Medical Care and Equipment on Commercial Airlines

Susan M. Hull
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I. INTRODUCTION

FOR YEARS, physicians and other interested groups have protested the lack of adequate medical equipment for use in medical emergencies aboard commercial airlines.¹ Although many passenger illnesses do not require sophisticated emergency medical equipment or diversion of flights, other illnesses, such as cardiac arrests and seizures, clearly call for prompt assistance from qualified personnel as well as the availability of medical equipment. Unfortunately, in the past airline personnel or physicians aboard flights could not render assistance adequately during many serious in-flight medical emergencies because the air carriers carried only elementary first-aid kits.²

It is primarily these life-threatening situations that the Federal Aviation Administration (FAA) addressed in adopting a recent amendment to the Federal Aviation Regulations.³ The amendment requires air carrier certificate holders⁴ to carry an emergency medical kit aboard

¹ For a discussion of the physicians' concerns, see infra notes 73-85 and accompanying text.
² See infra notes 83-87 and accompanying text.
³ See 14 C.F.R. §§ 121.309(d) (requiring specified emergency medical kits), 121.417(b)(3)(iv) (requiring emergency training, including instruction for handling emergencies involving injuries and illnesses and familiarization with the emergency medical kit), 121.715 (requiring reports on in-flight emergencies), 121 App. A (requirements and specifications for emergency medical kits) (1988).
⁴ The amendment applies to certificate holders operating under Part 121 of the FAA regulations. See 14 C.F.R. § 121.1(a)-(f) (1988).
passenger aircraft and to report any medical emergencies annually for two years after the effective date of the rule (August 1, 1986). The emergency medical kit will enable physicians who may be aboard flights to more effectively diagnose and treat persons in need of emergency medical care during the flight.

This Comment will address the issue of an airline's duty in handling in-flight medical emergencies. In lawsuits brought by passengers experiencing in-flight medical illnesses, courts have recognized a cause of action based on allegations of an airline's breach of its duty to provide either a reasonable, high or highest degree of care for the safety of its passengers. Thus, the Comment discusses cases recognizing such a cause of action and the implications of the courts' holdings.

Further, the Comment discusses the perceived concern for the necessity of additional equipment and medications for use in in-flight medical emergencies, the issues addressed by the FAA when issuing the new regulation, and the specific requirements of the final emergency medical kit rule. Moreover, the Comment summarizes the results of the first annual reports of in-flight medical emergencies and makes suggestions for improvements in both the kit and in training requirements. Also addressed are issues not resolved by the FAA regulation, including good samaritan protection, permitted users of the kits, the adequacy of crewmember training, and the adequacy of the medication and equipment included.

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6 See infra notes 19-67 and accompanying text.
7 See infra note 22 and accompanying text.
8 See infra note 20 and accompanying text.
9 See infra note 21 and accompanying text.
10 See infra notes 70-85 and accompanying text.
11 See infra notes 86-138 and accompanying text.
12 See infra notes 139-148 and accompanying text.
13 See infra notes 155-168 and accompanying text.
14 See infra notes 169-185 and accompanying text.
15 See infra notes 186-187 and accompanying text.
16 See infra notes 188-208 and accompanying text.
in the kit. Finally, this Article addresses the issue of whether the new requirement for emergency medical equipment will expand or reduce an airline's potential liability for its conduct in handling in-flight medical emergencies.

II. An Airline's Duty in In-Flight Medical Emergencies

A. General Duty to Exercise High or Highest Degree of Care

While air carriers are not insurers of the safety of their passengers, as common carriers they are generally held to be under a duty to exercise either a high degree or the highest degree of care to safekeep them. Some

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17 See infra notes 208-209 and accompanying text.
18 See infra notes 212-240 and accompanying text.
19 See, e.g., Delta Air Lines, Inc. v. Gibson, 550 S.W.2d 310 (Tex. Civ. App. 1977). The court affirmed the judgment for the plaintiff who fell while descending an escalator on the airline's concourse. Id. at 314. The court noted that while an airline "is not an insurer of the safety of its passengers," it must exercise a "high degree of care." Id. at 312. In Rathvon v. Columbia Pac. Airline, 30 Wash. App. 193, 633 P.2d 122 (1981), the court held that the defendant airline, as a common carrier, had a duty to exercise the highest degree of care for the safety of its passengers, but that the airline was not an insurer of a passenger's safety. Id. at 193, 633 P.2d at 129.
20 See, e.g., Morena v. South Hills Health Sys., 462 A.2d 680 (Pa. 1983), where the court stated that "[e]ven under the high degree of care required of a common carrier, it is incumbent upon a moving party to establish the requisite knowledge on the part of the carrier before a breach of duty can be found." Id. at 684. The Morena case involved allegations of negligence against an ambulance service. Id. at 682; see also Delta Air Lines, Inc. v. Gibson, 550 S.W.2d at 313 (where the court found that Delta did exercise care for the safety of the passenger when assisting her from the plane to the concourse, but the evidence supported the jury findings that it did not exercise a high degree of care at the time of the injury and was negligent).
21 See, e.g., Sprayregen v. American Airlines, 570 F. Supp. 16 (S.D.N.Y. 1983). The plaintiff alleged that the airline breached its duty to warn passengers suffering from head colds of the risks of losing their hearing. Id. at 17. The court noted that "it is widely established that a common carrier for hire owes its passengers the duty of exercising the highest degree of care for their safety." Id. The court concluded, however, that it would be unreasonable to require the airline "to warn of hazards that vary according to the particular condition of the passenger." Id. at 18; see also Fleming v. Delta Airlines, 359 F. Supp. 339 (S.D.N.Y. 1973) (The court stated that "common carriers owe their passengers the highest degree of care," noting that under federal law there is a "duty resting upon air carriers to perform their services with the highest possible degree of safety." Id. at 341. (citations
courts, however, appear to require airlines to exercise only reasonable care for their passengers' safety.\textsuperscript{22}

B. **Cases Involving In-Flight Medical Emergencies**

Although no court has specifically held that an airline must provide sophisticated medical care to passengers, some have stated that airlines do have a duty to assist passengers in medical emergencies.\textsuperscript{23} Courts have recognized a cause of action under a host of allegations, including claims that 1) the airline refused to aid a passenger suffering a heart attack during a flight,\textsuperscript{24} 2) the airline's negligent conduct aggravated a passenger's pre-existing hiatal hernia,\textsuperscript{25} 3) the airline failed to use care to

\textsuperscript{22} See, e.g., Fischer v. Northwest Airlines, 623 F. Supp. 1064, 1066 (N.D. Ill. 1985) (complaint which alleged airline breached common-law duty to exercise reasonable care to its passengers when it failed to aid passenger suffering heart attack during flight stated negligence claim upon which relief could be granted); O'Leary v. American Airlines, 100 A.D.2d 959, 475 N.Y.S.2d 285, 288 (App. Div. 1984) (airline had duty to exercise reasonable care for passenger's safety "in keeping with the dangers and risks known to the carrier or which it should reasonably have anticipated").

\textsuperscript{23} See infra notes 24-67 and accompanying text.

\textsuperscript{24} See, e.g., Fischer v. Northwest Airlines, 623 F. Supp. 1064, 1066 (N.D. Ill. 1985) (complaint sets forth negligence action alleging breach of common law duty to exercise reasonable care to passengers when failing to aid decedent suffering heart attack during flight); Northern Trust Co. v. American Airlines, 142 Ill. App. 3d 21, 491 N.E.2d 417, 423 (1985) (inapplicability of Warsaw Convention does not preclude plaintiffs from bringing cause of action against air carrier under traditional common law rules for alleged negligence when decedent suffered heart attack while a passenger on international flight). For further discussion of Fischer, see infra notes 29-36 and accompanying text. For further discussion of Northern Trust Co., see infra notes 37-40 and accompanying text.

\textsuperscript{25} See Abramson v. Japan Airlines, 799 F.2d 130, 135 (3d Cir. 1984) (the plaintiff alleged negligence and willful misconduct based on the airline attendant's failure to provide him a place to lie down and administer "self-help" remedy), cert.
alleviate a passenger's ear pain, 4) the airline failed to exercise reasonable care for the safety of an intoxicated passenger who died from asphyxiation after choking on a piece of food, and 5) the airline failed to provide adequate medical care and attention to a passenger in shock.

For example, in Fischer v. Northwest Airlines, William Hawley, a passenger on Northwest's nonstop flight from Chicago to Seoul, Korea, suffered a severe heart attack during the flight and died shortly thereafter. The passenger's personal representative sued Northwest alleging causes of action under Article 17 of the Warsaw Convention and common law negligence. After finding the Warsaw Convention claim inapplicable, the court al-

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26 See American Airlines v. Marchant, 249 F.2d 612 (1st Cir. 1957) (per curiam); see infra notes 45-49 and accompanying text.
27 See O'Leary v. American Airlines, 100 A.D.2d 959, 475 N.Y.S.2d 285, 287 (App. Div. 1984). The plaintiff alleged that the passenger's death "resulted from asphyxiation when he choked on a piece of food while in an intoxicated state," that the airline's negligence proximately caused the death when it permitted him to board while intoxicated, continued to serve him liquor and food, and "failed to provide adequate emergency medical treatment." Id. at 959, 475 N.Y.S.2d at 287. For further discussion of O'Leary, see infra notes 58-61 and 216-220 and accompanying text.
28 See D'Aléman v. Pan American World Airways, 259 F.2d 493 (2d Cir. 1958). The court affirmed the jury's finding in favor of defendant in plaintiff's state law claim against the airline. Id. at 496. For further discussion of D'Aléman, see infra notes 63-66 and accompanying text.
30 Id.
31 Convention for the Unification of Certain Rules Relating to International Transportation by Air, opened for signature Oct. 12, 1929, 49 Stat. 3000, T.S. No. 876, 137 L.T.N.S. 11, reprinted in 49 U.S.C. app. § 1502 (1982) [hereinafter Warsaw Convention]. The Warsaw Convention makes international carriers liable for injuries sustained by a passenger "if the accident which caused the damage . . . took place on board the aircraft or in the course of any of the operations of embarking or disembarking." Id.
33 Id. at 1065. The Fischer court found that Hawley's ill health "was an internal disability and was not the result of an unusual or unexpected occurrence connected with the flight." Id. The court based its decision on the United States Supreme Court's definition of "accident" in Air France v. Saks, 470 U.S. 392 (1985). In Saks, the Court concluded that "liability under Article 17 of the Warsaw Convention arises only if a passenger's injury is caused by an unexpected or
ollowed plaintiff's negligence action to go forward. According to the court, the plaintiff's allegation that the airline breached its common law duty to exercise reasonable care to its passengers clearly stated a claim upon which relief could be granted. Specifically, the court noted that a fact finder might conclude that Northwest acted unreasonably in not landing at the nearest available airport, that the aircraft lacked adequate medical equipment, or that the airline negligently failed to seek medical assistance from ground personnel.

