



STATEMENT OF THE ASSOCIATION OF AIR MEDICAL SERVICES

**SUBMITTED IN WRITING TO THE
COMMITTEE ON TRANSPORTATION INFRASTRUCTURE
SUBCOMMITTEE ON AVIATION**

U.S. HOUSE OF REPRESENTATIVES

March 22, 2007

**Written Statement of the Association of Air Medical Services
Submitted April 11, 2007**

The Association of Air Medical Services (AAMS) would like to thank the Subcommittee for the opportunity to provide more information on the air medical community and our continuing safety efforts. AAMS, in coordination with the Federal Aviation Administration (FAA), the National Transportation Safety Board (NTSB), other aviation organizations, and the many dedicated individuals in this community, are committed to improving our safety record beyond a decrease in the number of accidents to, ultimately, the elimination of accidents in air medical aviation.

The Government Accountability Office (GAO) recently released a detailed report on the status of air medical services. The GAO made two recommendations highlighting the need for improved data collection and improved oversight of carriers providing air medical services by the Federal Aviation Administration (FAA). AAMS believes that these recommendations are in the best interest of the air medical community, the FAA, and the public served by both groups.

This testimony would be incomplete, however, without some background as to the use of air medical services as part of both the healthcare system and the aviation community in order to understand the importance of this unique kind of medical transport.

Air medical services consist of two types of aircraft: fixed wing aircraft that provide long range, sometimes international transport, and helicopter aircraft that provide very fast transport over comparatively shorter distances than fixed wing aircraft but much longer distances than ground ambulances. Fixed wing aircraft move patients from airport to airport, often utilizing rural and remote airports to transport patients from those areas to more specialized medical facilities. Helicopter, or rotor wing aircraft, transport patients from accident scenes to hospitals or from hospitals to other hospitals that are better equipped to handle that patient's medical needs. Helicopter air medical services transport patients in emergency situations in which time and level of medical care are critical factors. Because helicopter air medical services were the focus of the Government Accountability Office (GAO) Report, much of this testimony will also focus on that segment of the air medical community.

Historically, helicopter air medical service programs developed as components of hospital trauma programs and were owned and operated by these early trauma centers. Many AMS providers focused their services on transports between hospitals of severely ill and injured patients and often across state and even national borders. While earlier focus was on the unique ability of aircraft to provide rapid transport, current practice is centered on the added ability to deliver a very high level of medical care to an injured or ill patient -- whether in a community hospital, at an accident scene, or during transport. Critical injury remains a daunting challenge with recent data from the Agency for Healthcare Research and Quality (AHRQ) identifying trauma as the nation's costliest medical problem. Over the last three decades of EMS system development, the

availability of helicopter EMS (HEMS) has grown to meet this challenge and has become an expectation in the delivery of contemporary trauma system care.

It is estimated that a dedicated medical aircraft, staffed by a highly trained critical care team, equipped as a mobile intensive care unit, takes off every 60 seconds in the United States to serve a critically ill or injured person. Civilian air medical operations, of which over 90% are non-government providers, are a significant component in assuring access to specialty care for much of our population.

The number of air medical services in this country has grown significantly in the past twenty years. Currently, according to the Atlas and Database of Air Medical Services, or ADAMS, there are over 800 helicopters and more than 200 fixed wing air ambulances currently operating in the United States. The rapid growth in the number of air medical providers is largely due to expansive and systematic changes in the healthcare system. The closure of many emergency departments, the transition of full service rural medical centers to Critical Access Hospitals, and the loss of specialty services such as neurosurgical and pediatric medicine in many hospitals, requires that the critically ill and injured move longer distances at greater speeds than ground transport can provide in order to meet the patient's medical needs. Combined with the lack of specialist physician on-call coverage especially at night, and new changes in time critical medical therapies such as primary cardiac surgical intervention for heart attack patients, there remains significant gaps in healthcare coverage at various times and locations. Helicopter and fixed wing air ambulances have essentially filled these widening gaps between patients and the medical facilities and specialty types of healthcare they require.

