Flying Hospitals: Coffee, Tea or Defibrillation?

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INTRODUCTION

Recently, the public is focusing an increasing amount of attention on the problem of addressing medical emergencies that occur during commercial air flights. While only one in 58,000 airline passengers experience an in-flight medical emergency,[1] the topic has commanded significant interest on the part of the airlines, the flying public and the Federal Aviation Administration ("FAA"). The issue of how much medical service must be provided by a common air carrier is currently being evaluated by the FAA, under the direction of the Aviation Medical Assistance Act of 1998 ("Act").[2] Interestingly, however, carriers are not waiting for new federal regulations and are instead taking voluntary action to improve aircraft medical kits and emergency services. Such actions, while outwardly appearing merely to fill a gap between current in-flight emergency medical procedures and recent health care technological improvements, may expose carriers to increased liability and a higher duty of care to passengers intended to benefit from these changes. This article will discuss the impact of efforts to expand aircraft medical kits and the potential legal impacts carriers may face as they move toward providing medical

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1. *See* Jane Costello, *U.S. Airlines Step Up Emergency Medical Care*, WALL ST. J., Aug. 16, 1999, at B7A.

2. *See* Aviation Medical Assistance Act of 1998, 49 U.S.C. § 44701 (1998).

services previously reserved only for trained personnel firmly planted on the ground.

THE PROBLEM: SERIOUS AS A HEART ATTACK

While the overall percentage of persons requiring medical attention in-flight is low, cardiac emergencies present a particular problem for airlines. Due to the seriousness and time sensitivity of the health threat, more than a third of diverted flights are due to cardiac emergencies.[3] A cardiac emergency involving ventricular fibrillation, or the condition that results when someone's heartbeat goes out of sync, requires immediate medical treatment.[4] Automatic external defibrillators ("AEDs"), portable devices that deliver external shock, electrically stimulate the heart and restore normal rhythm.[5] In addition to AEDs, airlines are upgrading onboard medical kits to include prescription drugs which provide the necessary follow-up care to stabilize the patient until hospital treatment is available and to avoid diverting the flight.[6]

DEFIBRILLATION – A PANACEA, BUT ONLY ONE ELEMENT OF THE SOLUTION

While the cost and ease of use of defibrillators has improved to the point of making the devices capable of being standard equipment in aircraft medical kits, the requirement for administration of prescription drugs after the defibrillation may subject the passenger/patient to incomplete care and the airline to potential wrongful death lawsuits. Flight attendants are trained to operate defibrillators, but federal law prohibits them from administering controlled substances. In the absence of a licensed medical professional on board the flight that is willing to render assistance, treatment may stop at defibrillation.[7] In such a time sensitive, life-threatening situation, the airline's undertaking to provide help that may not completely improve the passenger's chance of survival is legally risky. In response, airlines have addressed the need for professional medical guidance in emergencies by either contracting with hospitals or companies that provide 24-hour radio link to emergency room physicians or maintaining "on call" doctors on staff.[8]

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3. *See* Peter Corbett, *In-Flight Emergencies Dial MedAire*, ARIZ. REPUBLIC, Jan. 16, 2000, at S3.

4. *See* Julie A. Buffington, *Airlines, Defibrillators, and Enhanced Medical Kits: Filling a Void or Creating a Duty?*, 64 J. AIR L. & COM. 497, 503 (1999).

5. *See id.*

6. *See id.* at 511.

7. *See id.* at 512.

8. *See* John Crewdson, *Code Blue: Survival in the Sky. A Follow Up*, CHI. TRIB., Aug. 1, 1999, at 1.

One solution for carriers in lieu of maintaining doctors on staff is outsourcing to firms specializing in providing these services. For example, MedAire, a Phoenix-based company provides 24-hour hotline service for 21 commercial airlines.[9] Using satellite phone systems or high-frequency radios, doctors on the ground consult with pilots, flight attendants, and sometimes passengers, who may be anywhere in the world and cruising at 37,000 feet.[10] The process has proved effective, as MedAire estimates that three-quarters of the time a doctor, nurse or medically trained passenger is on board, but regardless, the company's liability insurance covers anyone who volunteers.[11]