Similarly, in Northern Trust v. American Airlines, a passenger on American's flight from Acapulco, Mexico, to Chicago, died after suffering congestive heart failure during an unusual event or happening that is external to the passenger.” Id. at 405. The Fischer court held that “no accident caused Hawley's injury” and Northwest was therefore not liable under the Warsaw Convention. 623 F. Supp. at 1065. The Fischer court rejected the plaintiff's argument that the airline's refusal to aid Hawley after his heart attack was an “accident” causing his injuries. Id. In Saks, the plaintiff, Valerie Saks, traveled on an Air France jet for a 12-hour flight from Paris to Los Angeles. As the plane descended to Los Angeles, Saks experienced severe pain and pressure in her left ear. Several days later, a physician determined that “she had become permanently deaf in her left ear.” Saks, 470 U.S. at 394. Saks sued Air France in California state court alleging negligent maintenance and operation of the airplane's pressurization system. The evidence produced in discovery revealed that the pressurization system had operated normally on the date of the occurrence. After the case was removed to Federal district court, Air France filed a motion for summary judgment claiming that the plaintiff's injury was not caused by an “accident” within the meaning of the Warsaw Convention. The district court granted summary judgment to Air France, but the court of appeals reversed, interpreting the Warsaw Convention and the Montreal Agreement as imposing “absolute liability on airlines for injuries proximately caused by the risks inherent in air travel.” Id. at 395-96. The Supreme Court disagreed and concluded that “liability under Article 17 of the Warsaw Convention arises only if a passenger's injury is caused by an unexpected or unusual event or happening that is external to the passenger.” Id. at 405. The Court further stated that “when the injury indisputably results from the passenger's own internal reaction to the usual, normal, and expected operation of the aircraft, it has not been caused by an accident, and Article 17 of the Warsaw Convention cannot apply.” Id. at 406.

34 Fischer, 623 F. Supp. at 1066.
35 Id. Accordingly, the court denied Northwest's motion to dismiss plaintiff's negligence claim and dismissed the Warsaw Convention claims “for failure to allege facts sufficient to establish that an 'accident' caused Hawley's heart attack.” Id.
36 Id.
ing the flight.\textsuperscript{38} Here, as in \textit{Fischer}, the court denied plaintiff's claim under the Warsaw Convention,\textsuperscript{39} but held that the plaintiffs were not precluded from asserting their claim of negligence against the airline under traditional common law.\textsuperscript{40}

Again, in \textit{Abramson v. Japan Airlines},\textsuperscript{41} the plaintiff suffered an attack from a pre-existing hiatal hernia while on the defendant's flight from New York to Tokyo, Japan.\textsuperscript{42} The plaintiff claimed that the negligent conduct of the airline and its employees aggravated his hiatal hernia. He also alleged willful misconduct, which, if proved, would entitle him to punitive damages.\textsuperscript{43} The Court of Appeals for the Third Circuit affirmed the lower court's dismissal of the plaintiff's additional claim under the Warsaw Convention but held that the lower court erred in failing to reach the negligence and willful misconduct claims.\textsuperscript{44}

\textsuperscript{38} Id. at 21, 491 N.E.2d at 419.
\textsuperscript{39} Id. at 21, 491 N.E.2d at 422. The court found that the passenger's ill-health (heart condition) was an "inherent weakness or disability and was not the result of an unusual or unexpected happening . . . connected with the flight." \textit{Id. at 21, 491 N.E.2d at 422.} Thus, no "accident" occurred under the Warsaw Convention. \textit{Id. at 21, 491 N.E.2d at 422.}
\textsuperscript{40} Id. at 21, 491 N.E.2d at 423. In the trial court, the jury found Nardi 60\% contributorily negligent and awarded plaintiffs $1,030,212 in damages. The appellate court reversed and remanded the case because of the trial court's exclusion of evidence concerning Nardi's pre-flight medical condition. The court, however, did not otherwise question the posture of the case as it went to the jury, i.e., on the claim that the airline was negligent by failing to remove Nardi from the plane at a stopover and immediately transporting him to a hospital. \textit{Id. at 21, 491 N.E.2d at 422.} The court did not articulate the degree of care required of the airline.
\textsuperscript{41} 739 F.2d 130 (3d Cir. 1984), \textit{cert. denied}, 470 U.S. 1059 (1985).
\textsuperscript{42} Id. at 131. The plaintiff did not inform the airline of his condition before the flight. \textit{Id.}
\textsuperscript{43} \textit{Id.} The plaintiff also asserted a cause of action under the Warsaw Convention. \textit{Id.} The court affirmed the district court's dismissal of the Warsaw claim and stated, "In the absence of proof of abnormal external factors, aggravation of a pre-existing injury during the course of a routine and normal flight should not be considered an 'accident' within the meaning of Article 17." \textit{Id. at 133.}
\textsuperscript{44} Id. at 135. The defendant argued "that as a matter of law it had no duty to provide Abramson with a place to lie down." \textit{Id. at 134-35.} The court held that the issue of the airline's duty "as well as the question of whether there [was] a genuine dispute of material fact with respect to Abramson's state law negligence and willful misconduct claims, should be addressed in the first instance by the district court." \textit{Id. at 135.}
Uniformly, the courts require the airlines to assist an ill passenger only so long as they are aware or should be aware of the passenger's condition. For instance, in *American Airlines v. Marchant*, the plaintiff allegedly informed the stewardess that he was experiencing severe pain in his ear during the ascent of the defendant's plane. The stewardess, however, did nothing to alleviate the plaintiff's condition until after the plaintiff's eardrum had ruptured. The plaintiff claimed that the airline was negligent in not correcting the air pressure difference after being notified of plaintiff's condition and "in failing to give him reasonable attention." In affirming the district court's judgment in favor of the plaintiff, the Court of Appeals for the First Circuit stated that the airline, after receiving notice of the passenger's condition, had a duty to "use care" (presumably reasonable care) to alleviate the passenger's condition.

By way of contrast, in *Sprayregen v. American Airlines*, the plaintiff, who had a head cold prior to boarding the defendant's aircraft, suffered permanent hearing loss subsequent to the flight. The plaintiff alleged that the sudden pressure change while the flight descended caused his injury. He also alleged that the airline had a duty to warn passengers of the risks of such injuries. Here, unlike in *Marchant*, the plaintiff did not advise the airline of his dis-

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45 249 F.2d 612 (1st Cir. 1957) (per curiam).
46 *Id.* at 614. The plaintiff testified that he was not aware of any problem with his ears prior to boarding the flight. *Id.*
47 *Id.* The court noted that the evidence indicated that the stewardess could have assisted the plaintiff by providing an inhalator to equalize the pressure and relieve the pain in his ears. *Id.* Furthermore, the court stated that the airline could have used manual controls to reduce the change in cabin pressure which would have relieved the plaintiff's condition. *Id.*
49 *American Airlines v. Marchant*, 249 F.2d at 613-14. The court did not indicate the particular degree of care the airline was obligated to exercise.
51 *Id.* at 17.
52 *Id.*
53 *Id.*
comfort at any time during the flight.\textsuperscript{54} After acknowledging that an air carrier must exercise the highest degree of care for the safety of its passengers,\textsuperscript{55} the court held that an airline has no duty to warn its passengers of hazards that vary according to the particular condition of the passenger.\textsuperscript{56} The court recognized, however, that under \textit{Marchant} a different rule might apply if the airline knew of the passenger’s condition,\textsuperscript{57} thus implying that the airline would indeed be obligated to render medical assistance if aware of a passenger’s illness.

In \textit{O’Leary v. American Airlines},\textsuperscript{58} where an intoxicated passenger died from asphyxiation after choking on a piece of food, the court did so hold.\textsuperscript{59} There, the court held that the plaintiff’s amended complaint sufficiently stated a cause of action for negligence under the principle that the common carrier owed a duty to the passenger to exercise reasonable care for his safety.\textsuperscript{60} Interestingly, the \textit{O’Leary} court stated that the carrier has a further duty to render aid or obtain assistance \textit{if} it knows or should know of the passenger’s disability.\textsuperscript{61}

\textsuperscript{54} Id.
\textsuperscript{55} Id.
\textsuperscript{56} Id. at 18. The court denied the defendant’s motion for summary judgment, however, stating that material fact questions remained as to whether the airline acted negligently in some other respect, apart from its failure to warn. \textit{Id}.
\textsuperscript{57} Id. The court stated that “a different rule might apply where the airline was aware of the passenger’s peculiar physical or emotional state or of any difficulty or distress that the passenger suffered during the flight.” \textit{Id}.
\textsuperscript{59} \textit{Id}. at 959, 475 N.Y.S.2d at 287.
\textsuperscript{60} \textit{Id}. at 959, 475 N.Y.S.2d at 288. The amended complaint alleged that the defendant’s negligence was the proximate cause of decedent’s death, in that defendant, \textit{inter alia}, permitted him to board the airplane while intoxicated, continued to serve him alcoholic beverages and food, failed to provide adequate emergency medical treatment and failed to comply with existing [FAA] regulations pertaining to service of alcoholic beverages in flight.
\textsuperscript{61} \textit{Id}. at 959, 475 N.Y.S.2d at 287. The court stated that the defendant, as a common carrier, owed a duty to exercise reasonable care for the decedent’s safety “in keeping with the dangers and risks known to the carrier or which it should reasonably have anticipated.” \textit{Id}. at 959, 475 N.Y.S.2d at 288 (citations omitted).
Understandably, courts clearly recognize that air carriers cannot reasonably anticipate, nor should they be held absolutely liable, for every in-flight medical emergency. For example, in *D’Aleman v. Pan American World Airways*, the plaintiff alleged that the airline’s negligence in operating the plane and in failing to provide adequate medical care caused the decedent to go into a state of shock, resulting in his death four days later. The Second Circuit affirmed the district court’s judgment in favor of the defendant airline, noting that “carriers cannot be responsible for the individual characteristics of each passenger.”

One may confidently conclude from the foregoing decisions that a plaintiff may maintain a cause of action for negligence under traditional common law rules when the airline is alleged to know of a passenger’s illness and fails to render or seek medical assistance or divert the flight. Less certain, however, is the level of medical care the airline must provide.

### III. The New Regulation Requiring Emergency Medical Kits

The cases discussed above arose when the FAA required commercial carriers to carry only rudimentary first-aid kits aboard flights. Some of the medical emergencies involved in the cases might have been prevented

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102 *See*, e.g., *D’Aleman v. Pan American World Airways*, 259 F.2d 493, 494 (2d Cir. 1958) (airline is not responsible for the individual characteristics of passengers); *Delta Air Lines v. Gibson*, 550 S.W.2d 310, 312 (Tex. Civ. App. 1977) (airline is not insurer of safety of passengers).

103 259 F.2d 493 (2d Cir. 1958).

104 *Id.*

105 *Id.* at 496.

