

Solving America's General Aviation Crisis: The Advantages of Federal Preemption Over Tort Reform

Patrick J. Shea

Follow this and additional works at: <http://scholarship.law.cornell.edu/clr>

 Part of the [Law Commons](#)

Recommended Citation

Patrick J. Shea, *Solving America's General Aviation Crisis: The Advantages of Federal Preemption Over Tort Reform*, 80 Cornell L. Rev. 747 (1995)

Available at: <http://scholarship.law.cornell.edu/clr/vol80/iss3/7>

This Note is brought to you for free and open access by the Journals at Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell Law Review by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact jmp8@cornell.edu.

**SOLVING AMERICA'S GENERAL AVIATION CRISIS: THE
ADVANTAGES OF FEDERAL PREEMPTION OVER
TORT REFORM**

Introduction	748
I. Background	750
A. Federal Safety Regulation in the General Aviation Industry	750
1. A Brief History	750
2. The Scope of the Federal Aviation Act.....	752
3. The Role of FAA Safety Regulations Today	753
B. Products Liability in the General Aviation Industry	756
1. A Brief History	756
2. The New Restatement of Products Liability Law	758
3. The Effect of Products Liability on General Aviation	763
C. Recent Congressional Movement Toward Tort Reform	766
1. The General Aviation Revitalization Act of 1994.....	766
2. Senate Bill 67	768
D. Federal Preemption in the General Aviation Industry	772
1. The Two Faces of Federal Preemption	772
2. The Preemptive Effect of Federal Regulatory Standards.....	773
3. Federal Preemption and the Federal Aviation Act	779
II. Analysis.....	781
A. Tort Reform is an Inefficient Solution to the General Aviation Crisis	781
1. The Main Case Against Tort Reform.....	781
2. Criticisms of the General Aviation Revitalization Act of 1994	783
3. Criticisms of Senate Bill 67	788
4. Finding an Efficient Solution to the General Aviation Crisis	795
B. A Proposed Solution: Regulatory Reform.....	797
1. First Step: Amending the Federal Aviation Act to Include an Express Preemption Clause.....	797

2. Effect of a Preemption Clause on the Act's <i>Minimum Standards</i>	801
3. Effect of a Preemption Clause on the Act's Savings Clause	802
4. Second Step: Modernizing Federal Air Safety Regulations	804
5. Regulatory Reform is an Efficient Solution to the General Aviation Crisis	807
Conclusion	808

INTRODUCTION

"[I]t is inappropriate to take into account whether the imposition of liability would have a negative effect on corporate earnings, or would reduce employment in a given industry. These considerations do not speak to whether a product is reasonably designed."¹

The United States has been the world leader in aviation since the Wright brothers pioneered flight over ninety years ago.² Over the past decade, however, the U.S. general aviation³ industry has withered to a shadow of what it once was. Declining aircraft sales signal an industry at the point of collapse. In 1978, U.S. general aviation manufacturers produced over 18,000 planes.⁴ By 1991, production had fallen to less than 900.⁵ The production of single engine piston aircraft has fallen even more sharply, from 14,000 units in 1978 to 555 in 1993.⁶ Piper Aircraft Corporation, for example, produced 5,200 aircraft in 1978. In 1991, it filed for bankruptcy and shipped only eighty-

¹ RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2 cmt. d (1994) (Tentative Draft No. 1, 1994) [hereinafter TENTATIVE DRAFT 1].

² GENERAL AVIATION MANUFACTURERS ASSOCIATION, LIABILITY REFORM FOR GENERAL AVIATION: A NEED AT THE POINT OF CRISIS 3 (1992) [hereinafter GAMA].

³ The General Aviation Revitalization Act of 1994 defines general aviation aircraft as: [A]ny aircraft for which a type certificate or an airworthiness certificate has been issued by the Administrator of the Federal Aviation Administration, which, at the time such certificate was originally issued, had a maximum seating capacity of fewer than 20 passengers, and which was not, at the time of the accident, engaged in scheduled passenger-carrying operations

Pub. L. No. 103-298, § 2(c), 108 Stat. 1552, 1553. See also Robert Martin, *General Aviation Manufacturing: An Industry under Siege*, in *THE LIABILITY MAZE: THE IMPACT OF LIABILITY LAW ON SAFETY AND INNOVATION* 478, 478 (Peter W. Huber & Robert E. Litan eds., 1991) [hereinafter *THE LIABILITY MAZE*] (defining general aviation as "every form of civil aviation except that directly related to scheduled domestic and international airline operations" and noting that general aviation aircraft are typically "designed to carry fewer than twenty persons and may be fixed-wing or rotary-wing airplanes, powered by piston-driven or turbine engines").

⁴ GAMA, *supra* note 2, at 1.

⁵ *Id.*

⁶ H.R. REP. NO. 525(I), 103d Cong., 2d Sess. 2 (1994), reprinted in 1994 U.S.C.C.A.N. 1638, 1639.

five aircraft.⁷ Cessna Aircraft Company, which once dominated the world market and boasted of “teaching the world to fly,”⁸ stopped producing single engine piston aircraft in 1986.⁹ The dominant position once held by American general aviation aircraft manufacturers in international trade has also slipped dramatically.¹⁰ Consistent with this decline in production, seventy percent of the industry’s workers have lost their jobs over the past fourteen years.¹¹

General aviation is one of the most intensely regulated industries in the United States.¹² Since its enactment of the Federal Aviation Act of 1958,¹³ Congress has regulated nearly every aspect of the manufacture and operation of general aviation aircraft for the purpose of ensuring “the highest degree of safety.”¹⁴ However, while safety is the primary objective of the federal regulatory scheme, current liability law regards federal safety regulations as only “minimum” standards; thus, compliance with these regulations does not shield manufacturers from liability in products liability lawsuits.¹⁵ When a general aviation accident occurs, state, rather than federal, liability standards apply. This situation has left manufacturers trapped between the conflicting authority of the federal government and each of the fifty states.

Tort reform legislation, which the industry hopes will solve the general aviation crisis, also ignores the extensive framework of federal law that regulates the general aviation industry. Because it fails to utilize the existing federal regulatory scheme, such legislation promises to bury existing regulations under additional, unnecessary federal law.

⁷ GAMA, *supra* note 2, at 3; *see also* S. REP. NO. 202, 103d Cong., 1st Sess. n.7, *available in* 1993 WL 484770.

⁸ Gregory P. Wells, Comment, *General Aviation Accident Liability Standards: Why The Fuss?*, 56 J. AIR L. & COM. 895, 896 n.6 (1991).

⁹ GAMA, *supra* note 2, at 3; *see also* 140 CONG. REG. H5001 (daily ed. June 27, 1994) (statement of Rep. Glickman) (“Ten years ago, Cessna had more than 1,000 dealers worldwide selling their [general aviation] aircraft. Today, they have none.”).