The GAO study also noted that the implementation of the Medicare Ambulance Fee schedule, which helped to stabilize the reimbursement rates for air medical transport, was a major driver for both increasing the number of providers and transitioning to non-hospital corporate ownership. The implementation of this payment schedule made it possible to create a business model rather than rely on other types of funding, such as hospital sources. This allows for more air medical services to function as stand-alone, independent operators outside of the hospital structure. While the growth of the air medical community has largely been among these types of independent business models, there is still a very large component of hospital-based air medical services.

In addition to structural changes in healthcare and the national fee schedule, there are two other significant factors in the growth of air medical transport. The negotiated rule making process that created the ambulance fee schedule also transitioned all ambulance providers to Part B status rather than bundled billing by hospitals under Part A. Furthermore, some hospital systems have realigned their core priorities, shifting the capital and considerable operating costs of aircraft operations and replacement to direct hospital costs. This realignment is partly due to the availability of independent providers who can still provide the air medical service to the public. While this creates the proliferation of aircraft among independent providers, there is again a very sizable contingent of hospital-based aircraft.

The public relies on these services and expansion in its availability. A recently published academic paper, "Access to trauma centers in the United States" published in the *Journal of the American Medical Association*, noted that medical helicopters are essential in providing access to 81.4 million Americans who would otherwise not be able to reach specialist care in the "golden hour." The paper further notes that, despite the growth in the air medical system, 46.7 million Americans still cannot reach a Level 1 or 2 Trauma Center within an hour of critical illness or injury.

Not surprisingly, air medical services have played a key role in disaster response and emergency preparedness, transporting patients from the Pentagon following the 9/11 disaster, and more recently responding to Hurricanes Katrina and Rita in 2005. As noted in the US House of Representatives Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, entitled *A Failure of Initiative*, air medical services were instrumental in much of the most critical hospital evacuations, especially in instances where hospitals were inaccessible by ground EMS providers. Over 60 civilian air medical helicopters transported thousands of affected citizens after Hurricane Katrina, despite the fact that there was a lack of communication and federal coordination of civilian aviation assets.

Air medicine has become a critical part of this nation's healthcare and emergency medical service system, providing a vital service in the public interest. Because of this commitment to public service, aviation safety as well as patient and medical safety is the highest priority in air medicine. The fundamental premise of medicine is "do no harm," an ideal that is reflected in all aspects of the commitment to both the patient and the air medical crews who provide care and transport.

The air medical community is cognizant of and dedicated to the need for more thorough data collection, and in response helped create and supports participation in the Atlas and Database of Air Medical Services (ADAMS), a voluntary database of air medical locations and other information referenced numerous times in the GAO's report. Support for ADAMS is provided by the US Department of Transportation (through the Federal Highway Administration and the National Highway Traffic Safety Administration). Through the voluntary reporting efforts of AAMS members, the database now represents the only accurate source for the locations, capabilities, and service areas for air medical programs and bases. This service is also being used by numerous government agencies, including the Department of Homeland Security for use in disaster situations and public health emergencies.

AAMS, with the cooperation of the National Emergency Medical Services Operators Executive Forum, also initiated the newly-created Flight Operations Database for Air Medical Services (FODAMS), a collection of data on flight hours and other aviation-related data voluntarily reported by air ambulance operators. This program is still in its infancy, so the data could not be used for the purposes of the GAO report. However, it is important to note that the air medical community has long recognized the importance of quality flight operations data, and has undertaken, through numerous efforts, the collection of this information voluntarily.

AAMS and its members are firmly committed to assuring the public of access to this essential medical service while maintaining the highest level of safety in the delivery of patient care. To meet that commitment, AAMS and its members work extensively and collaboratively with the Federal Aviation Administration (FAA) Helicopter Emergency Medical Services (HEMS) Task Force and other regulatory entities in a continuing effort to foster an environment that promotes a safe and effective air medical system. For example, AAMS representatives serve on the RTCA committee studying the application of new standards for terrain avoidance warning systems, or TAWS, for use in helicopter operations. We firmly believe that this cooperative effort, combined with numerous safety initiatives of the air medical community, has led to a dramatic decrease in the number of HEMS accidents in 2006.

This is not to say, however, that there is any acceptable number of accidents in the air medical community. To that end, AAMS has instituted a number of safety-focused initiatives since 2000 as a way for our community to voluntarily address these issues.