106 *Id.* at 494. The court stated that to hold air carriers responsible for the individual characteristics of passengers “would be to impose a duty of a complete medical and psychiatric examination of all passengers and then to adopt a rule of absolute liability in the event that any undiscovered condition was aggravated by some incident of the flight.” *Id.*

107 *See supra* notes 23-66 and accompanying text.
had the airlines been equipped with more sophisticated medical equipment. Fortunately, the FAA now requires that airlines equip passenger aircraft with emergency medical kits. What effect the requirements will have on an airline's potential liability to its passengers is discussed in Section IV of this Comment.

A. The Need for Additional Medical Equipment

Airlines based in the United States transport over 300 million passengers per year. An estimated 100 of these passengers die during flight, and even more become seriously ill. The experience of one major U.S. airline indicated that it diverted flights for an average of one of every one million passengers due to a life-threatening medical emergency.

Surprisingly, physicians are passengers aboard a high percentage of commercial flights. When a medical...
emergency occurs, these physicians are called upon to assist voluntarily in diagnosing and treating the sick passenger.\footnote{Goodman, Medical Emergencies During Air Travel, 80 Postgraduate Med. 54 (1986). The pilot and/or crewmembers first seek assistance from any physicians aboard a flight before making the decision to divert. A physician voluntarily providing services and advice may save the life of a seriously ill passenger since diverting a domestic flight can take up to forty minutes. The physician who voluntarily aids in diagnosing a passenger may also save an airline the inconvenience and expense of an unscheduled landing, since many in-flight illnesses may not require diversion of flights. \textit{Id.}} It is these physicians, as well as nurses, interest groups, and victims of in-flight medical emergencies, who have criticized the perceived lack of adequate medical facilities aboard aircraft and the inadequate emergency medical training of crewmembers.\footnote{See, e.g., Anderson, Emergency Medical Kits to be Required Cargo on Commercial Airlines. But Will They Fill the Bill?, 256 J. A.M.A. 167 (1986) (reciting physicians' accounts of patients suffering diabetic seizure, cardiorespiratory arrest, and severe allergic food reaction while aboard aircraft and complaints of lack of adequate medical equipment); Cockerell, Basic Medical Equipment on Commercial Airlines, 314 New Eng. J. Med. 1052 (1986) (letter to the editor) (physician's complaint of lack of stethoscope and sphygmomanometer and inadequate crewmember training for patient suffering possible myocardial infarction); Lawrie, Medical Responsibilities of Airlines, 282 Brit. Med. J. 320 (1981) ("airlines should . . . review their responsibilities and reactions to the passenger taken ill during flight"); see also Hays, Physicians and Airline Medical Emergencies, 48 Aviation Space & Envtl. Med. 468 (1977); Rennie, Medical Hazards of Air Travel, 2 Brit. Med. J. 515 (1977).}

In the past, compilations of reliable statistics of the frequency and cause of in-flight medical emergencies did not exist.\footnote{See, e.g., Litwin, supra note 71, at 1983; Mills & Harding, supra note 73, at 1131.} Those statistics that were available consisted of voluntary reports of several airlines (usually consisting of flight attendants' reports),\footnote{See Litwin, supra note 71, at 1983; Davies & Degotardi, Inflight Medical Facilities, 53 Aviation Space & Envtl. Med. 694, 695 (1982); Hays, supra note 75, at 468; Mohler, Nicogossian & Margulies, supra note 70, at 918.} analysis of the number of unscheduled landings for medical reasons,\footnote{See Davies & Degotardi, supra note 77, at 698 (reporting Qantas experienced 16 diversions during 1975-79; Air France, three diversions in 1975; and American Airlines, an average of 18 diversions per year for 1964-68); Mohler, Nicogossian & Margulies, supra note 70, at 918 (estimating one of every one million passengers is deplaned because of medical emergency).} computations of the number of in-flight deaths,\footnote{See, e.g., Litwin, supra note 71, at 1983 (reporting 42 carriers experienced av-
ited from physicians concerned with and involved in such incidents. Reports of medical incidents have indicated that the most critical medical problems occurring aboard aircraft include obstructed airway of the throat, cardiac problems, trauma, hemorrhage, and hypoxia. Although the frequency of medical emergencies does not appear to be alarmingly high, those involved in such emergencies in the past consistently criticized the lack of adequate medical facilities. Physicians pointed to the use by European airlines of sophisticated medical equipment when criticizing the first-aid kits formerly required on United States airlines, the contents of which were plainly inadequate.

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See, e.g., Davies & Degotardi, supra note 77, at 694 (analysis of 10 incidents from 6 physicians); Hays, supra note 75, at 468 (solicitation for physician experience in medical emergencies resulting in 42 responses and 62 incident reports).

See, e.g., Hays, supra note 75, at 469 (physicians interviewed reported cardiovascular problems most frequently); Litwin, supra note 71, at 1985 (most frequently reported cause of death related to cardiac problems); Mohler, Nicogossian & Margulies, supra note 70, at 919 (listing types of medical emergencies encountered on U.S. and European airlines).

See, e.g., Anderson, supra note 75, at 168 ("Scandinavian Airlines System, Air France, El Al, and Air Canada already carry emergency medical equipment, including drugs to treat asthma, heart problems, and diabetic insulin shock."); Chapman & Chamberlain, Death in the Clouds, 294 BRIT. MED. J. 181 (1987) (letter to the editor) (British Caledonian Airways equipment includes a semiautomatic defibrillator for use by trained flight attendants in cardiac arrests); Mills & Harding, Medical Emergencies in the Air (pt. 2), 286 BRIT. MED. J. 1204 (1983) [hereinafter Mills & Harding II] ("Air France, Alitalia, Iberia, Lufthansa, and Sabena have equipped their aircraft with kits for use solely by doctors."); Mohler, Nicogossian & Margulies, supra note 70, at 920 (listing contents of European airlines physician's kit and flight attendant's kit).

See 51 Fed. Reg. 1218 (1986). Prior to the amendment requiring both first-aid kits and emergency medical kits, the FAA required airlines to carry only first-
quate for effective treatment of critically ill passengers.

B. The Petition for Rulemaking

As a result of such widespread concern, various interest groups and individuals formally assessed the problem of in-flight illnesses and recommended equipment and drugs suitable for an on-board emergency medical kit.86 In March 1981, Sidney M. Wolfe, M.D., and Eve Bargmann, M.D., representing the Public Citizen Health

aid kits containing various bandages, leg and arm splints, antiseptic swabs, ammonia inhalants, bandage scissors, and burn compound. Id.

86 See, e.g., Mohler, Idealized Inflight Airline Medical Kit, 47 Aviation Space & Envtl. Med. 1094 (1976). The Air Transport Medicine Committee of the Aerospace Medical Association studied the occurrence of in-flight illnesses and recommended drugs and equipment suitable for an ideal medical kit. The Committee recommended that the kit contain drugs for: (1) cardiovascular emergencies (including deslanoisde for cardiac failure, atropine for bradycardia, Xylocaine for cardiac arrhythmia, morphine for infarct pain, nitroglycerin for angina pectoris, ammonia for vagovagal fainting, and furosemide for pulmonary edema); (2) respiratory emergencies (including aminophylline, Isuprel, and Solu Cortef); (3) neurological emergencies (including diazepam for agitation, Dramamine for airsickness, and phenobarbital for convulsions); (4) metabolic emergencies (including dextrose for hypoglycemia, insulin for diabetic acidosis, and sodium bicarbonate for acidosis); (5) traumatic injuries (including meperidine hydrochloride and Talwin, both for pain); (6) gastrointestinal emergencies (including Lomotil, Mylanta and Donnatal); (7) pregnancy emergencies (ergonovine maleate); and (8) anaphylactic shock (including epinephrine and Benadryl). Id. at 1095. Recommended medical equipment for flights included a stethoscope, a sphygmomanometer, oral airways, scalpels, an ambu-bag (manual resuscitator), clamps, needles, and an intubation set. Id. As discussed more fully in infra notes 144-146 and accompanying text, when promulgating the final emergency medical equipment rule the FAA compromised and refused to include many drugs and items of equipment previously recommended by those commenting on the proposed rule. See also Mohler, Nicogossian & Margulies, supra note 70, at 920, describing the first-aid and medical kits then used by such foreign airlines as Air France, Alitalia, Iberia, Lufthansa, and Sabena. These airlines carry three kits: (1) an emergency physician's kit for use only by physicians volunteering to assist, (2) a flight attendant's kit for use only by crewmembers having specific training in its use, and (3) a first-aid kit similar to the U.S. first-aid kit required by the FAA. Id.; see supra note 85 for a list of the contents of the first-aid kit required on U.S. airlines. The Mohler article also called for centralized reporting to the FAA of in-flight illnesses, more extensive emergency medical training of crewmembers, and additional medical equipment and medications for treatment of common in-flight illnesses. Mohler, Nicogossian & Margulies, supra note 70, at 922. In addition, see Bargmann & Wolfe, supra note 70, at 1049, where Sidney Wolfe, M.D. and Eve Bargmann, M.D., apprised readers of their petition asking the FAA to require U.S. air carriers to provide emergency medical equipment.
Research Group of the Aviation Consumer Action Project, filed a petition ("Bargmann petition") to amend the Federal Aviation Regulations "to require air carriers to provide emergency medical equipment (both medications and diagnostic and lifesaving equipment) in addition to the rudimentary first aid kits now required." The petition cited various reasons for requesting the amendment. First, the petition stated that an unknown number of Americans develop serious medical problems while travelling on airplanes and any doctor requested to assist cannot effectively treat the ill passenger because the plane is not equipped with lifesaving medical equipment or helpful medications.

The petition noted that many of the 100 passenger deaths per year reported to the Air Transport Association might have been prevented if lifesaving equipment were available. The petition also cited surveys of doctors expressing concern over the problem. According to a survey of more than 300 physicians, 88.9% recommended that airlines be required to carry more medical equipment and medications aboard their airplanes. The survey results indicated that 20% of the 300 physicians surveyed had responded to requests for assistance on flights. Many of the responding physicians experienced problems in treating passengers due to the lack of adequate medica-

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88 46 Fed. Reg. 42,278 (1981). The petition stated that many of the serious in-flight medical problems experienced by ill passengers may be life-threatening if not promptly treated.

Yet any doctor on board who is called to help will find that the plane carries no lifesaving medical equipment, no medications (other than burn compound) — not even a stethoscope. As a result, a person with severe asthma [sic] or diabetic coma, for example, could die for want of treatment while the doctor stands helplessly by.

Id.

89 Id.

90 Id.

91 Id.
tions or equipment on board. The petition further referred to the reports of physicians in medical journals relating their experiences in assisting passengers with heart problems, strokes, gastrointestinal problems, and diabetic comas without the benefit of adequate equipment or medications.

Finally, the petition stated that the implementing of better medical equipment would be feasible and inexpensive, that two medical groups had published recommended lists of emergency medical equipment for airlines, and that many foreign air carriers (including Scandinavian Airlines System, Air France, and El Al) already carry in-flight emergency medical equipment and medications.