¹⁰ The United States exported \$120 million worth of single engine piston aircraft in 1980. H.R. REP. NO. 525(I), *supra* note 6, at 2, *reprinted in* 1994 U.S.C.C.A.N. at 1639. At that time, there were very few imports of such aircraft into the United States. *Id.* Over the next 12 years, exports declined by \$90 million while imports increased to \$25 million. *Id.*

¹¹ 139 CONG. REG. S470 (daily ed. Jan. 21, 1993) (statement of Sen. Kassebaum introducing the General Aviation Accident Liability Standards Act of 1993) [hereinafter Kassebaum]. Since 1978, 20,000 general aviation employees have lost their jobs, and another 80,000 jobs have been lost in related industries. H.R. REP. NO. 525(I), *supra* note 6, at 2, *reprinted in* 1994 U.S.C.C.A.N. at 1639.

¹² Andrew Craig, *Product Liability and Safety in General Aviation*, in *THE LIABILITY MAZE*, *supra* note 3, at 456, 461 (citing John S. Yodice, general counsel for the Aircraft Owners and Pilots Association, or AOPA).

¹³ Pub. L. No. 85-726, 72 Stat. 731 (codified as amended at 49 U.S.C. app. §§ 1301-1557 (1988 & Supp. V 1993)).

¹⁴ Pub. L. No. 85-726, tit. I, § 102(b), 72 Stat. 731, 740 (codified as amended at 49 U.S.C. app. § 1302(a) (1988)).

¹⁵ *Id.*; Martin, *supra* note 3, at 489.

Furthermore, such legislation is heavily biased in favor of general aviation manufacturers. For these reasons, current congressional tort reform measures represent an inefficient solution to the general aviation crisis.

This Note explores possible legal solutions to America's general aviation crisis. Part I first outlines the federal regulatory framework that Congress designed to ensure safety in the general aviation industry. This Part then examines the civil liability system and discusses how modern products liability law affects lawsuits involving general aviation aircraft accidents. Next, Part I profiles recent federal tort reform legislation that general aviation manufacturers hope will save their industry. Finally, Part I examines the federal preemption doctrine and discusses its current and potential effect on litigants in general aviation lawsuits.

Part II first criticizes the recent tort reform legislation as a means of solving the general aviation crisis. This Part argues that such legislation is not only detrimental to legitimate products liability claimants, but it simultaneously fails to provide the general aviation industry with sufficient relief from illegitimate products liability lawsuits. Part II next argues that an efficient solution to the general aviation crisis would focus on the one objective shared by manufacturers and plaintiffs alike—the prevention of accidents. Finally, Part II proposes a two-step regulatory reform that would first, create an express preemption clause to govern the area of general air safety, and second, revitalize the existing federal air safety regulations. As an efficient solution to the general aviation crisis, such a reform would still allow plaintiffs to bring legitimate products liability lawsuits against general aviation manufacturers. However, a manufacturer's compliance with federal design standards would preempt nearly all products liability actions for defective design.

I.

BACKGROUND

A. Federal Safety Regulation in the General Aviation Industry

1. *A Brief History*

The use of general aviation aircraft—as well as their maintenance, repair, and qualification for airworthiness status—is subject to unusually extensive federal regulation. As a recent report of the House of Representatives emphasized, one of the most distinguishing characteristics of the general aviation industry is “the ‘cradle to grave’ Federal regulatory oversight of the industry.”¹⁶ This extensive regula-

¹⁶ H.R. REP. NO. 525(II), 103d Cong., 2d Sess. 5 (1994), *reprinted in* 1994 U.S.C.A.N. 1644, 1647.

tion began in 1938 when the Civil Aeronautics Authority, an agency within the Department of Commerce, became the first federal agency charged with regulating aviation safety.¹⁷ Its responsibilities included promulgating safety rules, inspecting and certifying aircraft, certifying pilots, regulating owners, operating air traffic functions, and investigating domestic aviation accidents.¹⁸

In 1958, pursuant to the Federal Aviation Act,¹⁹ the Federal Aviation Agency took over the regulatory functions of the Civil Aeronautics Authority.²⁰ In 1966, Congress reorganized the administrative hierarchy established by the Federal Aviation Act.²¹ This reorganization transferred the duties of the Federal Aviation Agency to the newly created Department of Transportation (DOT).²² The reorganization also transferred authority to investigate general aviation accidents to the DOT.²³ The DOT has since delegated responsibility for such investigations to the National Transportation Safety Board (NTSB),²⁴ an independent federal agency.²⁵

In 1984, Congress abolished the Civil Aeronautics Authority, which by that time had been renamed the Civil Aeronautics Board.²⁶ Today, the Federal Aviation Agency, renamed the Federal Aviation Administration (FAA), is the only federal agency responsible for regulating general aviation.²⁷ Responsible for promulgating air safety rules, controlling air traffic, and certifying pilots and aircraft, the FAA shapes the legal responsibilities of pilots and general aviation aircraft manufacturers alike.²⁸ Thus, the agency's interpretation of the Federal Aviation Act and the regulations and rules promulgated thereun-

¹⁷ Civil Aeronautics Act of 1938, Pub. L. No. 706, 52 Stat. 973 (codified as amended at 49 U.S.C. app. §§ 1301-1542 (1988 & Supp. V 1993)). For a discussion of the history of federal regulation of the aviation industry, see LEE S. KREINDLER, 1 AVIATION ACCIDENT LAW § 10.01[1] (1994).

¹⁸ Pub. L. No. 706, § 601(a), 52 Stat. 973, 1007 (1938).

¹⁹ Pub. L. No. 85-726, 72 Stat. 731 (codified as amended at 49 U.S.C. app. §§ 1301-1557 (1988 & Supp. V 1993)).

²⁰ Pub. L. No. 85-726, § 601(a), 72 Stat. 731, 775 (1958). By this time, the Civil Aeronautics Authority had been renamed the Civil Aeronautics Board by Reorganization Plan No. IV of 1940. See Pub. L. No. 85-726, § 201(a)(1), 72 Stat. 731, 741 (1958).

²¹ The Department of Transportation Act of 1966, Pub. L. No. 89-670, 80 Stat. 931.

²² § 3(e)(1), 80 Stat. at 932.

²³ § 5, 80 Stat. at 935.

²⁴ 49 U.S.C. app. §§ 1441-1443 (1988).

²⁵ The Independent Safety Board Act of 1974, Pub. L. No. 93-633, tit. III, 88 Stat. 2166 (codified at 49 U.S.C. app. §§ 1901-1907 (1988)). Prior to 1975, the NTSB was an agency within the Department of Transportation. See Department of Transportation Act of 1966, Pub. L. No. 89-670, § 5, 80 Stat. 931, 935-37.

