year history, Flight For Life has encouraged feedback from our “customers” and the communities we serve through a variety of methods: personal contacts, Satisfaction Surveys, focus group meetings, and interaction during educational and community events.

At the end of 2007, we added a more formal structure to this process through the creation of a Customer Service Advisory Board (CSAB). Representatives from agencies throughout Flight For Life’s service region were invited to participate on this board to provide their input to us on a variety of aspects relating to our organization, including all steps of the patient transfer process, interaction with our personnel, and outreach education.

Our first meeting was held on November 15, 2007. A terrific cross section of people from EMS/Fire, Dispatch Centers/Law Enforcement, and referring and receiving hospital departments attended, along with the Flight For Life management team. Jim Singer, Flight For Life’s Transport System Director, opened the meeting with an in-depth presentation on “The Anatomy of a Flight.” This was followed by a facilitated discussion which allowed board members to brainstorm a number of topics related to their experiences with and observations about Flight For Life. The day concluded by distilling all of this information into a ‘Top Ten List’ of ideas/items requiring additional follow up.

Subsequently, the CSAB has had two additional meetings. In between meetings, Flight For Life contacts board members to obtain their opinions on various projects related to how Flight For Life interacts with its customers. At each meeting, the board is updated on Flight For Life news, progress in completing projects identified at prior meetings is reviewed, the “Top Ten List” is re-prioritized with new additions, and we have lively discussions about future opportunities to improve our service. Results of these meetings include: development of a new brochure to hand out to families of patients transported by Flight For Life (a “Family

Brochure”) – which is available in English and soon in Spanish, several new educational cards have been developed, a presentation to hospital staff on preparing patients for transport is completed, and a new Dispatch Center Satisfaction Survey was developed and is being sent to scene call requesting agencies.

Flight For Life is indebted to the individuals who have enthusiastically agreed to participate on our CSAB. They and the agencies they represent have invested significant time and effort to show support for this new venture in our partnership with their organizations. We appreciate their willingness to assist us as we expand and grow to meet current and future needs of the communities we serve.

FLIGHT FOR LIFE Communication Specialists Now NAACS Certified

Flight for Life recently held a National Association of Air-Medical Communication Specialists (NAACS) course at our Waukesha base. In addition to all Flight For Life communication specialists attending, several other programs sent people to the class as well.

We’re happy to say that all of our Flight For Life communication specialists are now NAACS certified. Congratulations to our Flight Communication crew!

NAACS is a not-for-profit professional organization whose mission is to represent the air medical communication specialist on a national level through education, standardization and recognition.

FLIGHT FOR LIFE presents 2007 Scene Call of the Year Awards

The 14th Annual Scene Call of the Year Awards were presented at five separate events throughout the spring, summer, and fall of 2008. The award was developed to recognize and honor the extraordinary contributions to patient care given by EMS professionals in northern Illinois and Wisconsin.

FLIGHT FOR LIFE – Waukesha/Milwaukee recognized North Prairie Fire Department and Allenton Volunteer Fire Department (dual recipients of the Combination Department Award) as well as South Milwaukee Fire Department at multiple events hosted in 2008.

North Prairie Fire Department



On Sunday, May 18th, **North Prairie Fire Department** received their award during an EMS Week Open House celebration hosted at the station. This challenging call involved multiple vehicles with a particularly difficult extrication of a critically injured victim who sustained blunt as well as penetrating trauma due to being impaled on protruding metal. Early mobilization of mutual aid resources via the Waukesha County Communications Center included Wales/Genesee and Mukwonago Fire Departments, North Prairie Police Department, Waukesha County Sheriff's Department and Flight For Life.

Allenton Volunteer Fire Department



Allenton Volunteer Fire Department's presentation was held on the evening of Wednesday, May 21st. A large gathering of EMS providers and law enforcement gathered at the station to welcome recovering patient Mary Miller and her family to the award ceremony. Following a two vehicle head-on crash, Mary was pinned in her SUV and sustained significant blunt traumatic injuries with respiratory difficulties. Along with Allenton, other mutual aid agencies dispatched to the scene by the Washington County Sheriff's Department included their law enforcement personnel and West Bend Fire Department. Flight For Life was rapidly requested by EMTs who arrived on scene. Careful and timely management of Mary's injuries resulted in her ability to attend this event.