C. The FAA’s Initial Denial of Rulemaking

Pursuant to FAA rules of practice, the FAA published a summary of the petition in the Federal Register for public comment for a proposed rule. During the subsequent comment period, the FAA received 370 comments, most supporting the proposed rule. Those in favor of the proposal indicated that the FAA should require United States airlines to carry emergency medical equipment which would enable crewmembers or medically qualified persons to assist ill passengers. Many physicians related experiences of involvement in in-flight medi-

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92 Id.  
93 Id.  
94 Id. The petition noted that the American College of Surgeons and the Air Transport Medicine Committee of the Aerospace Medical Association had published recommended lists of emergency medical equipment. Id.; see supra note 86 for discussion of the recommendation of the Air Transport Medicine Committee.  
96 See 14 C.F.R. § 11.27(b) (1988).  
97 46 Fed. Reg. 42,278 (1981). Comments on a petition must be filed within 60 days after the summary is published. 14 C.F.R. § 11.27(b) (1988). The Administrator considers the comments before taking action on the petition. Id.  
99 Id.
cal emergencies. Those opposed to the proposal cited added cost and possible misuse of the equipment or medications as problems.

After reviewing the Bargmann petition and comments received, the FAA refused to promulgate a new rule, stating that a revised rule would, if adopted, "require air carriers to provide equipment and medicine to handle general emergencies not related to flight or shown to affect aviation safety." The FAA interpreted its statutory powers to be limited to requiring only those medical supplies "necessary for the treatment of . . . injuries or illnesses likely to be caused or induced by flight," and not for those which merely "occur" in-flight.

In response to the FAA's refusal to proceed with the rulemaking, the original petitioners (Doctors Bargmann and Wolfe of the Public Citizen Health Research Group of the Aviation Consumer Action Project), along with other doctors, health care professionals and airline passengers requested the United States Court of Appeals for the District of Columbia Circuit in Bargmann v. Helms to review the FAA's decision. In doing so, the court reviewed the issue of whether the FAA indeed lacked statutory authority to promulgate a rule requiring a commercial aircraft to carry additional medical supplies on commercial aircraft. After deciding it had the power to review the

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100 Id. "Those emergencies include such conditions as myocardial infarction, allergic reaction to food, acute asthma, epileptic seizures, and childbirth." Id.

101 Id.


104 Id. at 640 (quoting FAA's Denial of Rulemaking).

105 Id. at 641.

106 715 F.2d 638 (D.C. Cir. 1983). The petitioners in the case were "forty individual doctors, health care professionals, and airline passengers and two non-profit consumer organizations, Aviation Consumer Action Project (ACAP) and Public Citizen Health Research Group (HRG)." Id. at 639. The respondents were J. Lynn Helms (the administrator of the FAA), the FAA, Drew Lewis (the Secretary of Transportation), and the Department of Transportation. Id. at 638.

107 Id. at 638. The court stated, "The sole issue presented for review . . . is
agency's decision and stating the standard of review,\textsuperscript{108} the court held that the FAA had the statutory authority to promulgate such a rule "should it deem such action advisable on the merits."\textsuperscript{109} The court disagreed with the FAA's contention that the first aid kit requirements were historically instituted "at the outer limits of the agency's regulatory authority."\textsuperscript{110} Moreover, the court noted that the FAA operates under the broad statutory mandate of the Federal Aviation Act of 1958 which empowers the

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{108} Id. at 640-41. The court acknowledged that judicial review of an agency's decision not to regulate might be improper, for example, when the decision is made "because of internal management considerations as to budget and personnel or for reasons made after a weighing of competing policies." Id. at 640. In this case, however, the court stated that "the FAA has denied a petition for rulemaking solely because it believes it lacks the statutory power to act—a rationale that is uniquely well-suited for judicial resolution." Id. The court held that it had the authority to make an independent inquiry into an agency's allegation that it lacked statutory authority to act. Id. at 641. In so holding, the court noted that this was not a case involving an agency's legislative choice, where the reviewing court would simply determine whether the agency's actions were "arbitrary" or "irrational." Id.
\item \textsuperscript{109} Id. at 639. The court concluded:
\begin{quote}
According to the FAA's rules of practice, this [statutory authority] requires the Administrator to determine, in light of the public comments received, whether the institution of rulemaking proceedings is justified by the reasons put forth in the petition. In remanding the case to the agency, we express no views whatsoever on the merits of petitioner's request. We hold only that the agency has the power of decision; the decision itself must be made by the FAA.
\end{quote}
Id. at 643 (citation omitted).
\item \textsuperscript{110} Id. at 642. The court noted that the first-aid kit rule as originally developed did not limit the contents of the kits; "the kits were merely required to be 'proper', 6 Fed. Reg. 5,826 (1941), 'adequate', 10 Fed. Reg. 8,529 (1945) or 'suitable and sufficient', 14 Fed. Reg. 4,307 (1949)." Id. at 641. In addition, the agency's subsequent rulemaking concerning required items in the first-aid kits did not make an "induced or caused by flight" distinction. Id. (construing 14 Fed. Reg. 7,034 (1949) and 17 Fed. Reg. 2,748 (1952)). Furthermore, the agency's rulemaking in 1964, 1973, and 1975 indicated that the FAA considered itself to have the authority to require medical equipment for any type of in-flight medical emergency. Id. at 641-42.
\end{itemize}
\end{footnotesize}
FAA to regulate safety. Accordingly, the court held that the FAA's "induced by flight" distinction was inconsistent with the intent of Congress to grant the FAA plenary authority to "[m]ake and enforce safety regulations governing the design and operation of civil aircraft," in order to ensure maximum possible safety. Following the court's reversal and remand in Bargmann, the FAA reconsidered the petition and the comments received in response to the summary of the petition published in the Federal Register.

D. The Notice of Proposed Rulemaking

Upon reconsideration, the FAA issued a notice of proposed rulemaking and recommended additional medical equipment and medications on passenger flights for use by qualified persons whom crewmembers request to assist in the treatment of in-flight medical emergencies.

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111 Id. at 642. The court cited various provisions of the Federal Aviation Act of 1958 relating to the power of the Secretary of Transportation, including 49 U.S.C. § 1421(a)(6) (1982), which provides:

(a) The Secretary of Transportation is empowered and it shall be his duty to promote safety of flight in civil aircraft in air commerce by prescribing and revising from time to time:

. . . . .

(6) Such reasonable rules and regulations, or minimum standards, governing other practices, methods, and procedures, as the Secretary of Transportation may find necessary to provide adequately for national security and safety in air commerce.

Federal Aviation Act of 1958, 49 U.S.C. § 1421(a)(6) (1982). In addition, the FAA is authorized to issue air carrier operating certificates which "shall prescribe such terms, conditions, and limitations as are reasonably necessary to assure safety in air transportation." 49 U.S.C. § 1424(b) (1982). The Bargmann court further noted:

Although we do not interpret the 1958 Act's safety provisions to constitute a general welfare clause, giving the FAA authority over virtually all aspects of life on board commercial aircraft, the proper scope to be given these provisions must comport with the broad language in which Congress couched its delegation of authority.

Bargmann, 715 F.2d at 642.


113 For discussion of the petition and comments, see supra notes 87-101 and accompanying text.

FAA notice of proposed rulemaking ("FAA notice") recommended that each aircraft carry a medical kit containing equipment and medications to provide basic life support during medical emergencies such as heart attacks, acute asthma attacks, allergic reactions, insulin shock, seizures, and childbirth. In addition, the FAA notice proposed that each air carrier be required to report annually, for two years after the implementation of the rule, in-flight medical emergencies that result in the use of the re-


50 Fed. Reg. at 10,445. The notice recommended that the medical kit include the following equipment and medications:

1. Diagnostic equipment
   a. Sphygmomanometer
   b. Stethoscope
   c. Flashlight
2. Airway equipment
   a. Oropharyngeal airways (3 sizes)
   b. Equipment necessary to establish a tracheal airway
3. Surgical Equipment
   a. Alcohol sponges
   b. Hemostats (2)
   c. Scalpel
   d. Scissors
4. Syringes and needles (those necessary to administer required drugs)
5. Intravenous administration set
6. Drugs, parenteral
   a. Analgesic: Morphine sulfate
   b. Antiarrhythmic
      (1) Lidocaine hydrochloride
      (2) Atropine sulfate
   c. Drug for acidosis: Sodium bicarbonate
   d. Anticonvulsant/Anxiolytic
      (1) Amobarbital
      (2) Diazepam
   e. Drugs for acute allergic reaction and bronchospasm
      (1) Epinephrine
      (2) Diphenhydramine hydrochloride
      (3) Adrenocortical steroid
      (4) Aminophylline
   f. Drug for hypoglycemic shock: 50% dextrose injection
   g. Intravenous fluid for drug administration: 5% dextrose injection 250cc
7. Drug for oral administration:
   Antianginal: Nitroglycerine, sublingual
8. Basic instructions for use of the drugs in the kit

Id.
quired emergency medical kit, diversion of the aircraft, or the death of a passenger or crewmember.\textsuperscript{116}

The FAA notice invited interested persons to comment upon the proposed rule.\textsuperscript{117} The FAA received approximately 140 public comments in response to the notice. In contrast to the comments received in response to the Bargmann petition,\textsuperscript{118} which were primarily from individuals, the responses to the FAA notice were mainly from organizations, including several medical associations, air carrier associations, labor organizations, and air carrier certificate holders.\textsuperscript{119} Forty-six individual physicians also sent comments, forty-four of whom supported the notion of an expanded medical kit.\textsuperscript{120}

The physicians' opinions varied as to what the medical kits should contain. Some physicians, concerned that a few of the proposed drugs would be misused, recommended that such drugs be deleted.\textsuperscript{121} Others recommended that the kits contain more extensive drugs and equipment.\textsuperscript{122} One physician objected because the presence of such equipment could result in a tendency "to try to make do with the available equipment," consequently delaying immediate diversion of flights.\textsuperscript{123} Another physician opposed any equipment and drugs other than a stethoscope and a blood pressure recording cuff, because of the potential for misuse.\textsuperscript{124} Some physicians, as well as nurses, expressed their belief that "good samaritan" protection from liability was necessary to ensure that physi-

\textsuperscript{116} Id.
\textsuperscript{117} Id. at 10,444.
\textsuperscript{120} Id. at 1218-19. Of the seven registered nurses commenting on the notice of proposed rulemaking, five favored medical kits and two opposed them based on possible misuse. Id. at 1219. Two nurses recommended that a registered nurse be included as a crewmember on flights. Id. The FAA also received comments from many "non-medical" individuals. Their comments generally favored the proposed kit. Id.
\textsuperscript{121} Id. at 1218.
\textsuperscript{122} Id.
\textsuperscript{123} Id. at 1219.
\textsuperscript{124} Id.
cians and nurses come forward during medical emergencies.\textsuperscript{125}

Not surprisingly, providers of medical equipment and consultant services favored the expanded medical kit.\textsuperscript{126} The National Transportation Safety Board also favored the proposed kit.\textsuperscript{127} Air carrier labor organizations generally favored the proposed kits. Although favoring the medical kit, the Airline Pilots Association additionally advocated the need for good samaritan legislation.\textsuperscript{128} The Airline Operations Control Society objected to the kit proposal, voicing concerns of potential misuse of the equipment and drugs by unqualified individuals.\textsuperscript{129} The flight attendant unions favored the proposal and recommended an additional "expanded first-aid kit" for use by flight attendants.\textsuperscript{130}

Small air carriers objected to the proposal, primarily because of the short duration of their flights and the low probability of a person qualified to use the kit being on board such flights.\textsuperscript{131} Three air carrier associations, the Air Transport Association (ATA), the Regional Airline Association (RAA), and the National Air Carrier Association, Inc. (NACA) opposed the FAA's proposed rule.\textsuperscript{132} The ATA, representing the major domestic air carriers,

\textsuperscript{125} Id. In response to the concern for "good samaritan" legislation, the FAA pointed out that existing state "good samaritan" laws may apply. Furthermore, the FAA opined that qualified medical personnel will nevertheless continue to assist voluntarily in medical emergencies, and that the absence of federal legislation did not justify withdrawal of the proposed rule. The FAA also noted that Congress had been considering "good samaritan" legislation. Id. at 1221; see infra notes 169-185 and accompanying text for further discussion of "good samaritan" laws.