SAVING LIVES IN THE SKY - AIRLINES VOLUNTARILY IMPROVE IN-FLIGHT MEDICAL SERVICES

Airlines seem to be quite proud of their efforts to expand in flight emergency medical services. American Airlines ("American") calls the company's defibrillation efforts "enormously satisfying" and cites a survival rate of 50 percent (seven successes out of fourteen attempts).[12] American flight attendants who have used a defibrillator to save a passenger's life wear a special gold pin on their uniforms signifying their heroic achievements.[13] The airline has even brought three of the seven survivors to their training center to speak to new flight attendants.[14] This public advancement of the benefits of enhancing in-flight medical services appears to have created a *de facto* industry standard requiring defibrillators on all aircraft; however, passengers must be reminded that as yet, neither Congress nor the FAA has enacted any federal regulation mandating these devices on commercial aircraft.[15] Airlines clearly have felt the pressure to comply with this self-imposed standard in lieu of potential regulation.

Less than a month after being sued by the spouse of a passenger who died of cardiac arrest aboard a 1995 United Airlines ("United") flight, the giant U.S. carrier announced plans to join American and Delta Air Lines by equipping all of its aircraft with defibrillators and enhanced medical kits.[16] Likewise, after a $10 million negligence lawsuit filed by the wife of a Florida man who died of a heart attack on a May 18, 1996 flight, Continental Airlines retreated on its statement that aircraft are not

9. *See* Corbett, *supra* note 3.
10. *See id.*
11. *See id.*
12. *See* Crewdson, *supra* note 8.
13. *See id.*
14. *See* Costello, *supra* note 1.
15. *See* Crewdson, *supra* note 8.
16. *See id.*

"flying ambulances"[17] and announced it will equip its entire fleet of 361 jet aircraft with defibrillators.[18] Public pressure, therefore, is forcing the major carriers to take voluntary action and make pending FAA regulations irrelevant.

Enhanced Medical Kits With Defibrillators Make Good Business Sense

In addition to an airline's need to remain competitive in the industry, other factors support the addition of defibrillators in aircraft medical kits. In the absence of sufficient on board medical aid, a pilot must decide whether an emergency landing is required. In "1996, U.S. carriers diverted 557 flights for medical emergencies, nearly a third of those for cardiovascular problems."[19] These endeavors, in the case of cardiac arrest, are successful only if accomplished expeditiously. Medical experts estimate that with each passing minute of a sudden cardiac arrest, the chances of survival decrease ten percent and the window of opportunity is said to be less than ten minutes.[20] Adding to the potential futility of making such a diversion, emergency landings can prove very costly to the airline. In 1995, a United 747 flight from Argentina to Miami returned to Buenos Aires shortly after takeoff because a passenger suffered an asthma attack. Before landing, the plane was forced to dump 100,000 pounds of jet fuel and upon refueling, was delayed on the ground overnight due to fog and flight crew work rule restrictions.[21] Obviously the addition of enhanced medical kits can readily be cost justified in such circumstances, but what type of liability are the airlines opening themselves up to by voluntarily providing advanced medical equipment and prescription drugs for use by employees lacking formal medical training or licenses?

Carrier Liability – A *De Facto* Standard May Be Raising the Bar

Generally, an airline must exercise reasonable care when facing an in-flight medical emergency. If an airline acts without negligence in administering care to a passenger, it will be free of liability.[22] The Act pro-

17. *See* Meg Nugent, *Widow Finds Airline Has Changed Little After Husband's Fatal Flight*, Star-Ledger (Newark, NJ), Nov. 1, 1999, at 013.

18. *See Continental Airlines: Continental To Equip Entire Jet Fleet with Automatic External Defibrillators*, M2 Presswire, Nov. 8, 1999.

19. Martha Brannigan, *Airlines Split on Need for Medical Gear*, Wall St. J., Feb. 23, 1999, at B1.

20. *See* Buffington, *supra* note 4, at 505.

21. *See* Crewdson, *supra* note 8.

