

Collaborating for Safety

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The North East Air Alliance (NEAA), originally the New England Air Alliance, was formed in 1989 in collaboration between Hartford Hospital's LIFE STAR, Boston Med-Flight, and the University of Massachusetts LifeFlight air-medical transport programs as a joint venture to facilitate information exchange. Members include Hartford Hospital LIFE STAR, Boston Med-Flight, UMASS LifeFlight, LifeFlight of Maine, Dartmouth-Hitchcock Advanced Response Team, and LifeNet of New York.

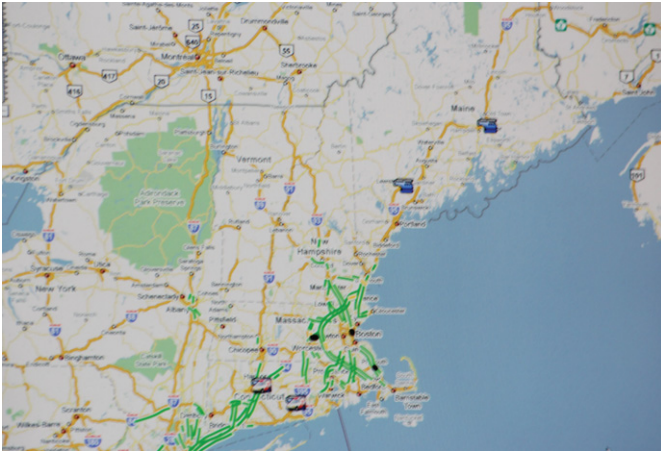
"The mission of NEAA is to share information, discuss experiences, and encourage communications among the programs to maintain a safe and high-quality regional air-medical partnership in order to maintain a safe and high-quality critical care transport system in the region."¹ In accordance with this mission, the Alliance members agree to provide resources, facilities, and services to each other when assistance is required.

Management representatives from each program meet quarterly and participate in monthly conference calls to discuss and share information on an array of topics pertinent to the region and the industry. Each year there is an annual meeting and conference for all program members that includes educational and team-building exercises. A different program hosts the annual conference each year on a rotating basis.

On a day-to-day basis, this translates into cooperation and collaboration as opposed to competition. This starts in each program's communications center with all transport requests. Although there is frequent mutual aid provided between the programs, an active effort exists to eliminate the act of helicopter shopping. These mutual aid services are incorporated in a best practice agreement acknowledged by the management of all of the NEAA programs. The purpose for the development of the best practice agreement was to insure the standardization of operational procedures



LIFE STAR flight communicator monitoring FleetEyes movement of NEAA aircraft in the region.



FleetEyes screen showing locations of NEAA aircraft.

when operating in an area other than one's primary territory. The primary service areas have been predetermined and agreed on by the management of each program.

When a request is taken by a program that cannot complete the mission for reasons other than those related to safety, typically weather, that communication center will coordinate with the nearest program to complete the transport. Should a request originate from what would normally be in another program's primary service area, contact is made to determine why that request was not accepted. Often this may occur simply because the primary program is busy. However, if the request was turned down because of weather or other safety concerns, the other programs typically will not accept the mission either.

Additionally, any time an aircraft is working within another program's primary service area, there is communication between the communications centers to notify each other of these occurrences. Collaboration expands any time an aircraft is transporting to any hospital within a different program's primary service area. Whenever this occurs, the visiting aircraft takes handoff to the primary communications center. This handoff includes coordinating with the receiving center, arranging intermediate ground transport, and even refueling. Although flight following remains the responsibility of the primary service, this is often done in conjunction with or through the communication center that is in closest proximity to the aircraft, because radio communication is often limited.

Safety and collaboration have always been at the forefront of NEAA's mission. After the midair collision of two electronic newsgathering helicopters in 2007 that killed four and the midair collision of two helicopter emergency medical services (HEMS) aircraft on approach to a receiving hospital in 2008 that resulted in several fatalities, exploration into how we at NEAA could best make every attempt at avoiding such an incident from occurring in our region became the priority. To mitigate the possibility of such an occurrence from happening in our region, a search was conducted to find a system that could provide real-time tracking of each NEAA aircraft and allow these data to be viewed in each communications center. What we found was FleetEyes (Farnborough, UK).

FleetEyes was originally developed for ground-based emergency medical services for fleet management and can incorporate all participating services into the computer program. Staff members worked with representatives of FleetEyes, and although they were not necessarily familiar with HEMS specifically, they were more than willing to assist NEAA in the development of a program that would accomplish our goals. The result is a program that operates by using a global positioning satellite (GPS) system that is interfaced with each program's computer-aided dispatch (CAD) system. At LIFE STAR, our Outerlink (Lowell, MA) GPS system and our Zoll (Chelmsford, MA) CAD program are paired to FleetEyes and incorporate all data into a live on-screen map complete with interactive control screens, weather overlay, and the locations of all aircraft and ground units.

This web-based program is already in use at LIFE STAR, UMass, Boston Med Flight, DHART, and LifeFlight of Maine. This program tracks each aircraft and can incorporate ground vehicles, displaying current location and planned route. This allows each communication center to know where every asset will be responding in advance, and they can relay this information along to individual aircraft that might be operating in the same area.

The status of all assets, including aircraft, is also displayed on the screen, identifying whether the aircraft is available to take flight requests, whether an aircraft is currently en route to a request or currently transporting a patient to a hospital facility.

For those programs with a ground transport system, the program also can display ground traffic conditions along with providing directions in the same fashion as traditional car-mounted GPS systems.

Although still in the early stages, this program is operational and is working very well, as NEAA and FleetEyes continues to work together at improving every aspect of the operational systems of the program. It must be realized that this program is not a substitute for, but an adjunct to, situational awareness and constant screening for other aircraft or hazards. The relationship between all of the NEAA programs has continued to remain very strong. Our commitment and pursuit to maintain a truly collaborative effort for safety in our region will remain in force as we continue to move forward. This is of significance at a time when there is increasing pressure for the industry to come together and work as group to reduce known and potential hazards and thereby improve our overall safety culture.

Reference

1. North East Air Alliance. Available at: <http://www.neaa.us/>. Accessed April 15, 2009.

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