²⁶ The Civil Aeronautics Board Sunset Act, Pub. L. No. 98-443, 98 Stat. 1703 (1984) (codified at 49 U.S.C. app. §§ 1551-1556 (1988)).

²⁷ § 3(e)(1), 80 Stat. at 932.

²⁸ KREINDLER, *supra* note 17, § 10.1[1].

der will continue to have a marked effect on questions of law emanating from general aviation accidents.²⁹

2. *The Scope of the Federal Aviation Act*

Congress enacted the Federal Aviation Act of 1958 (the Act) to address two broad areas of concern: the rates and routes of commercial air carriers and general air safety.³⁰ Because general aviation includes, by definition, only aircraft that are not "engaged in scheduled passenger-carrying operations,"³¹ the industry is primarily affected by the provisions of the Act governing general air safety.³² In 1978, Congress added section 1305(a) to the Act,³³ which contains an express preemption provision governing the rates and routes of commercial air carriers.³⁴ Intended to "prevent conflicts and inconsisten[cies]"³⁵ between state and federal standards, the amendment bestowed preemptive effect on federal "rates and routes" laws that had, up to that point, often been simply ignored by state law.³⁶ At least according to the Tenth Circuit, however, Congress did not intend this broad preemptive effect to reach the area of general air safety.³⁷

In amending the Act to include a preemption clause governing rates and routes, Congress also considered general safety concerns associated with air travel.³⁸ Congress did not, however, enact an express preemption provision governing general air safety.³⁹ Rather than further amend the Act, Congress took a less paternalistic attitude toward safety concerns and merely directed the DOT to maintain the status

²⁹ *Id.*

³⁰ 49 U.S.C. app. § 1302 (1988); see also *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1444 (10th Cir.) (discussing rationale behind provisions of the Federal Aviation Act), *cert. denied*, 114 S. Ct. 291 (1993).

³¹ The General Aviation Revitalization Act of 1994, Pub. L. No. 103-298, § 2(c), 108 Stat. 1552, 1553.

³² See 49 U.S.C. app. §§ 1421-1432 (1988 & Supp. V 1993).

³³ The Airline Deregulation Act of 1978, Pub. L. No. 95-504, §4(a), 92 Stat. 1705, 1707-08 (current version at 49 U.S.C. app. § 1305(a) (1988)).

³⁴ Titled "Preemption," § 1305(a) reads: "[N]o State . . . shall enact or enforce any law . . . relating to rates, routes, or services of any air carrier having authority under subchapter IV of this chapter to provide air transportation." 49 U.S.C. app. § 1305(a)(1) (1988).

³⁵ H.R. REP. NO. 1211, 95th Cong., 2d Sess. 16 (1978), *reprinted in* 1978 U.S.C.C.A.N. 3737, 3752; see also *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1444 n.17 (10th Cir.) (discussing preemption clause), *cert. denied*, 114 S. Ct. 291 (1993).

³⁶ The Supreme Court broadly applied the new clause in *Morales v. Trans World Airlines*, 112 S. Ct. 2031 (1992), holding that the clause's preemptive effect reaches even state regulation of airline advertising. *Id.* at 2040-41.

³⁷ *Cleveland*, 985 F.2d at 1444 & nn.13 & 17.

³⁸ The Airline Deregulation Act of 1978 designated "[t]he assignment and maintenance of safety as the highest priority in air commerce." § 3(a), 92 Stat. at 1706 (codified as 49 U.S.C. app. § 1302(a)(1) (1988)).

³⁹ See *Cleveland*, 985 F.2d at 1444 & n.17.

quo.⁴⁰ In contrast to the preemptive effect given to the Federal Aviation Act's standards concerning the rates and routes of commercial air carriers, "Congress did not intend to preempt lawsuits over design defects."⁴¹

This congressional intent not to exclude state statutory and common law from the field of aircraft safety is further illustrated by the existence within the Federal Aviation Act of a savings clause.⁴² Titled "Remedies not exclusive," section 1506 of the Act reads as follows: "Nothing 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."⁴³ As a result of this clause, not only may juries apply their own safety standards in lawsuits involving general aviation accidents, but all state remedies—such as tort liability for design defects—are also available to plaintiffs.⁴⁴

3. *The Role of FAA Safety Regulations Today*

In addition to their lack of preemptive effect on state law, the safety standards promulgated under the Federal Aviation Act governing the design of general aviation aircraft are only "minimum" standards.⁴⁵ Section 1421(a) of the Act reads in part as follows:

The Secretary of Transportation is empowered and it shall be his duty to promote safety of flight of civil aircraft in air commerce by prescribing and revising from time to time: (1) Such minimum

⁴⁰ Section 3(a) of the Airline Deregulation Act directs the Civil Aeronautics Board to prevent "any deterioration in established safety procedures." 92 Stat. at 1706 (codified at 49 U.S.C. app. § 1302(a)(2) (1988)). Section 5(a) declares Congress' intent that the Act "result in no diminution" of air safety standards and directs the Secretary of Transportation to prepare annual reports on the extent to which implementation of the Act affects safety. 92 Stat. at 1709 (codified at 49 U.S.C. app. § 1307(a)-(b) (1988)); *see also Cleveland*, 985 F.2d at 1444 n.17 (discussing Congress' safety concerns and noting that "none of these requirements are inconsistent with state common law duties").

⁴¹ *Cleveland*, 985 F.2d at 1444 n.17.

⁴² 49 U.S.C. app. § 1506 (1988).

⁴³ *Id.*

⁴⁴ While the *Cleveland* court held that the Federal Aviation Act did not preempt a products liability claim for defective design, several other courts have held that the Act does not preempt state tort claims based on other theories. The Ninth Circuit, for example, found that the Act did not preempt a state law claim for negligent infliction of emotional distress. *Hingson v. Pacific Southwest Airlines*, 743 F.2d 1408, 1416 (9th Cir. 1984). Similarly, the Fifth Circuit concluded that the Act did not preempt state bailment law as it relates to the liability of an airplane owner for the negligent acts of a pilot, and it allowed a wrongful death action to proceed. *Rogers v. Ray Gardner Flying Serv., Inc.*, 435 F.2d 1389, 1394 (5th Cir. 1970), *cert. denied*, 401 U.S. 1010 (1971); *see also Bieneman v. City of Chicago*, 864 F.2d 463, 471 (7th Cir. 1988) (recognizing that state courts award damages every day in air crash cases), *cert. denied*, 490 U.S. 1080 (1989); *McEntire v. Estate of Forte*, 463 S.W.2d 491, 494 (Tex. Civ. App. 1971) (finding that nothing in the FAA's regulatory scheme indicates an intent to preempt the traditional function of state law with respect to tort liability).