South Milwaukee Fire Department



The **South Milwaukee Fire Department** was presented with their award on Tuesday, October 7th during the city's common council meeting. Their call involved an innocent bystander who was propelled through a door after being struck by a vehicle during a high speed chase. Early recognition of indicators for a potential critical patient suffering from apnea and blunt force trauma were key to an early request for Flight For Life; a remote landing zone was also utilized to expedite transfer from the scene. Smooth coordination with the Cudahy and Oak Creek Police Departments ensured a safe landing zone and rapid transfer to the Level One Trauma Center at Froedtert Hospital.

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Scene Call of the Year Awards

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FLIGHT FOR LIFE – McHenry recognized Woodstock Fire/Rescue District (Full-time Department Award Winner) and Lakewood Fire Department (Combination Department Award Winner) at two different events in 2008.

Woodstock Fire/Rescue District



Woodstock Fire/Rescue District received their award at the District meeting on Thursday, June 26th at the main station. This call started out being dispatched as a 10-79 (DOA-notify Coroner). Upon arrival at the scene the paramedics found a patient who had suffered a gunshot wound to the face but was conscious and breathing. They did a rapid assessment of the patient's injuries and called for FFL-McHenry. This decision was made due to the location, complexity and magnitude of the facial injuries. It was the quick-thinking of the paramedics and proper patient airway management that helped to provide this patient with the opportunity for recovery.

Lakewood Fire Department



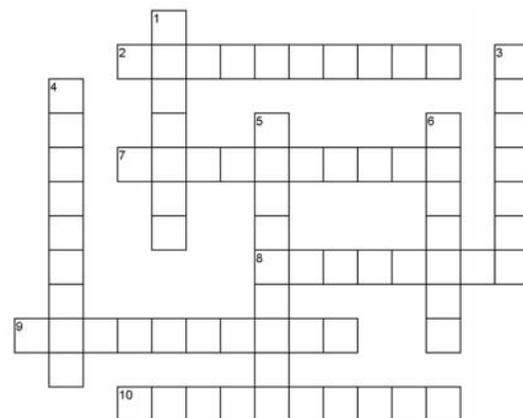
The **Lakewood Fire Department** presentation was done at the department's station Wednesday, September 10th. Lakewood's call involved a gravel truck versus

car with entrapment that resulted in four unresponsive patients, two of which were critical and two that died on scene, mutual aid companies - Woodstock Fire/Rescue, Crystal Lake Fire Department, McHenry and Huntley Fire Protection Districts and two helicopters. Lakewood Fire Department is a new fire department and this was their first large scale critical incident. This call was an outstanding example of teamwork, patient care, and coordination in a very difficult situation.

These calls highlight the teamwork that exists among EMS, fire departments, law enforcement agencies, dispatch and air medical services as they work together to provide services that result in the best possible patient outcomes.

Congratulations to **North Prairie Fire Department, Allenton Volunteer Fire Department, South Milwaukee Fire Department, Woodstock Fire/Rescue District, Lakewood Fire Department** and all agencies involved for an outstanding job!

Motorcycle Trauma Injury Crossword Puzzle



ACROSS:

- 2 This fracture is the most common in motorcycle related injuries.
- 7 This material will reduce accidents by 37% when worn by motorcyclists.
- 8 This injury is a result of blood accumulating within the space between the dura and the skull.
- 9 This is one sign of traumatic brain injury.
- 10 These motorcyclists are over three times as likely to suffer a brain injury when compared with their protected counterparts.

DOWN:

- 1 These reduce the probability of dying in a motorcycle by 35-50% according to the Snell Foundation.
- 3 This use was identified in 75% of all fatal motorcycle crashes between mid night and 3 am according to the NHTSA in 2004.
- 4 This drug attenuates or "blocks" the negative hemodynamic effects of endotracheal intubation while treating a head injured subject.
- 5 This hematoma injury resulted in 85 of cases where the operator of a motorcycle did not wear a helmet according to the Illinois Department of Public Health Trauma Registry.
- 6 This facial fracture is common in motorcycle accidents with blunt force trauma to the face.

see answers on page 10

McHenry Base Mechanic Wins Transport Mechanic's Award of Excellence

On Monday night, October 20th in Minneapolis, Les Love, **FLIGHT FOR LIFE** – McHenry Base mechanic, was presented with the Association of Air Medical Services'



(AAMS) Transport Mechanic's Award of Excellence at the Air Medical Transport Conference (AMTC) awards banquet. This national award is sponsored by Agusta-Westland, a helicopter manufacturer, and was presented by their Executive Vice President of Sales and Marketing, Lou Bartolotta. Many of Flight For Life's personnel, including the System Director and Les's wife, were in attendance at the banquet along with 2,000 of the conference's participants.