22. *See* Buffington, *supra* note 4, at 526.

vides an even lower standard by holding a carrier not liable if it performs by obtaining or attempts to obtain medical assistance.[23] Further, the legislation relieves a medically qualified volunteer passenger of liability in the absence of gross negligence or willful misconduct.[24] However, while every state and the District of Columbia have so called "Good Samaritan" laws which provide legal protection to health professionals offering aid during medical emergencies on the ground, these laws do not apply in the air.[25] The lack of a federal "Good Samaritan" law may still expose in-flight medical volunteers to civil litigation despite absence of negligence, but to date, plaintiffs have targeted airlines, not passenger-volunteers, for legal recourse.

Most courts tend to side with the airline if it fulfills its basic duty of care to the passenger. This conclusion may be explained in light of the duty owed by a common carrier. The Restatement (Second) of Torts holds that the special relation of common carriers gives rise to a duty to take reasonable action to protect passengers against unreasonable risk of physical harm and to give first aid after having reason to know the passenger is ill or injured.[26] The court in *Gingeleskie v. Westin Hotel Co.* applied this standard of care in deciding that an innkeeper was liable for the death of a guest being transported to a hospital in the hotel's shuttle bus after the guest became ill because the hotel failed to take reasonable steps to care for the man once having knowledge of his illness.[27] This holding implies that "reasonable action" during airline in-flight medical emergencies might include providing enhanced medical kits, if this truly is an industry standard, and failure to equip aircraft with defibrillators might be interpreted as a failure to perform reasonably.[28]

However, in *Green v. American Airlines, Inc.*, a passenger sued the airline for negligence claiming American failed to provide adequate medical care when he suffered a stroke on a flight from Honolulu to Dallas.[29] The plaintiff suffered permanent injury as a result of the stroke. Flight attendants provided some assistance to the passenger, but the flight continued and landed as scheduled in Dallas approximatly three hours after Green became ill. The Eight Circuit upheld the district court ruling in finding the carrier not negligent in providing medical assistance.[30]

Likewise, in *McDowell v. Continental Airlines, Inc.*, a passenger suf-

23. *See* Aviation Medical Assistance Act of 1998 § 5(a)-(b), 49 U.S.C. § 44701 (1998).

24. *See id.*

25. *See* Karla Cameron, *Are United States Airlines Prepared to Handle In-Flight Medical Emergencies?*, 9 IND. INT'L & COMP. L. REV. 573, 589 (1999).

26. Restatement (Second) of Torts § 314A(1) (1965).

27. Gingeleskie v. Westin Hotel Co., 961 F. Supp. 1310 (D. Ariz. 1997).

28. *See* Buffington, *supra* note 4, at 529.

29. Green v. American Airlines, Inc., 804 F.2d 453, 454 (8th Cir. 1986).

30. *See id.*

fered a fatal heart attack on a flight from Newark to Nassau, Bahamas. Despite the fact that both a cardiovascular surgeon and a nurse (passengers on the plane) volunteered emergency medical care, the man died soon after arriving at a hospital in Nassau. The airline medical kit lacked a defibrillator and related supplies. The district court held the airline was not negligent in maintaining an on-board medical kit that complied with FAA regulations, although the kit was inadequate for treating a heart attack victim in-flight.[31] These cases illustrate the courts apparent reluctance to impose upon airlines any liability beyond FAA-mandated requirements, yet the industry has gradually taken steps to improve in-flight medical services despite the absence of a federal requirement to do so.

Does "Reasonable Care" Require "Flying Hospitals"?

Some airlines have already acknowledged a duty to provide defibrillators on board, as these devices are generally accepted in the industry as appropriate, and that there is a liability associated with this duty.[32] Based on case law, this approach seems justified, since carriers adopting the use of defibrillators have not been saddled with any greater duty than that created by the common carrier special relation. However, an airline is subject to liability for failure to perform, in the absence of use of reasonable care.[33]

Uncertainty as to what constitutes reasonable in-flight medical care has airlines asking themselves how far they must go in turning aircraft into flying hospitals. Medical experts have cautioned restraint. Mryon L. Weisfeldt, former president of the American Heart Association and Chairman of the Department of Medicine at Columbia University, has said, "We'll quickly get to where every aircraft is like a coronary-care unit, and that's ridiculous."[34] Airlines must, however, consider both changing demographic trends and medical equipment advances when establishing their in-flight care policies to meet the subjective "reasonable care" standard used by the courts.