⁴⁵ 49 U.S.C. app. § 1421(a)(1) (1988).

standards governing the design, materials, workmanship, construction, and performance of aircraft, aircraft engines, and propellers as may be required in the interest of safety⁴⁶

By designating these standards—known as Federal Aviation Regulations (FARs)—as minimum requirements, “Congress indicated that it did not want to bar states from adopting additional or more stringent standards.”⁴⁷ As a result, juries with neither scientific nor engineering backgrounds are second-guessing FAA experts and finding long-standing aircraft designs to be “unsafe” and defective.

In addition to the fact that FARs are only minimum standards, insuring compliance with the safety regulations is the primary responsibility of aircraft manufacturers, not the FAA.⁴⁸ In fact, the entire certification process depends on the duty of manufacturers and operators to ensure that airplanes conform to FAA safety regulations. The FAA retains merely the responsibility for policing such compliance.⁴⁹ Section 1421(a)(3) of the Federal Aviation Act allows the Secretary of Transportation to accept certification reports from “properly qualified private persons” instead of FAA officials.⁵⁰ These private examiners are often aircraft company employees appointed by the FAA to examine, inspect, and test aircraft for certification purposes.⁵¹ After a general aviation aircraft manufacturer establishes that its design comports with the applicable regulations, the FAA may conduct a “spot check” of the manufacturer’s work.⁵² Thus, as a rule, FAA certification is only a minimum check on safety.⁵³

⁴⁶ *Id.* § 1421(a).

⁴⁷ *Cleveland*, 985 F.2d at 1445. The Federal Aviation Regulations are a voluminous body of rules and regulations that set standards for nearly every facet of civil aeronautics. Codified in Title 14 of the Code of Federal Regulations, the FARs are quite detailed—many contain algebraic formulas, complex navigational charts, and technical drawings. Parts 25 through 35 of the FARs, for example, establish the basic criteria for aircraft airworthiness. Section 25.775(b), titled “Windshields and windows,” provides an example of the unique union of simplicity and complexity that can be found in the FARs:

Windshield panes directly in front of the pilots in the normal conduct of their duties, and the supporting structures for these panes, must withstand, without penetration, the impact of a four-pound bird when the velocity of the airplane (relative to the bird along the airplane’s flight path) is equal to the value of V_c , at sea level, selected under § 25.335(a).

14 C.F.R. § 25.775(b) (1994). While the section’s reference to a four-pound bird seems archaic, such an impression vanishes as a reader attempts to determine the value of V_c under § 25.335(a), and is greeted by a geometric graph where V_c is a vector representing design cruising speed and is defined by comparison to at least seven other selected design airspeed vectors.

⁴⁸ *See, e.g., United States v. Varig Airlines*, 467 U.S. 797, 815 (1984).

⁴⁹ *Id.* at 816.

⁵⁰ 49 U.S.C. app. § 1421(a)(3) (1988).

⁵¹ *Varig Airlines*, 467 U.S. at 807.

⁵² *Id.* at 817.

⁵³ *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1446 (10th Cir.), *cert. denied*, 114 S. Ct. 291 (1993).

The limited role of federal safety regulations in the field of general aviation became painfully obvious to Piper Aircraft Corporation in a recent case of great significance to manufacturers that sell general aviation aircraft in the United States. *Cleveland v. Piper Aircraft Corp.*⁵⁴ involved a claim of defective design.⁵⁵ Cleveland, who had been injured while attempting to take off in his Piper Super Cub airplane, convinced a jury that Piper had acted negligently in designing the aircraft without adequate forward vision from the rear seat and in failing to provide a rear shoulder harness.⁵⁶ Despite the fact that the airplane's tailwheel design was approved by the FAA, and even though Piper had fully complied with the FAA's seatbelt requirements,⁵⁷ the jury returned a \$2.5 million verdict against Piper.⁵⁸ While general aviation manufacturers such as Piper might have at one time felt safe knowing that their aircraft met FAA safety requirements, cases such as *Cleveland* have stripped them of this peace of mind.

The limited role of federal safety regulations in the field of general aviation is also evidenced by the lack of significance juries attach to the findings of federal aircraft accident investigators. Congress established the National Transportation Safety Board (NTSB) as an independent federal agency on April 1, 1975.⁵⁹ The NTSB is required to determine the probable cause or causes of transportation accidents, including those involving general aviation aircraft.⁶⁰ NTSB field investigators, engineers, and scientists must also "[a]scertain what will best tend to reduce or eliminate the possibility of, or recurrence of, accidents by conducting special studies and investigations on matters pertaining to safety in air navigation and the prevention of accidents."⁶¹ Notwithstanding this congressional mandate, NTSB determinations are often ignored during the litigation process.⁶²

⁵⁴ 985 F.2d 1438 (10th Cir.), *cert. denied*, 114 S. Ct. 291 (1993).

⁵⁵ *Id.* at 1440.

⁵⁶ *Id.* at 1441. On the day of the accident, Cleveland planned to film a glider that was attached by rope to the aircraft's tail. *Id.* Prior to takeoff, Cleveland removed the front pilot's seat of the plane and installed a camera in its place. *Id.* Piloting the airplane from the rear pilot seat, Cleveland collided with a van that the airport's owner had parked in the runway to prevent Cleveland from taking off. *Id.* Upon impact, Cleveland's head struck the camera, resulting in serious head and brain injuries. *Id.*

⁵⁷ *Id.* at 1445.

⁵⁸ *Id.* at 1440. The trial judge later reduced the verdict against Piper to \$1,042,500 plus post-judgment interest and costs. *Id.* at 1440 n.2.

⁵⁹ The Independent Safety Board Act of 1974, Pub. L. No. 93-633, tit. III, 88 Stat. 2166 (codified at 49 U.S.C. app. §§ 1901-1907 (1988)).

⁶⁰ 49 U.S.C. app. § 1441(a)(2) (1988).

⁶¹ 49 U.S.C. app. § 1441(a)(5) (1988).

⁶² Martin, *supra* note 3, at 490; cf. Arthur A. Wolk, *Product Liability: A Plaintiffs' Lawyer Responds*, AOPA PILOT, June 1993, at 117, 119 (criticizing the "paucity of investigation by the NTSB" and investigators' reliance "on the manufacturer for the information it gets to reach its conclusions").