\textsuperscript{127} Id. at 1219.

\textsuperscript{128} Id.

\textsuperscript{129} Id.

\textsuperscript{130} Id.

\textsuperscript{131} Id. The probability of an individual qualified to use the kit being on board is not as high on small carriers as it is on large carriers using larger aircraft and making longer flights. Id.

\textsuperscript{132} Id.
cited the American Medical Association's 1981 study to support its belief that the first-aid kits were satisfactory. The ATA's concerns included who could use the kit, liability for use of the kit, security of the medications and dangerous instruments, the Drug Enforcement Agency's regulation of controlled substances, and potential for misuse of the kit. The ATA concluded by recommending that the FAA analyze the results of the proposed two-year reports before requiring airlines to carry emergency medical kits. The RAA, representing "short haul" regional and commuter carriers, objected to the FAA's proposed rule because the short flights make diversion possible, and the aircraft are never more than 30 minutes from an airport where qualified medical assistance is available. Both the RAA and the NACA raised issues of "liability, security, potential for misuse, accountability for controlled substances, and need for a physician in order to procure the proposed drugs in the kit."

Seven physicians' associations and two nurses' associations responded with comments ranging from full support to total opposition. The primary reasons for opposition by these groups concerned the need for good samaritan legislation and the fear of possible misuse of the equipment and drugs.

E. Final Emergency Medical Kit Requirement

After considering the comments on both the Bargmann

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133 Id.; see AMA Commission on Emergency Medical Services, supra note 82, at 1007.
135 Id. at 1219.
136 Id. at 1220.
137 Id. The AMA, for example, cited its 1981 study, AMA Commission On Emergency Medical Services, supra note 82, and pointed to its other activity in the area, including its recommendations to physicians travelling by air to carry personal medical kits, and its support for federal "good samaritan" legislation. 51 Fed. Reg. 1218, 1220. The nurses' associations questioned how crewmembers will identify a qualified user of the kit. Id. The nurses suggested that qualification to use the kit should include special training in emergency care. Id.
petition and the notice of proposed rulemaking, the FAA concluded that an expanded medical kit on passenger aircraft was needed. Although recognizing the decreased need for use of the kits on short duration flights with limited numbers of passengers, the FAA nonetheless concluded that medical emergencies requiring prompt assistance might occur on such flights. Hence, the FAA requires carriage of the emergency medical kits on all passenger aircraft operating under Part 121 of the federal aviation regulations.

The FAA modified the contents of the proposed kit by eliminating all surgical instruments and controlled drugs. The kits, as modified, must contain the follow-

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142 Id. at 1220-21.
143 See 14 C.F.R. § 121.309(d) (1988)(requiring emergency medical kit on passenger flights). Air carriers subject to the regulation are as follows:
   (1) Each air carrier engaging in interstate or overseas air transportation under a certificate of public convenience and necessity or other appropriate economic authority issued by the CAB.
   (2) Each air carrier engaging in foreign air transportation under a certificate of public convenience and necessity or other appropriate economic authority issued by the CAB.
   (3) Each air carrier covered by paragraph (a) (1) or (2) of this section when engaging in charter flights or other special service operations.
   (4) Each supplemental air carrier when it engages in the carriage of persons or property in air commerce for compensation or hire
   (5) Each commercial operator when it engages in the carriage of persons or property in air commerce for compensation or hire—
      (i) With large aircraft other than airplanes; or
      (ii) As a common carrier solely between places entirely within any state of the United States, with airplanes having a seating capacity of more than 30 passengers or a maximum payload capacity of more than 7,500 pounds.
   (6) Each air carrier when it engages in all-cargo air service under a certificate issued by the CAB under section 418 of the Federal Aviation Act of 1958.
144 See 51 Fed. Reg. 1218, 1221 (1986). The equipment and drugs eliminated from the proposed kit include a tracheal airway set, hemostats, a scalpel, scissors, an intravenous administration set, analgesics (morphine sulfate), antiarrhythmic
ing: dextrose, epinephrine, and diphenhydramine (injectable medications); nitroglycerin tablets; a stethoscope and a sphygmomanometer; three sizes of oropharyngeal airways; needles and syringes (sizes necessary to administer required drugs); and, basic instructions for use of the drugs in the kit. The FAA reasoned that elimination of the surgical instruments, controlled substances, and prescription drugs minimized concerns regarding security, the potential for misuse, congressional concerns regarding the dangerousness of the drugs and equipment, and liability for use of the kit.

The amendment also requires that crewmembers’ training include “familiarization with the emergency medical kit.” Finally, the FAA adopted the proposal requiring carriers to maintain records and to report medical emergencies annually for two years.

In evaluating the implementation costs of the amend-

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146 51 Fed. Reg. 1218, 1221 (1986). The elimination of so many drugs and medical instruments obviously represents a compromise by the FAA. The FAA explained that the prescription drugs retained in the kits “do not have the same potential for misuse or require monitoring equipment as do those drugs deleted.” Id. at 1221.
147 14 C.F.R. § 121.417(b)(3)(iv) (1988). The regulation for emergency training of crewmembers states that crewmembers must receive instruction in handling emergency situations, including illnesses, injuries, “or other abnormal situations involving passengers or crewmembers to include familiarization with the emergency medical kit.” Id. For discussion of crewmember training, see infra notes 188-208 and accompanying text.
148 See 14 C.F.R. § 121.715 (1988). This amendment states:
(a) For a period of 24 months commencing with the effective date of this rule, each certificate holder shall maintain records on each medical emergency occurring during flight time resulting in use of the emergency medical kit required under Appendix A, diversion of the aircraft, or death of a passenger or crew member. These records shall include a description of how the medical kit was used, by whom, and the outcome of the medical emergency.
(b) The certificate holder shall submit these records, or a summary thereof, to its assigned FAA Principal Operations Inspector within 30 days after the end of each 12-month period during the 24 months specified in paragraph (a).
ment, the FAA estimated that the cost of equipping passenger aircraft with emergency medical kits would be $233,000.\textsuperscript{149} Further, the additional fuel cost per kit would be $94.00.\textsuperscript{150} On the other hand, the FAA estimated that the benefits resulting from emergency medical kits might be a "savings" of two to ten lives annually.\textsuperscript{151} Using these figures, the FAA predicted that 21 to 100 lives could be saved over a ten year period, with the expected discounted present value of lives saved ranging from $8.4 million to $41.9 million.\textsuperscript{152} Thus, the FAA concluded that the "estimated benefits exceed[ed] the estimated costs of implementing this amendment."\textsuperscript{153} Furthermore, according to the FAA, the amendments would not have a significant economic impact on small air carriers.\textsuperscript{154}

F. Results of First Annual Reports

The new amendment required each air carrier to main-

\textsuperscript{149} See 51 Fed. Reg. 1218, 1221 (1986). This cost includes both the purchase and installation costs and is based on an approximate cost of $100 per kit for 2333 aircraft. \textit{Id.}

\textsuperscript{150} \textit{Id.} This figure was arrived at based on the medical kit's approximate weight of seven pounds, which would result in an estimated average fuel consumption of 15 gallons per year per aircraft, at an approximate fuel price of 89.4 cents per gallon. \textit{Id.} The FAA further stated that the present value of the total implementation costs for the 10 year period following implementation would be approximately $5.9 million. \textit{Id.} at 1222.

\textsuperscript{151} \textit{Id.} The FAA estimated that approximately 21 deaths occur in flight per year, while the public estimates of in-flight deaths approximated 100 annually. \textit{Id.} The FAA then estimated that 10\% of these deaths might be prevented by use of an emergency medical kit. \textit{Id.} Thus, a range of two to ten lives saved annually was derived from the FAA's and the public estimates. \textit{Id.}

\textsuperscript{152} \textit{Id.} The FAA valued a life at $650,000 in 1983 dollars for purposes of the economic study. \textit{Id.} The discount rate used in the FAA's calculations for the 10 year period was 10\%. \textit{Id.} Based on these estimates, the emergency medical kits were projected to have a benefit/cost ratio ranging from a low of 1.42 to a high of 6.76. \textit{Id.}

\textsuperscript{153} \textit{Id.} at 1223.

\textsuperscript{154} \textit{Id.} The FAA estimated that the annualized cost per aircraft to meet the emergency medical requirements was $217 per aircraft. \textit{Id.} As the FAA defines a small air carrier to consist of a maximum of nine operating aircraft, a small air carrier maximum economic cost would be approximately $1953 (9 x $217). \textit{Id.}
tain records for a twenty-four month period on each in-flight medical emergency "resulting in use of the emergency medical kit required under Appendix A, diversion of the aircraft, or death of a passenger or crewmember." \(^{155}\) In addition, the regulation required each airline to send the records, or a summation of them, to its FAA Principal Operations Inspector at the end of each year. \(^{156}\) The Protection and Survival Laboratory of the FAA compiled the records and prepared a summary of them for the first 12-month period. \(^{157}\) Although the substantive information provided by the airlines varied, making accurate statistical analysis impossible, \(^{158}\) the Laboratory's compilation and summary of the data provides useful information for the FAA to consider in any future rulemaking.

The Laboratory report indicates that the airlines filed 651 individual reports, and two airlines filed report summaries. There were a total of 1,016 in-flight medical emergencies. \(^{159}\) The air carriers diverted at least eighty-nine flights \(^{160}\) and eight in-flight passenger deaths oc-

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\(^{155}\) 14 C.F.R. § 121.715.(a) (1988). The regulations did not specify a particular format for these records other than requiring "a description of how the medical kit was used, by whom, and the outcome of the medical emergency." *Id.*

\(^{156}\) 14 C.F.R. § 121.715(b) (1988).