The award is given to a medical transport mechanic who has made significant contributions to the safe operation of medical transport vehicles or the improvement of safe maintenance procedures of those vehicles. Applicants are judged on a variety of criteria: longevity within the profession, the variety of ways they contribute to crew education, how they communicate with staff and the community, direct actions that have impacted safety within the program for both the flight team and patients, along with staff testimonials. Les was nominated by the McHenry Base's Safety Committee for his commitment to safety, willingness to educate, and dedication to maintaining the base's aircraft in "mission ready" condition. He was chosen from the many award submissions that came from the 350 AAMS member programs from throughout the U.S. and other countries.

Glenn "Les" Love has been a helicopter mechanic for 34 years and has spent the past 11 years with the **FLIGHT FOR LIFE** – McHenry Base. In those 11 years he has become an indispensable member of the Flight For Life team, not only for his skills as a mechanic, but for his attitude and commitment to safety. The fact that Flight For Life has flown over 26,000 patient flights

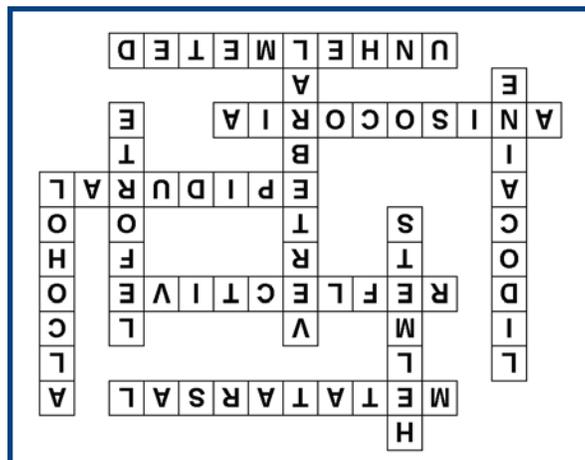
during nearly twenty-five years of service is, in part, a testament to the work that Les does on a daily basis.

Les and two other staff members were responsible for the development of a helicopter simulator to assist Flight For Life crews with emergency "situational preparedness" training. The time and effort Les expended to help construct the trainer was done because he believes in safety and wanted the crew to have a realistic simulator for training. This simulator provides a realistic mock-up of the Flight For Life helicopter which enables the crews to experience real time egress and emergency procedures in a safe and controlled environment. The trainer remains in a state of renovation and upgrade as more ideas are put to the test by Les and the other team members.

In any profession, be it a flight nurse, police officer, or cashier, it is said that you can train skills but you cannot train attitude. Attitude is critical to the success of any individual in their work or personal relationships. When you find an individual who is a master in their skills and has a great attitude, you are truly blessed. Les Love is the embodiment of those characteristics and more for **FLIGHT FOR LIFE** – McHenry.

To Les, the aircraft and the safety of the crew and patients are his number one priority. Les is an integral part of the success of the Flight For Life. It is his expertise, attention to detail, work ethic, attitude, commitment, and unwavering dedication to the safety of the aircraft, crew and patients that made him a perfect choice for the Transport Mechanic's Award of Excellence for 2008.

Motorcycle Trauma Injury Crossword Puzzle ANSWERS



FLIGHT FOR LIFE in the News

FLIGHT FOR LIFE Opens Two New Bases in August

The **FLIGHT FOR LIFE** Transport System began operations from its new base at the Fond du Lac County Airport on August 4th and its new site at Waukesha County Airport—Crites Field on August 20th. Corporate offices are now also located at the Waukesha site.

Each base hosted their own Open House events for Emergency Service Workers, a “Ribbon Cutting” ceremony/VIP Reception and an Open House for the general public, which featured tours of the newly completed hangar facilities and the BK117 helicopters.