In *Datskow v. Teledyne Continental Motors*,⁶³ for example, the plaintiffs alleged that a defect in the design of an aircraft engine caused a crash which killed a family of four.⁶⁴ The NTSB investigation did not reveal any product defect that could have caused the accident, and NTSB investigators concluded that the crash was the result of pilot error.⁶⁵ Despite these findings, the jury returned a verdict against the engine's manufacturer, and awarded the plaintiffs \$107,285,000⁶⁶—the largest products liability judgment in general aviation history.⁶⁷

Because the Federal Aviation Act has no express preemption clause governing general air safety, includes a savings clause, and designates its safety standards as only minimum standards, the Federal Aviation Act does not preempt products liability lawsuits based on defective design.⁶⁸ Despite the enormous costs general aviation aircraft manufacturers incur in conforming their designs to meet federal safety standards,⁶⁹ no mechanism is currently in place to prevent a jury from holding manufacturers to higher safety standards. Even where the FAA certifies a plane's design and the NTSB concludes that a crash was due to pilot error, a jury may nevertheless charge a manufacturer with millions of dollars of damages because its aircraft was "defectively" designed.

B. Products Liability in the General Aviation Industry

1. A Brief History

In a landmark 1962 case, *Greenman v. Yuba Power Products*,⁷⁰ the Supreme Court of California affirmed a lower court's judgment that the manufacturer of a combination power tool was strictly liable in tort for injuries sustained by the plaintiff as a result of a defect in the

⁶³ 826 F. Supp. 677 (W.D.N.Y. 1993).

⁶⁴ *Id.* at 681.

⁶⁵ GAMA, *supra* note 2, at 8. The lawyer for the decedents declares the NTSB investigation "a sham," and views the Board's conclusions as "irrelevant given the fact that it virtually performed no investigation." Wolk, *supra* note 62, at 117.

⁶⁶ *Datskow*, 826 F. Supp. at 681. Nearly all of the damages awarded were compensation for the pain and suffering of the decedents. *Id.* On the defendant's motion for relief, the court found the jury's verdict to be excessive in several respects and ordered a new trial on the damages issue unless the plaintiffs agreed to a remittur limiting total damages to \$1,105,000. *Id.* at 698.

⁶⁷ John S. Yodice, *Preface* to Wolk, *supra* note 62, at 117.

⁶⁸ The same can be said for lawsuits based on inadequate instructions or warnings. However, because the safety regulations promulgated under the Federal Aviation Act establish federal design standards, the amendment this Note proposes would preempt only claims based on defective design. See *infra* note 114 and accompanying text. For a discussion of the differences between these types of defects and an explanation for why manufacturing defect claims are not affected by federal preemption, see *infra* part I.B.2.

⁶⁹ Martin, *supra* note 3, at 490.

⁷⁰ 377 P.2d 897 (Cal. 1962).

design and manufacture of the tool.⁷¹ According to the court, the purpose of strict liability is to require the manufacturer of a defective product, rather than the injured consumer, to bear the cost of injuries caused by such a product.⁷² To establish liability on the part of a manufacturer, a plaintiff need only prove “that he [or she] was injured while using [the product] in a way it was intended to be used as a result of a defect in design and manufacture of which [the] plaintiff was not aware.”⁷³ Under this standard of liability, whether or not the manufacturer engaged in any culpable conduct is immaterial.⁷⁴ Since the *Greenman* decision, an “overwhelming majority” of American jurisdictions have incorporated strict liability into their tort law.⁷⁵

In 1965, the American Law Institute included a general strict products liability provision in its Restatement (Second) of Torts that has since come to dominate the law of products liability.⁷⁶ Titled “Special Liability of Seller of Product for Physical Harm to User or Consumer,” section 402A reads:

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if (a) the seller is engaged in the business of selling such a product, and (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

(2) The rule stated in Subsection (1) applies although (a) the seller has exercised all possible care in the preparation and sale of his product, and (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.⁷⁷

Strict liability under section 402A applies to any manufacturer of a product.⁷⁸ Comment (d) of the Restatement specifically cites airplanes as one of the products to which the rule applies.⁷⁹ Whether officially adopted into state law or used as a drafting guide for similar provisions, section 402A has been explicitly referenced in thousands of products liability decisions over the past twenty-five years.⁸⁰ Some

⁷¹ *Id.* at 901.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ See JAMES A. HENDERSON, JR. & AARON D. TWERSKI, PRODUCTS LIABILITY: PROBLEMS AND PROCESSES 109 (2d ed. 1992) (stating that, in strict liability, a plaintiff need not “show fault on the part of the defendant”).

⁷⁵ *Id.* at 115.

⁷⁶ *Id.* at 117.

⁷⁷ RESTATEMENT (SECOND) OF TORTS § 402A (1965) [hereinafter RESTATEMENT 2D].

⁷⁸ *Id.* cmt. f.

⁷⁹ *Id.* cmt. d.

⁸⁰ James A. Henderson, Jr. & Aaron D. Twerski, *A Proposed Revision of Section 402A of the Restatement (Second) of Torts*, 77 CORNELL L. REV. 1512, 1512 (1992).

commentators have even claimed that the section has achieved "the dignity of a holy writ."⁸¹

Courts have applied section 402A in numerous products liability cases involving general aviation accidents. In *Rudisaile v. Hawk Aviation, Inc.*,⁸² for example, the Supreme Court of New Mexico held that an airplane, which was leased without oil in the engine, was "defective" within the meaning of section 402A of the Restatement (Second) of Torts.⁸³ As a result, the court found the owner of the rented plane strictly liable for the death of the pilot.⁸⁴ In *First National Bank v. Tex Sun Beechcraft, Inc.*,⁸⁵ a Texas appeals court affirmed a trial court's grant of summary judgment in favor of the manufacturer of an aircraft that crashed allegedly as a result of a fatigue fracture that caused the aircraft's propeller to fail.⁸⁶ The plaintiffs contended that the fracture was caused by water soluble decals attached to each blade of the propeller, and that as a result, the aircraft was defective within the meaning of section 402A.⁸⁷ These cases are indicative of the wide range of factual scenarios encountered in general aviation cases in which courts have applied section 402A.

2. *The New Restatement of Products Liability Law*

On April 12, 1994, the American Law Institute accepted a tentative draft of the first eight sections of what is essentially a revision of section 402A of the Restatement (Second) of Torts. Drafted by Professors James A. Henderson, Jr. and Aaron D. Twerski, the Restatement of the Law—Torts: Products Liability (Tentative Draft 1) may eventually become an independent volume of the Restatement (Third) of Torts.⁸⁸ The revision seeks to clarify much of the confusion that has arisen since section 402A was introduced in 1965.⁸⁹ According to the authors of the new draft, doctrinal developments in products liability law have rendered the original text and comments of section 402A "anachronistic and at odds with [the section's] currently

⁸¹ *Id.*

⁸² 592 P.2d 175 (N.M. 1979).

⁸³ *Id.* at 177.