\(^{157}\) M. George, Summary of Inflight Medical Emergency Reports, August 1, 1986 through July 31, 1987, Memorandum No. AAM-119-88-2 (Feb. 12, 1988) (available at the Civil Aeronautical Center, FAA, Oklahoma City, Okla.).

\(^{158}\) See *Id.* at 4. The Laboratory noted:

The inflight medical emergency reports are informationally inconsistent. Certain operators provided more than the required information, while others did not provide even the minimum. In some cases, copies of the attending physician's report were furnished, requiring considerable interpretation in order to make data encoding possible . . . . Since there is no requirement for uniform reporting of inflight medical emergencies, the data in this study should not be considered complete, and should not be used for precise statistical analysis or projections.

*Id.*

\(^{159}\) *Id.* at 2. This figure is actually higher because Eastern Airlines' report of 81 occurrences of medical emergencies was not included in the summary due to its failure to provide detailed information. *Id.*

\(^{160}\) *Id.* at 3. The data reflected 89 confirmed diversions and 628 instances not requiring diversion. In the remaining 299 instances it is unknown whether or not the aircraft diverted. *Id.*
Medical equipment used most frequently included the spyhgmomanometer (739 reports of use) and the stethoscope (734 reports of use). Medications administered most frequently included nitroglycerin (used 100 times) and diphenhydramine (used 35 times). Persons using the medical kit included physicians, nurses, emergency medical technicians, and crewmembers. Physicians utilized the kit most frequently. The figures indicate 589 instances of use by a positively identified physician, and 321 instances where a physician probably used the kit. These figures confirm the previous estimates that physicians are aboard a high percentage of commercial flights.

The types of medical emergencies occurring included diabetic problems, cardiac problems, complaints of chest pain, nausea, seizures, allergic reactions, lacerations, and

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1. No deaths of crewmembers were reported. If the report stated a passenger died later at a hospital, it was not recorded as a death in the Laboratory's report. Id.

2. Id.

3. See id. Here, physicians were aboard flights at least 58.03% of the time, and perhaps as much as 89.66%. Id.
syncope. The frequency of use of the equipment and medications in treating the illnesses indicates that the new equipment has proved helpful in many medical emergencies. Due to the frequency of suspected cardiac problems, however, the FAA may wish to consider the possibility of requiring external automatic defibrillators in the future. The FAA will presumably review the reports after the two-year reports are filed to consider whether the inclusion of additional equipment and medications is warranted.

IV. UNRESOLVED ISSUES

Issues unresolved by the regulation include whether “good samaritan” protection will be afforded the care provider, who may use the kits, whether more extensive training for crewmembers should be instituted, whether the contents of the kits are sufficient for use in medical emergencies, and an airline’s potential liability under the regulation.

A. Good Samaritan Protection

Good samaritan statutes typically relieve physicians and other health care providers of civil liability for gratuitously rendering emergency treatment “in good faith” at the scene of an accident. State legislatures enacted

\[\text{REFERENCES}\]

167 See M. George, supra note 157, at app. C. Due to the variation in the descriptions of the causes of medical emergencies, accurate statistics have not been made. The compilation indicates, however, that syncope (fainting or unconsciousness), cardiac problems, complaints of chest pain, and seizures may have occurred more frequently that the other types of problems. Id.


Any individual, including a person licensed to practice any method of treatment of human ailments, disease, pain, injury, deformity, mental or physical condition, or licensed to render services ancillary thereto, or any person who is a volunteer member of a duly incorpo-
good samaritan statutes primarily in response to the physicians' argument that their professional duty required them to render aid in an emergency\textsuperscript{170} but that rendering

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\textsuperscript{170} The Principles of Medical Ethics of the American Medical Association provide that a physician should "respond to any request for his assistance in an emergency." See Note, supra note 169, at 1301 (citing AMERICAN MEDICAL ASSOCIATION, PRINCIPLES OF MEDICAL ETHICS ch. II, § 4 (1953)). Ordinarily, under American tort law, an individual has no duty to provide assistance in emergencies. Lee v. State, 490 P.2d 1206, 1208 (1971), overruled in part on other grounds, 545 P.2d 165 (Alaska 1976); W. PROSSER, LAW OF TORTS § 56, at 340 (4th ed. 1971). If, however, one voluntarily renders aid he "assumes a legally enforceable obligation to exercise reasonable care and skill in the task voluntarily undertaken." 2 D. LOUISELL & H. WILLIAMS, supra note 169, ¶ 22.01; see also RESTATEMENT (SECOND) OF TORTS § 323 (1965). Thus, as noted by the court in Beasley v. MacDonald Eng'g Co., 249 So. 2d 844 (Ala. 1971), "It was in recognition of this common-law theory of liability — i.e., that one who volunteers to act though under no duty to do so is thereafter charged with the duty of acting carefully —
\end{quote}
such emergency care made them vulnerable to malpractice suits. The legislatures thus passed the statutes to encourage physicians to voluntarily render treatment at the scene of emergencies without fear of resulting malpractice suits against them.

Although good samaritan protection does not exist at the federal level, all fifty states and the District of Columbia have enacted such legislation. The statutes vary, however, with respect to the individuals protected and the circumstances within the scope of coverage. There is no reported case involving a victim of an in-flight medical emergency suing a physician for malpractice for voluntary treatment.

that legislatures have passed the so-called Good Samaritan statutes . . ." Id. at 847.

See 2 D. LOUISELL & H. WILLIAMS, supra note 169, ¶ 21.01, where the authors stated:

The recent and substantial increase in medical malpractice suits, and the very real fear by many physicians of involvement therein, have played an important role in persuading legislatures that the protection of Good Samaritan laws is necessary to induce physicians and other medical care providers to respond to requests for assistance in emergencies.

"The basis for the enactment of such statutes is a perceived danger for potential liability for malpractice would inhibit volunteering." Id.

See id. ¶¶ 21.01, 21.10-.60.

Some statutes contain language exculpating "any person" rendering emergency assistance from civil liability. For example, the Georgia statute provides:

Any person, including those licensed to practice medicine and surgery . . . and including any person licensed to render services ancillary thereto, who in good faith renders emergency care at the scene of an accident or emergency . . . without making any charge therefore shall not be liable for any civil damages as a result of any act or omission by such person in rendering the emergency care or as a result of any act or failure to act to provide or arrange for further medical treatment or care for the injured person.

GA. CODE ANN. § 84-930 (Harrison 1985). A Georgia court of appeals held that the statute applied to "any person" providing emergency care in good faith, and thus a house owner who assisted a contractor's employee after he had fallen came within the protection of the statute. See Wallace v. Hall, 145 Ga. App. 610, 244 S.E.2d 129, 130 (1978). On the other hand, the New York good samaritan statute appears to apply only to licensed physicians. See N.Y. EDUC. LAW § 6527 (Consol. 1985). For the full text of the New York statute, see supra note 169.

In most cases involving good samaritan protection for physicians, the physi-
A review of the statutes and the "good samaritan" cases indicates, however, that physicians and other qualified personnel covered by the statutes who render emergency treatment during commercial flight may confidently rely on protection from the state statutes. Indeed, the statutes which protect "any person" rendering emergency treatment, rather than limiting protection to licensed physicians, should encourage other qualified persons to assist when an in-flight medical emergency arises. Whether good samaritan statutes will protect a crewmember assisting in medical emergencies will depend on the courts' determination of the airline's obligation to render medical treatment. Since courts require air carriers to exercise a reasonable, high, or highest degree of care for the safety of passengers, they have an affirmative duty to render aid to victims of in-flight medical emergencies. Moreover, the new regulation arguably expands an airline's duty to provide medical care and assistance. Since the statutes generally provide protection for those who are not otherwise legally obligated to pro-

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176 See 2 D. LOUISELL & H. WILLIAMS, supra note 169, ¶¶ 21.10-.60 (listing each state's good samaritan statute).
177 See 2 D. LOUISELL & H. WILLIAMS, supra note 169, ¶¶ 21.01-.09 (reviewing cases involving good samaritan statutes); Annotation, supra note 169, at 222.
179 See supra notes 19-22 and accompanying text.
180 See infra notes 235-240 and accompanying text.
vide assistance, crewmembers acting negligently may not fall within the scope of statutory protection. The airlines therefore have good reason to ask for good samaritan protection.

In response to concerns for good samaritan protection, the FAA noted that such a federal legislative matter was beyond the FAA's scope of rulemaking authority. The FAA stated that existing state laws "may apply" and that Congress was considering federal legislation regarding good samaritan protection. To resolve the problem, prudent state legislatures will amend their statutes to provide protection of airline personnel for their negligence in medical emergencies. Alternatively, Congress could re-

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181 See Lee, 490 P.2d at 1209 (the court stated that good samaritan statutes protect persons "who are not under some pre-existing duty to rescue.").

182 It is only in circumstances involving negligent conduct on the part of airline personnel that airlines need good samaritan protection. Courts recognize that air carriers are not obligated to carry elaborate hospital equipment or to provide physicians aboard flights. Courts only require air carriers to render such aid "as is reasonably required by the passenger's disability and the existing circumstances, providing that the carrier's employees know or in the exercise of reasonable care have reason to know of the passenger's disability." O'Leary v. American Airlines, 100 A.D.2d 959, 475 N.Y.S.2d 285, 288 (App. Div. 1984) (citations omitted). Thus, a court should not find an airline negligent in circumstances involving unknown or reasonably unanticipated medical emergencies. In those instances, the statutory protection would not be needed.


184 Id. at 1221. The FAA stated, "It is not clear whether the Federal government should provide this protection, or [whether] it is properly a matter for state law. The applicability of state laws to personnel utilizing medical kits in an aircraft during flight time is also unclear." Id. at 1220. Discussion of choice of law questions raised by the question of applicability of good samaritan statutes to personnel assisting in in-flight medical emergencies is beyond the scope of this comment.

185 Cf. Conn. Gen. Stat. § 52-557b (1987). The Connecticut good samaritan statute extends protection from liability for ordinary negligence to specific individuals—such as paid policemen, ambulance personnel and employees of railroad companies—who normally would have a common law duty to render aid in emergencies. Id. The subsections applying to railroad companies and their employees provide:

(c) An employee of a railroad company, including any company operating a commuter rail line, who has completed a course in first aid offered by the American Red Cross, who is trained in cardiopulmonary resuscitation in accordance with standards set forth by the American Red Cross and who renders emergency first aid or cardiopulmonary resuscitation to a person in need thereof, shall not be
consider enacting federal legislation providing protection for airline personnel and health care providers who assist in in-flight medical emergencies.

B. Persons Qualified to Use Kits

The FAA has determined that each airline must resolve who may use the emergency medical kits in light of each medical emergency’s unique circumstances. The regulation, therefore, continues to rely on a physician’s or other qualified personnel’s voluntary aid in medical emergencies. In order to obtain the maximum benefit from the kit, the individual airlines should consider training at least one crewmember per aircraft in regular resuscitation skills or even to paramedic standards so that the crewmember could, if necessary, utilize the kit in a medical emergency in the event a physician is not on board.