Despite highly publicized airline accidents, statistics show that passengers are more likely to die because of an in-flight illness than an aircraft accident.[35] Over the last three years, only a dozen passengers have died in the U.S. in accidents aboard major scheduled airlines, while at least 300 people may have died of cardiac arrest or other acute illnesses over the same time period.[36] This trend is attributable to several factors,

31. *See* McDowell v. Continental Airlines, Inc., 54 F. Supp.2d 1313, 1315 (S.D. Fla. 1999).
32. *See* Brannigan, *supra* note 19.
33. *See* Buffington, *supra* note 4, at 533.
34. Brannigan, *supra* note 19.
35. *See* Crewdson, *supra* note 8.
36. *See id.*

including an aging population and the growing number of passengers that have chronic medical conditions.[37] Such facts may evidence a carrier's actual notice of the likelihood of encountering life-threatening emergencies in-flight and lead to a duty to include enhanced medical care to meet a reasonableness standard.

FACING THE INEVITABLE – DEFIBRILLATORS ARE NO LONGER JUST FOR HOSPITALS

In addition to clear evidence of the growing demand for in-flight medical services, a carrier's financial burden associated with enhancing medical kits beyond FAA-mandated standards is progressively minimized through advances in technology and medicine. For example, portable defibrillators have become cheaper and easier to use. Defibrillators are currently available for $2000 to $3000, plus flight crew training expenses.[38] The devices are so technologically advanced that they have been called "idiot-proof," coaching the user through voice and visual prompts, and leading manufacturer's to argue that "harmful effects" are unlikely.[39]

The increasing popularity of defibrillators outside the airline industry adds to the assertion that making these devices available in public places is reasonable under the circumstances. Portable defibrillators are now finding their way into such diverse venues as casinos, manufacturing facilities, offices and even briefcases. While most purchasers of these devices are commercial users, a quarter of the approximately 50,000 defibrillators sold to date are purchased by individuals.[40] In addition, Congress is considering a bill, the Cardiac Arrest Survival Act, which would direct the Secretary of Health and Human Services to promote placement of defibrillators in all federal buildings along with training for their use.[41] In light of these trends, airlines can no longer deny an evolving reality that defibrillators are "reasonable" equipment for an in-flight medical kit and failure to include the devices may be interpreted as a failure to meet a common carrier due care standard.

CONCLUSION

Recent airline efforts to voluntarily enhance in-flight medical kits in the absence of regulations requiring them to do so appear to have not

37. *See* Costello, *supra* note 1.

38. *See id.*

39. *See* Buffington, *supra* note 4, at 515.

40. *See* Joseph Pereira, *For the Fearful: Portable Defibrillators*, WALL ST. J., Sept. 1, 1999, at B1.

41. *See* Deb Kiner, *Newport Schools Ponder Purchase, District Could be 1st to Own Life-Saving Devices*, HARRISBURG (PA) PATRIOT & EVENING NEWS, Nov. 2, 1999, at W01.

increased the carrier's liability to passengers who experience a sudden health emergency while traveling with an airline. Conversely, the growing popularity and affordability of portable defibrillators has increasingly led to an acceptance of such devices as a required standard component of in-flight medical kits as opposed to a complex, technical device usable only by trained medical professionals.

This growing understanding by both the public and government bodies may be establishing a higher threshold for an air carrier's standard of care toward its passengers. This higher standard of care is leading to the conclusion that the absence of defibrillators in commercial aircraft is a breach of the carrier's duty and fails to meet a "reasonable" care level under the circumstances. Hence, in the absence of voluntary medical kit enhancements, airlines may in fact be subject to increased liability to passengers requiring cardiac treatment in flight. Until the FAA completes its investigation pursuant to the Act and promulgates new regulations mandating enhanced aircraft medical kits, carriers must evaluate the costs/benefits of adding defibrillators compare to the associated risks. Certainly nothing on the horizon justifies an airline attempting to turn its aircraft into flying hospitals, but placement of defibrillators and associated drugs on commercial planes is inevitable. Unfortunately, such a consumer-positive approach by airline companies may not accomplish the implied goal of reducing in-flight deaths if required follow-up medical care cannot be administered for lack of a licensed "Good Samaritan" passenger volunteer. Could this be the next litigation exposure for the airlines, once again probing the need to examine the concept of in-flight hospitals? Time will tell.