AAMS launched its Vision Zero initiative in March of 2005 (www.aams.visionzero.org). Vision Zero signifies zero accidents of consequence; it is our community's program designed to promote safety awareness by reaching the community with timely information and educational opportunities. Since its inception, Vision Zero has greatly increased safety awareness by creating a culture of intolerance to the loss of life and the suffering caused by the consequences of poor decision-making. It is a message that is carried through every conference, committee meeting, education session, and program activity carried out by the air medical community. We only hope to enhance the visibility and effectiveness of this program in the future.

AAMS has also joined the International Helicopter Safety Team(www.ihst.org), led by the American Helicopter Society (AHS), the Helicopter Association International (HAI), the FAA, and Transport Canada, to reduce helicopter accidents. Based on the CAST model implemented by the nation's major air carriers, the IHST efforts are premised on the model that providers must work collaboratively with regulators to identify and accelerate the implementation of best practice standards, and they are both very closely coordinated with the work done by the FAA's HEMS Safety Task Force.

AAMS represented the air medical community during the Part 135 Aviation Rulemaking Committee (ARC), the FAA's effort to engage the aviation industry during a re-write of Part 135 of the Federal Aviation Regulations (FAR's). The AAMS representatives sat on the steering committee and chaired the air medical subcommittee. The recommendations made by this group to the ARC included making all segments of a flight fall under the Part 135 regulations for rest and duty time and weather minima. It was also recommended to the ARC at that time to revise the existing Part 135 regulations to allow flights flying under Instrument Flight Rules (IFR) to off airport destinations without NWS approved weather stations. This change in the regulation would eliminate the need for any segment of a HEMS flight to operate under Part 91 as the current exemption

requires. At present, the Part 135 ARC recommendations are being considered within the FAA for possible incorporation into regulatory changes

AAMS believes these examples, as well as our ongoing education and research initiatives, provide a faster, more flexible, and a more comprehensive means to improving safety. In an era in which both providers and regulators are working in increasingly resource-constrained environments, a collaborative, data driven strategy is essential. AAMS welcomes efforts to track these efforts and report on their efficacy.

Improving the safety of medicine and medical transportation is a complex undertaking and cannot be studied in isolation. Air medicine must be seen as both a portion of the aviation community and as a necessary part of our medical system. Significant gaps in available data resources are evident and are a detriment to research efforts both from a medical and an aviation perspective. AAMS would like to support the GAO's recommendations in order to help the air medical community fill those gaps. Given the unique nature of and diverse models for the delivery of air medical transport in our country today, we recommend that any data collection effort involve all service providers – hospital-based services, independent services and government-operated services – in order to present a balanced and comprehensive picture of the community.

Well-respected researchers from within the AAMS membership as well as independent researchers regularly conduct peer-reviewed research projects, often with funding from the non-profit Foundation for Air Medical Research and Education (FARE). Some of these research initiatives endeavor to determine which safety tools would be most effective in the air ambulance environment. We firmly believe that the GAO's recommendations will only help bolster the existing research and data-collection efforts and help provide the air medical community with the most valuable tools to improve and maintain safe operations.

AAMS and the air medical community are committed to improving the safety of medicine and aviation; keeping those goals in mind, we also must continue to care for critically ill and injured patients every day. In our efforts to improve, we must not put more lives at risk by decreasing access to care. Commercial air medical helicopters provide over 90% of the medical airlift capacity in our country, and are thus uniquely designed and equipped to address not only national emergencies, but also everyday situations involving very sick and critically injured patients. In short, the air medical community provides a critical public service that is vital in today's healthcare system and as part of the response mechanism for homeland preparedness.

As AAMS noted in its response to the GAO report, transport medicine is among the most complex arenas of medicine, characterized by a dichotomy in which access to time sensitive care for critically ill and injured patients must be immediately available, often with limited planning time conducted in hostile environmental conditions. Recognizing that risk cannot be completely eliminated, it is essential both for the public we serve, and the pilots, nurses, paramedics, physicians, and other health care providers who deliver

care, that the practice environment be as safe as practically possible. AAMS and the air medical community remain committed to this ideal.

AAMS would again like to thank the subcommittee for the opportunity to submit these comments. We would also like to offer our assistance and support in the ongoing efforts of the FAA, the NTSB, this committee, and the medical and aviation communities in improving upon the safe operation of this vital service to the public.