C. Training of Crewmembers

The FAA regulations require that airlines train

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liable to such person assisted for civil damages for any personal injury or death which results from acts or omissions by such employee in rendering the emergency first aid or cardiopulmonary resuscitation, which may constitute ordinary negligence. The immunity provided in this subsection does not apply to acts or omissions constituting gross, wilful or wanton negligence.

(d) A railroad company, including any commuter rail line, which provides emergency medical training or equipment to any employee granted immunity pursuant to subsection (c) of this section shall not be liable for civil damages for any injury sustained by a person or for the death of a person which results from the company’s acts or omissions in providing such training or equipment or which results from acts or omissions by such employee in rendering emergency first aid or cardiopulmonary resuscitation, which may constitute ordinary negligence. The immunity provided in this subsection does not apply to acts of omissions constituting gross, wilful or wanton negligence.

CONN. GEN. STAT. § 52-557b(c)-(d) (1987).

186 51 Fed. Reg. 1218, 1221 (1986). The FAA stated that “resolution of this question must be left to each air carrier since it depends, to some extent upon the nature of and circumstances surrounding each medical emergency.” Id. at 1221.

187 For further discussion of crewmember training requirements, see infra notes 188-207 and accompanying text.
crewmembers in the proper use of first-aid equipment. The airlines must also train crewmembers to operate the emergency oxygen equipment. In addition, the airlines must instruct crewmembers who fly at altitudes above 25,000 feet on likely problems passengers may suffer as a result of high altitude traveling.

Under the new emergency medical kit regulation, the airlines must instruct crewmembers in the handling of situations involving "illness, injury, or other abnormal situations involving passengers or crewmembers to include familiarization with the emergency medical kit." The FAA did not define what "familiarization" entails. The FAA's remarks regarding use of the kit clearly indicate, however, that the regulation does not require air carriers to train crewmembers to expertly use the kit. Indeed, comparison of the training requirement for first-aid equipment with that for the emergency medical kit reveals that airline personnel need not be trained in actual

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190 See 14 C.F.R. § 121.417(e)(1)-(6) (1988). This section states:
   (e) Crewmembers who serve in operations above 25,000 feet must receive instruction in the following:
   (1) Respiration.
   (2) Hypoxia.
   (3) Duration of consciousness without supplemental oxygen at altitude.
   (4) Gas expansion.
   (5) Gas bubble formation.
   (6) Physical phenomena and incidents of decompression.

Id. Significantly, the regulations apparently do not require that airlines train crewmembers to treat these physical problems associated with high altitude flying. See id. Instead, the language of the regulation appears to require only "instruction" in recognizing the physical problems likely to occur. Id.

192 51 Fed. Reg. 1218, 1221. The FAA stated that "[t]he regulations do not specify who should be permitted to use the kit. The FAA has determined that resolution of this question must be left to each air carrier since it depends, to some extent upon the nature of and circumstances surrounding each medical emergency." Id.

194 See 14 C.F.R. § 121.417(b)(3)(iv) (requiring "familiarization" with the emergency medical kit).
use of the emergency medical kit. Instead, the FAA allows airlines to continue to rely on “qualified medical personnel” to voluntarily render assistance and use the kit.\textsuperscript{195} Any additional or specialized training of crewmembers is left to the discretion of the individual airlines.\textsuperscript{196}

According to representatives of several major air carriers, first-aid training for flight attendants ranges from four to twelve hours.\textsuperscript{197} The airlines usually provide training in cardiopulmonary resuscitation with annual refresher courses of one to six hours.\textsuperscript{198} Some foreign airlines have adopted a policy of advanced first aid training for their cabin staff.\textsuperscript{199} One such airline trains selected crewmembers to diagnose and treat commonly encountered medical conditions.\textsuperscript{200} This training includes instruction on the use of a semiautomatic defibrillator in the treatment of cardiac arrests.\textsuperscript{201}

Physicians have advocated that the airlines should conduct more extensive crewmember training. Some suggest that the airlines should train at least one member of the

\textsuperscript{195} Id. “[T]he FAA believes that, in the event of an emergency, qualified medical personnel will voluntarily come forward, just as they do now, to provide assistance and, when indicated, use the medical equipment and medication made available.” Id.

\textsuperscript{196} See supra note 192 and accompanying text.

\textsuperscript{197} See AMA Commission on Emergency Medical Services, supra note 82, at 1010.

\textsuperscript{198} See id.; see also Mohler, Nicogossian & Margulies, supra note 70, at 920-21, which indicates that “[t]raining in Basic Cardiac Life Support (including CPR and obstructed airway clearance procedures) is given to flight attendants by most U.S. airlines. Others provide it to certain flight attendants, but not all.” Id. at 921. One source indicates that T.W.A. instructs flight attendants and pilots in introductory aviation physiology and provides a one-day first-aid course. See Rodenberg, Medical Emergencies Aboard Commercial Aircraft, 16 ANNALS EMERGENCY MED. 1373, 1375 (1987). Crewmembers are also taught to recognize common in-flight medical problems. Id. at 1375. CPR certification is not required by T.W.A. Training on “basic life support skills” is, however, provided. Id.

\textsuperscript{199} See Chapman & Chamberlain, supra note 84, at 181 (British Caledonian Airways); Preston, Death in the Clouds, 294 BRIT. MED. J. 374 (1987) (letter to the editor regarding British Airways).

\textsuperscript{200} See Chapman & Chamberlain, supra note 84, at 181 (British Caledonian Airways).

\textsuperscript{201} Id.
crew to paramedic standards\textsuperscript{202} or to the level of emergency medical technicians.\textsuperscript{203} One medical journal recently advocated additional training to operate an automatic external defibrillator for situations of cardiac arrest.\textsuperscript{204} At a minimum, physicians state that the crew should be "fluent with resuscitation techniques."\textsuperscript{205}

Whether the FAA should require additional emergency medical training of crewmembers on United States airlines will depend in part on the final results of the two-year reports submitted by the airlines.\textsuperscript{206} The information in the first-year reports revealed that physicians and other qualified medical personnel assisted in many of the in-flight emergencies.\textsuperscript{207} On the other hand, a recent independent survey of in-flight medical illnesses revealed that airline personnel provided medical assistance more often than physicians.\textsuperscript{208} If the results of the two year reports indicate that physicians or other qualified personnel

\textsuperscript{202} See, e.g., Emergencies in the Air, LANCET, Jan. 5, 1985, at 28, 29; Mills & Harding II, supra note 84, at 1205.

\textsuperscript{203} Cummins and Schubach, Frequency and Types of Medical Emergencies Among Commercial Air Travelers, 261 J. A.M.A. 1295, 1299 (1989) (suggesting training to level of emergency medical technician).

\textsuperscript{204} See Litwin, supra note 71, at 1987. The authors stated:

Early defibrillation alone, without intubation and without intravenous pharmacologic interventions, may convert up to 50\% of the people in ventricular fibrillation to a life-sustaining rhythm. These arguments suggest that training flight attendants to a higher skill level to deal with emergencies and to operate the new technology of automatic external defibrillators may achieve some success in resuscitation of patients with cardiac arrest in the air.

\textsuperscript{205} See Emergencies in the Air, supra note 202, at 29. This medical journal stated:

In hard practical terms it is not the depth of the first-aid kit that is important; rather it is the level of training of the cabin crew. Ideally, one member of the crew should be trained to paramedic standard but, as an absolute minimum, the rest should be fluent with resuscitation techniques — and that requires regular practice.

\textsuperscript{206} See supra notes 164-166 and accompanying text.

\textsuperscript{207} See supra notes 198 and 1295. The authors conducted a one-year survey of emergency medical calls to the Seattle-Tacoma International Airport. Id. at 1295. For medical emergencies occurring during flight, airline
were not available on a high percentage of flights, the FAA should consider requiring additional emergency medical training of crewmembers. Evaluation of ill passengers by crewmembers trained in emergency medical skills may reduce the number of unnecessary flight diversions, and thus save the airlines the tremendous cost and inconvenience of such unscheduled landings. Moreover, additional emergency medical training of crewmembers would ensure maximum assistance for airline passengers experiencing in-flight medical emergencies.

D. Adequacy of Medical Kit

Another unresolved issue is whether the contents of the emergency medical kit are adequate for use in commonly encountered in-flight emergencies. As noted above, some individuals supporting an expanded medical kit have called for more sophisticated equipment and additional drugs in the kit. The results of the reporting of medical emergencies for two years, however, should enable the FAA to reevaluate the equipment and drugs needed in in-flight medical emergencies. Indeed, based upon the results of the first-year reports, the FAA may wish to add to the drug and equipment requirements to adequately treat the commonly occurring medical illnesses such as syncope, cardiac problems and seizures.

personnel provided medical assistance for 51% of the passengers, whereas physicians apparently provided assistance to only 13% of the passengers. Id. at 1296.

See, e.g., Anderson, supra note 75, at 169 (reporting suggestions of ambu bags, laryngoscope, endotracheal tubes, supplemental oxygen supply, large bore needles, and external cardiac defibrillators); Litwin, supra note 71, at 1988 ("The high frequency of apparent sudden cardiac arrest as the major cause of death among air travelers suggests that the medical air kits now required by the FAA would not be particularly useful during in-flight resuscitation attempts.").

See 14 C.F.R. § 121.715 (1988). Prior to the adoption of this amendment, no centralized or systematic recordation of medical emergencies on flights was available. The FAA noted that "[a]n analysis of the results at the termination of the reporting requirement in 2 years will provide the FAA with information on medical emergencies occurring in flight so that any necessary changes can be made to the medical kits, training of personnel, or related matters." 51 Fed. Reg. 1218, 1221 (1986).

For discussion of the results of the first-year reports, see supra notes 157-168 and accompanying text. The FAA may reconsider physicians' recommendations
E. Liability of Airlines Under New Regulation

1. Liability Generally Under Federal Safety Requirements

As discussed above, courts generally require that commercial air carriers, as common carriers, exercise either a high or the highest degree of care for the safety of their passengers. In addition, courts recognize that a statute, the purpose of which is to promote safety, as well as the statute's implementing rules and regulations, impose a duty greater than ordinary care. Hence, courts have recognized that federal safety requirements do establish a standard of care for air carriers toward their passengers. Further, courts have held that a violation of the duty imposed by such requirements creates a private cause of action, as long as the individual is one of the particular class of persons the requirement was intended to protect.

of including an automatic external defibrillator in flights. See supra note 204 and accompanying text. Furthermore, the FAA should consider adding medications including those to treat seizures, shortness of breath, unconsciousness and congestive heart failure. See Cummins & Schubach, supra note 203, at 1298, where the authors note that the results of their survey indicate that the kit may be inadequate to treat problems such as "seizures, bronchospasm, drug-induced loss of consciousness, shortness of breath due to congestive heart failure, and the nausea and vomiting of severe motion sickness." Id. Suggested additional medications for the kit included an "antiseizure medication, an inhaled bronchodilator, an injectable narcotic antagonist, a parenteral diuretic, and . . . a parenteral antiemetic." Id. Another physician has made similar recommendations for additions to the kit, including diazepam for seizure disorders, furosemide for congestive heart failure, an "inhaled beta-2 agonist to relieve bronchospastic airway disease," and haloxone for drug overdose. See Rodenberg, supra note 198, at 1376.