Fond du Lac Base

The decision to expand was explained by Jim Singer, Transport System Director: “Since 1984, Flight For Life’s transports have increased over 500 percent, putting us beyond our current capacity to meet the needs of physicians and 911-emergency care providers who require critical care air medical transportation for their patients. Establishing a Flight For Life base within the southern Fox Valley and adjacent counties will enable us to provide an enhanced response for those communities.”

Since its inception, Flight For Life has completed nearly 26,000 safe transports, with a goal to link critically ill and injured people to resources that provide the optimum in medical care and outcomes. “We anticipate that we will be taking patients to a variety of hospitals throughout the region that offer the specialty care services they need,” Singer added.

Waukesha/Milwaukee Base

Likewise, the decision to expand the Waukesha County Airport was influenced by several factors: “Thirty to forty percent of Flight For Life’s service region was positioned over Lake Michigan, rendering a significant portion of its response area without benefit to patients. Remote-basing the helicopter to Waukesha will extend our life-saving services to a greater patient population and increase the benefits our program brings to the communities we serve,” according to Singer.

Flight For Life will continue to maintain the current hangar facility on the Milwaukee Regional Medical Center campus. It will be used for patient transfers to campus hospitals, re-stocking of medical supplies, continuing education training, refueling the aircraft, and occasional maintenance support.

Bill Hatcher, Executive Director for the Milwaukee Regional Medical Center, states, “Expanding to Fond du Lac and Waukesha is part of Flight For Life’s long term commitment to assure a continued high level of service in the area and expansion to meet the ever growing needs of those who call us for assistance in transporting their patients.”



The Communicators' Corner

Greetings on behalf of all of the communicators at Flight For Life's new Communications Center. We would like to take this opportunity to address who we are, what you should expect from us, and what we need from you to make request for services run as seamlessly as possible.

Formerly, communicators from Milwaukee County EMS took on the responsibility of not only Flight For Life requests, but also maintaining communications with all Milwaukee County Paramedic units, any arriving EMS units to Froedtert Hospital and Children's Hospital of Wisconsin, and other related tasks. Now, Flight For Life has hired communicators whose sole responsibility is to maintain a line of communication between the customer, ourselves, and the pilots and crew. This will allow the program to improve its customer service while meeting more stringent operational standards. As of December 26, 2007, we went "live" and the new cast of communicators are comfortably settling into their new environment.

Here are a few things you can expect from us. Certainly there should be no noticeable change in the basics. Continue to use the same contact process as you always have. You may notice more consistency and continuity between requests, regardless of who may be answering the phone at any give time. Remember, we are now exclusive to Flight For Life and can provide a more personal touch when that critical decision is made to request our services. We encourage you to call us at any time before, during, or after a flight with questions that may arise. We are here to help you!

Regarding requests for our services, there are certain pieces of information needed initially to get things "off the ground," so to speak. The following lists our initial priorities followed by additional information helpful to the crew:

- Your name and agency or hospital
- A call-back number
- "Stand-by" or "GO" request
- Landing info (scene call, hospital to hospital)
- What kind of patient you have (i.e, trauma, STEMI, CVA, pediatric, etc.)
- Age, sex and weight of the patient (if available)

We may at this point ask to place you on hold while we check with the pilot and crew for confirmation of this

flight. Although the flight decision is a team approach it is ultimately decided by the pilot if this mission can be safely completed. Meanwhile as the decision is being made, we will come back to you and gather additional information such as:

- Patient name, vital signs, IVs, intubated, what medications given, etc. (inter-facility transports)
- Referring physician (inter-facility transports)
- Receiving physician (inter-facility transports) and bed assignments
- Ground frequencies and number of helicopters needed (scene requests)
- Any special needs such as an isolette or balloon pump

Again, most of the latter information will be gathered after the initial request is placed through our communicators. It will not delay activation of the flight crew. As you can see, some of the items are applicable only within the hospital-to-hospital environments, where some relate specifically to scene calls. We will ask you the appropriate questions pertaining to your individual call.

Just a few additional things to keep in mind:

There are literally hundreds of hospitals and agencies that request our services. Please be patient if we need additional information regarding your specific facility or agency. Some hospitals have multiple names that have been commonly used for the same facility over a period of time. Additionally, there are a number of different hospitals with the same name (i.e., St. Joseph's).

When making a hospital-to-hospital request, we do not normally launch the helicopter until there is a receiving physician and room available. Exceptions would include scene calls going to a trauma facility, physician to accepting ER physician (usually trauma related), and certain STEMI patients. Placing the helicopter on "stand by" while awaiting a room assignment will expedite the launch by allowing the pilot and crew to gather weather information and address specific medical needs, among other procedures.