⁸⁴ *Id.* The court reached this conclusion despite the fact that the absence of oil in the engine was caused by one of the owner's employees, who, after draining the plane's oil and replacing its oil filter, forgot to replenish the oil; the decedent also failed to make the customary pre-flight check of the aircraft prior to takeoff. *Id.* at 176.

⁸⁵ No. 05-91-00956-CV, 1992 WL 86624 (Tex. Ct. App. Apr. 29, 1992).

⁸⁶ *Id.* at *2. The court of appeals held that collateral estoppel prevented the plaintiffs from relitigating issues that had been decided against them in a previous lawsuit in Pennsylvania federal court. *Id.* at *3.

⁸⁷ *Id.* at *2.

⁸⁸ As opposed to an independent volume, § 402A is merely a general section within the Restatement (Second) of Torts.

⁸⁹ Henderson & Twerski, *supra* note 80, at 1513.

discerned objectives.”⁹⁰ In short, the new draft is intended to restate the Restatement.⁹¹

Section 1 of Tentative Draft 1 outlines a commercial seller’s liability for harm caused by defective products it has sold. The section reads:

- (a) One engaged in the business of selling products who sells a defective product is subject to liability for harm to persons or property caused by the product defect.
- (b) A product is defective if, at the time of sale, it contains a manufacturing defect, is defective in design, or is defective because of inadequate instructions or warnings.⁹²

Section 402A was originally created to address liability for “manufacturing defects.”⁹³ During the late 1960s and early 1970s, however, products liability actions alleging “design defects” and “defects due to inadequate instructions or warnings” began to appear rather frequently in American courts.⁹⁴ After attempting to apply section 402A to these new claims, many courts soon discovered that the theories supporting the imposition of strict liability in manufacturing defect cases did not carry over to cases involving design defects or defects due to inadequate instructions or warnings.⁹⁵

Tentative Draft 1 recognizes that the liability standards developed for manufacturing defects are inappropriate for the resolution of other products liability claims. Therefore, Tentative Draft 1 not only defines each type of product defect,⁹⁶ but also establishes separate standards of liability against which each category of claims will be mea-

90 *Id.*

91 *Id.*

92 TENTATIVE DRAFT 1, *supra* note 1, § 1.

93 *Id.* cmt. a.

94 *Id.*

95 *Id.*

96 Section 2 reads as follows:

For purposes of determining liability under § 1:

- (a) A product contains a manufacturing defect when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product;
- (b) A product is defective in design when the foreseeable risks of harm posed by the product could have been reduced by the adoption of a reasonable alternative design by the seller or a predecessor in the commercial chain of distribution and the omission of the alternative design renders the product not reasonably safe;
- (c) A product is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced by the provision of reasonable instructions or warnings by the seller or a predecessor in the commercial chain of distribution and the omission of the instructions or warnings renders the product not reasonably safe.

sured.⁹⁷ Manufacturing defects present the most straightforward products liability problems. A manufacturing defect is simply "a departure from a product unit's design specifications."⁹⁸ An example is a product that has been constructed improperly.⁹⁹ Liability for a manufacturing defect will attach to the seller of a product if an injured party can establish that the product was defective when it left the hands of the seller and that the defect was a proximate cause of his or her injuries.¹⁰⁰

Liability for design defects and for defects due to inadequate instructions or warnings is based on a concept of responsibility different from that upon which liability for manufacturing defects is based.¹⁰¹ Unlike manufacturing defects, design defects and defects due to inadequate instructions or warnings cannot be determined by simply measuring a product against its manufacturer's production standards.¹⁰² Where manufacturing defects involve clear deviations from a manufacturer's normal production standards, a plaintiff bringing an action based on either a design defect or a defect due to inadequate instructions or warnings must attack the manufacturer's design or marketing standards as being unreasonable in and of themselves.¹⁰³ In other words, a product alleged to have a defective design meets the manufacturer's specifications but raises the question of whether those specifications create unreasonable risks to the consumer.¹⁰⁴ A product allegedly defective due to inadequate instructions or warnings raises the question of whether the product's seller provided reasonable instructions or warnings addressing the risks of injury associated with the use of its product.¹⁰⁵

Because a manufacturing defect involves a product's failure to conform to its intended design, "there is a 'built-in' design standard against which to measure the particular product unit."¹⁰⁶ No such standard of measure exists for design defects. Courts are thus forced to construct an objective standard of reasonableness with which to judge a product's design.¹⁰⁷ Because society does not benefit from products that are either too safe or too dangerous, courts must find a way to balance the level of built-in design safety their reasonableness

⁹⁷ See *id.* § 2 and accompanying comments.

⁹⁸ *Id.* cmt. b.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.* cmt. a.

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.* cmt. c.

¹⁰⁵ *Id.* cmt. f.

¹⁰⁶ HENDERSON & TWERSKI, *supra* note 74, at 130.

¹⁰⁷ *Id.*

standard will require against the costs of implementing such safety.¹⁰⁸ This is the rationale behind Tentative Draft 1's adoption of a risk-utility balancing test, in subsection 2(b), by which courts can determine whether an alternative design is reasonable and whether its omission renders the product not reasonably safe.¹⁰⁹ The test is similar to the reasonableness test traditionally used in determining whether an actor has been negligent.¹¹⁰

The provisions of Tentative Draft 1 do not represent a radical departure from existing tort law.¹¹¹ The new draft does, however, dispose of much of the strict liability "doctrine" that has come to clutter the functional underpinnings of defective design products liability law. While necessarily changing some of the relevant language to conform to current understandings of products liability, the authors stayed "as close as possible to shared perceptions of the evolved meanings of the original section and its comments."¹¹² The new draft's clarification of the three distinct types of product defects, however,

¹⁰⁸ As is the case with general aviation aircraft where speed and weight are crucial, many risks of use can be alleviated only by an unacceptable sacrifice of performance. Therefore, users of such products must bear an appropriate amount of responsibility for proper product use. According to Tentative Draft 1, user responsibility for proper product use would prevent "careless users from being subsidized by more careful users and consumers when the former are paid damages out of funds to which the latter are forced to contribute through higher product prices." TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. a.

¹⁰⁹ *Id.* cmt. d. Many factors must be considered in determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe. Included are:

[T]he magnitude of foreseeable risks of harm, the nature and strength of consumer expectations, the effects of the alternative design on costs of production, the effects of the alternative design on product function, the relative advantages and disadvantages of proposed safety features, product longevity, maintenance and repair, esthetics, and marketability.

Id. Furthermore, the new draft emphasizes that consumer expectations, heretofore used by many courts as a test of whether a defect renders a product unreasonably dangerous, are merely one factor, among many, in risk-utility balancing under subsection 2(b). *See id.* cmt. e.