212 See supra notes 19-21 and accompanying text.


214 See id. at 284-85.

In *O'Leary v. American Airlines*,\(^\text{216}\) for example, the court recognized that the regulation in question which forbid certificate holders from serving alcoholic beverages to intoxicated persons "serves to ensure the safety of the flight and thus of the passengers who might be endangered by the conduct of an intoxicated passenger."\(^\text{217}\) The court held, however, that the regulation did not aim to protect intoxicated passengers from their own conduct\(^\text{218}\) and that the airline's breach of the regulation, therefore, did not create a private cause of action for the plaintiff in this case. Nevertheless, the court concluded that the plaintiff could still bring a claim against the airline for breach of its common law duty to exercise reasonable care for the safety of the intoxicated passenger.\(^\text{219}\) Notably, the *O'Leary* court recognized that under certain circumstances, the enabling statute or its implementing regulation can create a private cause of action for injured plaintiffs.\(^\text{220}\)

In contrast to *O'Leary* is *Manfredonia v. American Airlines*,\(^\text{221}\) where the same New York court held that the violation of the identical regulation at issue in *O'Leary* created a private cause of action for the plaintiff, who was assaulted by an intoxicated passenger.\(^\text{222}\) The *Manfredonia* court relied on *Cort v. Ash*,\(^\text{223}\) where the United States Supreme Court prescribed the criteria a regulation must meet in order to provide a private cause of action.\(^\text{224}\) Under *Cort*, a plaintiff may base a claim on a breach of a regulation if "(1) the regulation was intended to protect a particular class of persons; (2) there was an intention to create or deny a private right; (3) the right would be con-

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217 Id. at 959, 475 N.Y.S.2d at 287.
218 Id. at 959, 475 N.Y.S.2d at 287.
219 Id. at 959, 475 N.Y.S.2d at 288-89.
220 Id. at 959, 475 N.Y.S.2d at 287.
222 Id. at 131, 416 N.Y.S.2d at 292.
224 Id. at 78.
sistent with the goal of the statute; and (4) the cause of the action is one traditionally left to state law."\(^{225}\) The *Manfredonia* court found the regulation in question satisfied each test and remanded the case for a new trial based on the alleged breach of the federal regulation.\(^{226}\)

Other courts have also recognized a private cause of action based on a violation of federal safety requirements. For example, in *Fleming v. Delta Airlines*,\(^{227}\) where the plaintiff suffered injuries and an attack of angina pectoris after the plane passed through turbulence,\(^{228}\) the court concluded that the airline's conduct in failing to warn the plaintiff of the possibility of serious weather disturbances constituted negligence. In so holding, the court acknowledged the statutory duty of air carriers "to perform their services with the highest possible degree of safety."\(^{229}\) Thus the court implied that the plaintiff's cause of action was based on the defendant's breach of the statutory duty. Moreover, in *Gabel v. Hughes Air Corp.*,\(^{230}\) an action involving the death of a passenger in a mid-air crash of a com-

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\(^{225}\) See *Manfredonia*, 68 A.D.2d at 131, 416 N.Y.S.2d at 290 (citing *Cort*, 422 U.S. at 78).

\(^{226}\) Id. at 131, 416 N.Y.S.2d at 290-91. The court stated that the statute was intended to protect the safety of passengers from the threat of intoxicated passengers. \(\text{Id. at 131, 416 N.Y.S.2d at 290.}\) In determining whether an intention to create or deny a private right appeared in the general FAA statute, the court relied on 49 U.S.C. \(\text{§ 1506, which provides that "[n]othing contained in this chapter shall in any way abridge or alter the remedies now existing at common law or by statute, but the provisions of this chapter are in addition to such remedies." 49 U.S.C. \(\text{§ 1506 (1982).}\) The court construed this clause as affording a private remedy. *Manfredonia*, 68 A.D.2d at 131, 416 N.Y.S.2d at 291. Under the third *Cort* element, the court stated:}

The implication of a right of action is not only consistent with, but also in furtherance of the goal of protecting the safety of passengers and aircraft generally. If private persons are afforded the right of action, the compliance with safety regulations by air carriers is encouraged and the regulations strengthened by economic sanctions in favor of those who have been injured by noncompliance. \(\text{Id. at 131, 416 N.Y.S.2d at 291.}\) To satisfy the fourth element, the court concluded that the New York courts "should enforce Federal law in the area peculiarly under Federal control." \(\text{Id. at 131, 416 N.Y.S.2d at 291.}\)


\(^{228}\) Id. at 340.

\(^{229}\) Id. at 341 (citing 49 U.S.C. \(\text{§ 1421(b) (1982).}\) )

mmercial aircraft and a military aircraft, the court held that under the Federal Aviation Act of 1958 and its implementing regulations, air carriers must exercise the highest degree of care for the safety of passengers, and that a violation of the duty imposed by the statute creates a cause of action for an injured passenger. Thus, many courts liberally construe the FAA statute and the regulations and allow plaintiffs to maintain causes of action based on an airline’s violation of the statute or regulation.

2. Potential Liability Under Emergency Medical Kit Requirement

Whether courts will hold that a violation of the duty imposed under the new medical kit requirement creates a private cause of action for an injured passenger remains to be seen. The FAA has stated that the intended effect of the amendment “is to enhance the potential for diagnosis and initial treatment of medical emergencies during flight time.” A court could easily recognize a claim under the regulation by construing it as protecting passengers from the hazards of in-flight illnesses requiring emergency medical care. Thus, under the court’s reasoning in O’Leary and Manfredonia, injured passengers faced with lack of required medical equipment could invoke the general enabling statute and/or the new regulation to assert a cause of action against an airline. Even though the FAA states that the airline can continue to rely upon the voluntary assistance of qualified personnel in medical emergencies, a court could construe the requirement of

231 Id. at 613.
232 Id. at 614.
233 Id. at 615.
235 See supra notes 215-226 and accompanying text.
crewmembers' "familiarization" with the kit\textsuperscript{238} as imposing an obligation on airlines to provide a higher level of medical care. For example, in instances of misuse of the equipment or medications, a court could find the failure of the crewmembers to prevent the misuse as a breach of the "familiarization" requirement. On the other hand, where the airline fails to seek or render medical assistance in a medical emergency, or fails to divert a flight, a plaintiff may not have a cause of action under the new regulation. This may be especially true when crewmembers allegedly fail to render adequate medical assistance, since they are not trained in the use of the kit\textsuperscript{239} Nevertheless, if courts interpret the "familiarization" requirement as mandating a more stringent level of medical skill, a crewmember's conduct in a medical emergency may be held as constituting a violation of the "familiarization" standard, giving rise to a private cause of action. Again, if a court refuses to construe an airline's conduct as a violation of its duty under the new regulation, a plaintiff may always assert a negligence claim under traditional common law rules\textsuperscript{240}

V. CONCLUSION

Prior to 1986, the FAA required United States commercial airlines to equip their aircraft with only basic first-aid kits for use in in-flight medical emergencies\textsuperscript{241} As a result, in many instances of serious in-flight medical emergencies, airline personnel and volunteer physicians aboard flights could not render assistance adequately. Indeed, some plaintiffs suffering from in-flight medical emergencies brought causes of action alleging breach of the airline's "high" or "highest" degree of care for the safety of its passengers\textsuperscript{242} Courts considering such ac-

\textsuperscript{239} Id.
\textsuperscript{240} See supra notes 19-67 and accompanying text.
\textsuperscript{241} See supra note 85 and accompanying text.
\textsuperscript{242} See supra notes 24-67 and accompanying text.
tions allowed negligence claims against airlines based on alleged failure to render adequate medical care or assistance, failure to divert flights, and failure to obtain medical assistance by contact with ground personnel. In response to a petition for rulemaking, the FAA promulgated a much needed emergency medical equipment requirement for all airlines operating under Part 121 of the FAA regulations. The amendment requires the air carriers to equip each plane with a stethoscope, a sphygmomanometer, oropharyngeal airways, syringes, needles, dextrose injection, epinephrine, diphenhydramine, and nitroglycerin tablets. The intended effect of the amendment is to enhance the potential for proper diagnosis and the initial treatment of in-flight medical illnesses. In addition, the airlines must report annually for two years each in-flight medical emergency resulting in the use of the emergency medical kit, diversion of the aircraft, or death of a passenger or crewmember. Results of the first annual reports indicate that 1,016 medical emergencies occurred during commercial flights, that the aircraft contained a high percentage of physicians, and that the physicians and other individuals volunteering in the emergencies utilized the equipment and medications extensively. The new regulation left several issues unresolved, however. One issue of concern is whether good samaritan protection will be afforded to persons rendering assistance in medical emergencies. Good samaritan statutes may protect individuals who volunteer their assistance during in-flight medical emergencies. The statutes, however, may not protect the actions of airline personnel

243 See supra notes 24-67 and accompanying text.
248 For a discussion of the results of the first annual reports, see supra notes 176-188 and accompanying text.
since airlines have an affirmative duty to render assistance. Therefore, state legislatures may wish to amend their good samaritan statutes to extend coverage to airline personnel.

Another unresolved issue concerns who is qualified to use the kit. Currently, under the ambiguous "familiarization" requirement, airlines need not train crewmembers in the use of the kit. Instead, the FAA allows the airlines to rely on volunteer physicians and other qualified medical personnel to utilize the kit. As a consequence of an airline's reliance on the chance that medically qualified personnel will be aboard flights, some ill passengers may be without adequate assistance. To remedy this problem, the FAA should consider requiring airlines to train crewmembers to higher levels of medical skill. By training the crewmembers in emergency medical techniques, the airlines' potential liability would be reduced and passenger safety maximized.

An additional unresolved issue is whether the emergency medical kit's contents are adequate to treat commonly occurring in-flight illnesses. The first-year reports disclosed that there were a significant number of suspected cardiac problems, seizures, and episodes of loss of consciousness. Based on these results, the FAA should consider requiring additional equipment and medications in the kit when it conducts its evaluation of the airlines' two-year reports.

A final question concerns the effect of the new regulation on an airline's potential liability. Airlines may perceive the requirement as increasing their standard of care owed to passengers. Indeed, courts may allow injured passengers to bring a private cause of action based on an airline's breach of the heightened duty imposed by the new requirement. Nevertheless, even if a court refuses to find that an airline's conduct is a violation of the new requirement giving rise to a private cause of action, an injured passenger may still assert a negligence claim under traditional common-law rules. Despite these unresolved
issues, the FAA's emergency medical kit requirement is undoubtedly a step in the right direction, since the kit will enable qualified medical personnel to diagnose and treat many passengers experiencing life-threatening illnesses during flight.