So on behalf of Wes, Ericka, Laura, Chris, Kurt, Tim, Dan and Brian, we are confident that the new communications center will continue to improve upon great service, timely dispatch, and above all, patient care and safety!

The Deerfield Bannockburn Fire Protection District and *FLIGHT FOR LIFE* Say Goodbye to a Colleague and Friend

by Tammy Chatman



On Sunday, August 31, Dean Schroeder, thirty-nine year old Deerfield Bannockburn F.P.D firefighter/paramedic and former **FLIGHT FOR LIFE** – McHenry Flight Paramedic, was killed in a motorcycle accident in Schaumburg, Illinois. Dean was on his motorcycle traveling on Higgins Road when a car heading westbound made a u-turn in front of him. He was taken from the scene by the Schaumburg Fire Department to Alexian Brothers Medical Center. Despite the best efforts of all involved, Dean did not survive his injuries. Dean leaves behind his ex-wife Sandra and their three children – Colin, Dylan and Brianna, as well as his parents, sister and many friends who loved him.

Dean was always quick with a smile and a hug anytime he saw a friend. He was artistic and used those talents to make educational tools for use by the fire department as well as other agencies. Dean was someone who lived for the moment and he enjoyed each and every one of them! “Fun” was definitely his middle name! In good weather, Dean and the rest of the guys could be found at the end of the day playing basketball or paddleball at the back of the station. When I would come by to drop off equipment he would stop playing and come over to give me a big hug and ask how the rest of the Flight For Life family was doing.

The fire service is a brotherhood, and honoring Dean and his family was a labor of love by the members of his department. Dean’s life was celebrated by many firefighters, family and friends from all over the area. FFL-McHenry did a flyover at the gravesite to pay our respects to a former colleague. In his eulogy for Dean, friend and fellow firefighter Kevin Griegel read a quote that exemplified what Dean was all about: “There is a magnet in your heart that will attract true friends. That magnet is unselfishness, thinking of others first. When you learn to live for others, they will live for you.”

In late September I was at Station #20 doing a safety inservice. As we sat in the training room we talked about Dean, and how his family was doing. Everyone laughed and said “Can’t you just see Dean out here playing basketball?” I smiled and replied “Yes I can.”

FLIGHT FOR LIFE Receives its Two EC145 Helicopters

Flight For Life has now received both of its new EC145 helicopters that were ordered in January of 2007. The first aircraft arrived June 9, 2008 and the second on June 30th.



The helicopters were flown from the American Eurocopter facility in Grandview, Texas to Helicopter Specialties (HSI), a helicopter

maintenance and completion center, in Janesville, Wisconsin. When they arrived, the aircraft only had a coat of primer on them and the basic avionics in the cockpit. There was a pilot and a co-pilot seat in the forward compartment; the back of the aircraft was completely empty.

While at HSI the aircraft paint scheme will be finished and the upgraded avionics and EMS interior will be installed. The first step in the completion process was the partial dismantling of the aircraft to place additional external mounts for the antennae and other items. The entire project will take approximately 6-8 months. Some of the enhancements to the aircraft will be the addition of wire strike equipment, dual GPS units, weather radar, XM weather, and a Technionics UHF/VHF/800 radio to name a few. When the aircraft are ready to be put into service, pilots at both sites will receive flight training on the EC145s in preparation for use at the McHenry and Waukesha/Milwaukee bases.



Stayed tuned to the Flight For Life website for the latest updates to the EC145 completions. We will chronicle the progress of the aircraft as they are further outfitted with the latest in technology.

2009 Upcoming Events

January 2009 TNS Course

Dates for the TNS Course scheduled for January 2009 has been cancelled due to low enrollment. Watch our website for information on the refresher course.

Visit *FLIGHT FOR LIFE* at WEMSA

Flight For Life will again be hosting an exhibit at the WEMSA Conference at the Midwest Airlines Center on January 28-31, 2009. Come and visit our booth!

FLIGHT FOR LIFE Celebrates 25 Years!

Watch our website for information on how we will celebrate our 25th anniversary year.

A fellow
who does things
that count,
doesn't usually
stop to count them.

- Albert Einstein

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