For an example of a court applying the consumer expectations test to determine whether a helicopter defect that prevented the pilot from using autorotation in case of engine failure was an unreasonably dangerous defective condition, see *Berkebile v. Brantly Helicopter Corp.*, 281 A.2d 707, 709 (Pa. Super. Ct. 1971). For an example of a court applying the risk-utility test to determine whether the icing of an aircraft's carburetor upon entering a cloud rendered the aircraft dangerously defective, see *Wilson v. Piper Aircraft Corp.*, 577 P.2d 1322, 1326 (Or. 1978). *See also* Scott V. Lindvall, *Aircraft Crashworthiness: Should the Courts Set the Standards?*, 27 WM. & MARY L. REV. 371, 386-87 (1986) (discussing the two tests courts have developed to determine whether a design was defective); Wells, *supra* note 8, at 905-08 (discussing strict liability and the differing approaches courts have used to determine whether a "defective condition unreasonably dangerous" exists under § 402A).

¹¹⁰ *See* RESTATEMENT 2D, *supra* note 77, §§ 291-293. Subsection 2(c) of Tentative Draft 1 also adopts a reasonableness test for judging the adequacy of product instructions and warnings. *See* TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. f.

¹¹¹ Henderson & Twerski, *supra* note 80, at 1513.

¹¹² *Id.*

serves as a touchstone for this Note's discussion of federal preemption.

As discussed above, compliance with the safety standards promulgated under the Federal Aviation Act does not preempt products liability lawsuits based on defective design. When attacking a product's design, a plaintiff must make reference—often through a reasonableness (risk-utility balancing) test—to a standard outside the product manufacturer's own design specifications.¹¹³ The issue of federal preemption arises when the manufacturer points to its compliance with federal aviation safety standards as proof of the reasonableness of its design. However, because the Federal Aviation Act contains no express preemption clause governing general air safety, includes a savings clause, and designates its safety standards as only minimum standards, general aviation aircraft manufacturers can be held to more stringent design standards than those mandated by federal safety regulations.

In contrast to its impact on claims alleging defective design, the lack of preemptive effect given to federal air safety standards has no relevance to claims alleging manufacturing defects.¹¹⁴ As discussed above, a manufacturing defect is "a departure from a product unit's design specifications."¹¹⁵ In order for liability to attach to a seller, a plaintiff need only establish that the product was defective when it left the hands of that specific seller.¹¹⁶ Whether or not a manufacturer complied with federal safety regulations has nothing to do with this concept of responsibility.¹¹⁷ Even if federal safety standards were

¹¹³ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. c.

¹¹⁴ The amendment proposed in this Note, *see infra* part II.B.1, would not affect claims based on inadequate instructions or warnings either. Since the primary purpose of the FARs is to regulate design safety, not instructions or warnings, compliance with such standards could not preempt a claim based on inadequate instructions or warnings. *See infra* note 232 and accompanying text (discussing the preemptive effect given to federal warning regulations under the Cigarette Act); *see also supra* note 68 and accompanying text.

Claims based on manufacturing defects, on the other hand, would not be preempted under this Note's proposal for a different reason—such claims are based on an alternative theory of liability. In other words, a defendant manufacturer could not point to its compliance with federal design regulations as a basis of preemption when being sued for a manufacturing defect because it is the manufacturer's own standards of production the plaintiff would be attacking (*i.e.*, a seat belt was improperly installed when it left the factory), rather than the reasonableness of the manufacturer's design. *See, e.g.*, TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. c.

¹¹⁵ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. b.

¹¹⁶ *Id.*

¹¹⁷ One could imagine a scenario where despite a manufacturing defect that caused injury to an occupant in an aircraft, a particular design is still found to be in accordance with federal design standards. For example, suppose the FARs require landing gear on small general aviation aircraft to withstand 1,000 pounds of pressure per square inch. Further suppose that a particular manufacturer designed its landing gear to withstand 3,000 pounds of pressure per square inch. If the landing gear collapsed on a particular landing and a plaintiff proved that a faulty molding had reduced the strength of the landing gear

given preemptive effect, this would pose no obstacle to a plaintiff who could prove, for instance, that the steering mechanism of his aircraft was damaged or incorrectly assembled when it left the manufacturer.

In light of these differences, the regulatory reforms proposed in this Note are directed only toward products liability lawsuits based on claims of defective design. The author mentions this categorical focus for clarification purposes only. Focusing on only one of the three possible types of products liability claims will not deter from the ability of this Note's proposed regulatory reforms to significantly reduce the number of illegitimate lawsuits allegedly paralyzing the general aviation industry. The vast majority of products liability lawsuits arising from crashes of general aviation aircraft are based on claims of defective design.¹¹⁸

3. *The Effect of Products Liability on General Aviation*

In the United States, product safety is often governed by both the regulatory and tort systems.¹¹⁹ In the field of general aviation safety, however, the regulatory system has taken a subordinate role to that assumed by state tort systems. This fact is hardly surprising. Because compliance with federal aviation safety standards does not preempt products liability lawsuits, juries have been free to implement their own standards of aircraft safety and have routinely held general aviation aircraft manufacturers to higher standards than federal law requires. What is startling, however, is the impact that this practice has allegedly had on the general aviation industry.

By the late 1960s, products liability litigation had become a serious impediment to general aviation manufacturers.¹²⁰ Historically, about eighty percent of all general aviation aircraft in service in the United States have been produced by three large manufacturers.¹²¹ Cessna Aircraft Company and Piper Aircraft Corporation emerged as

to half of the manufacturer's design standard strength, the manufacturer could claim that the action is preempted because the strength of the landing gear, even with a manufacturing defect, exceeded the requirement of the FARs. This is an extreme example. If it occurred, however, and the weakness of the landing gear was truly the cause of the accident, it would be an example of a design standard that was clearly out of date. Part II.B.4 of this Note suggests methods by which outdated design standards could be revamped and brought up-to-date. Under these methods, until such designs were brought up-to-date, states would maintain the authority to set such standards.

¹¹⁸ See, e.g., Craig, *supra* note 12, at 457 (“[General aviation] crashes lead to claims of product defective design much more often than to claims of defective manufacture.”); Martin, *supra* note 3, at 481 (“Because airplanes must be designed and built to be very reliable, almost all aviation product liability cases have involved claims of defective design.”).

¹¹⁹ Teresa Moran Schwartz, *The Role of Federal Safety Regulations in Products Liability Actions*, 41 VAND. L. REV. 1121, 1122 (1988).

¹²⁰ Martin, *supra* note 3, at 481.

¹²¹ *Id.* at 480.

the dominant manufacturers of small, single engine, two- and four-passenger airplanes.¹²² Beech Aircraft Corporation concentrated on the manufacture of somewhat larger and more expensive aircraft.¹²³

In 1975, Beech and Cessna estimated that the two companies spent a combined total of over \$9 million on products liability insurance and defense that year alone.¹²⁴ This total exceeded \$10 million per year by the end of 1976.¹²⁵ By 1977, the three major U.S. general aviation manufacturers found themselves defending hundreds of lawsuits, the claims of which far exceeded the net worth of the three companies combined.¹²⁶ Management and design engineers alike found their attention turning from building general aviation aircraft to defending their companies from products liability lawsuits.¹²⁷

The General Aviation Manufacturers Association (GAMA), as well as several independent commentators, have proclaimed a causal link between the decline of the general aviation industry and the proliferation of products liability lawsuits.¹²⁸ Their arguments focus on the rise of defense and liability insurance costs. According to one commentator, the 1970s saw an "upward spiral" of products liability loss and defense costs.¹²⁹ Aside from debilitating legal defense fees, manufacturers were also hit with increased insurance premiums.¹³⁰ These mounting costs were inevitably passed on to the consumer and new general aviation aircraft became prohibitively more expensive.¹³¹

During the 1980s, the price of new general aviation aircraft soared, forcing prospective buyers to purchase used aircraft.¹³² In 1987, the three main U.S. manufacturers calculated that their annual product liability costs ranged from \$70,000 to \$100,000 per aircraft built that year.¹³³ For two- to four-seat general aviation aircraft, this meant that "the product liability expense exceeded the cost of either raw materials or labor."¹³⁴ Furthermore, this increase in product liability costs came at a time when fatalities from general aviation acci-

122 *Id.*

123 *Id.*

124 *Id.* at 481-82.

125 *Id.* at 482.

126 *Id.*

127 *Id.*

128 See GAMA, *supra* note 2; see also Martin, *supra* note 3, at 480-86; George L. Priest, *Can Absolute Manufacturer Liability be Defended?*, 9 YALE J. ON REG. 237, 259-62 (1992).

129 Martin, *supra* note 3, at 483.

130 *Id.*

131 *Id.*

132 *Id.*; see also GAMA, *supra* note 2, at 5.

133 Martin, *supra* note 3, at 484; see also GAMA, *supra* note 2, at 1; Priest, *supra* note 128, at 259 ("In 1986, it was reported that liability insurance costs added \$80,000 to the price of each Beech aircraft and \$75,000 to each Piper aircraft.").

134 Martin, *supra* note 3, at 484.

dents were at their lowest in forty years.¹³⁵ Since World War II, for example, the incidence of fatal accidents has declined by 700%.¹³⁶ Nevertheless, as both sales and profits decreased, manufacturing facilities were closed, factory employees were laid off, and—for the first time in history—imports of general aviation aircraft exceeded the value of general aviation exports.¹³⁷ In short, the 1980s brought disaster to the American general aviation industry.

Today, the situation has not changed. As President Clinton reflected when signing into law the General Aviation Revitalization Act of 1994, “[a]n innovative and productive American industry has been pushed to the edge of extinction.”¹³⁸ Illustrative of this phenomenon is a recent four-year period during which Beech Aircraft Corporation was sued 203 times for accidents involving its aircraft.¹³⁹ Despite the fact that the NTSB did not find Beech equipment to be defective in any of the cases, each lawsuit cost Beech an average of \$530,000 to defend.¹⁴⁰ In other words, what government investigators established as “zero-defect performance” ended up costing Beech hundreds of millions of dollars.¹⁴¹

Speaking for general aviation aircraft manufacturers as a whole, GAMA left the 1980s claiming that “[t]he general aviation industry needs tort reform legislation to save it from destruction.”¹⁴² Convinced that products liability is the cause of the general aviation crisis, Cessna chairman Russ Meyer promised that his company would once again enter the small plane market as soon as tort reform legislation was passed.¹⁴³ General aviation manufacturers in the United States seem to agree that in order to save their industry from collapse, tort reform legislation is necessary. Beech chairman and CEO Art Wegner called the General Aviation Revitalization Act of 1994 a “great step forward,” while Piper’s president, Charles M. Suma, said the bill’s passage was “the icing on the cake” for the company’s creditors, who are

¹³⁵ Priest, *supra* note 128, at 260.

¹³⁶ GAMA, *supra* note 2, at 1; see also Craig, *supra* note 12, at 456.

¹³⁷ Martin, *supra* note 3, at 484. In 1980, 29 U.S. general aviation manufacturers competed for sales with only 15 foreign manufacturers; by 1992 29 foreign general aviation manufacturers competed against only nine U.S. manufacturers. 140 CONG. REC. H5000 (daily ed. June 27, 1994) (statement of Rep. Clinger).

¹³⁸ Statement by President William J. Clinton upon Signing S. 1458, 30 WKLY COMP. PRES. DOC. 1678 (Aug. 22, 1994), reprinted in 1994 U.S.C.C.A.N. 1654 [hereinafter Clinton].

¹³⁹ GAMA, *supra* note 2, at 4.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.* at 1.

¹⁴³ Mark R. Twombly, *Kill the Messenger*, AOPA PILOT, Aug. 1993, at 125. With the passage of the General Aviation Revitalization Act of 1994, Meyer insists that he will “honor [his] commitment to restart production,” although he admits the process may take up to two years to be put in motion. Thomas A. Horne, *Manufacturers Face the Future*, AOPA PILOT, Sept. 1994, at 5.

close to being granted ownership of the company.¹⁴⁴ Warren Hoffner, president of the American Bonanza Society (a publication for Beech aircraft owners), was one of many general aviation insiders rallying support for an even broader tort reform bill.¹⁴⁵ That bill, Senate Bill 67, recently failed to pass its fifth consecutive term of Congress.¹⁴⁶

C. Recent Congressional Movement Toward Tort Reform

1. *The General Aviation Revitalization Act of 1994*

On August 17, 1994 President Clinton signed into law the General Aviation Revitalization Act of 1994 (the 1994 Act),¹⁴⁷ the first major piece of products liability legislation to have ever been passed by Congress.¹⁴⁸ The 1994 Act represents the culmination of over eight years of lobbying by general aviation manufacturers and their supporters in Congress to provide "some predictability to an industry which has stopped building small airplanes because of liability costs."¹⁴⁹

The 1994 Act establishes a statute of repose¹⁵⁰ that bars products liability lawsuits against manufacturers of general aviation aircraft or their component parts once the aircraft or component is over eighteen years old.¹⁵¹ In addition, the statute of repose is "rolling"—when

¹⁴⁴ Horne, *supra* note 143, at 6.

¹⁴⁵ Warren E. Hoffner, *President's Comments: Product Liability General Aviation Crisis*, 1993 AM. BONANZA SOC'Y 3276, 3277.

¹⁴⁶ Telephone Interview with Mike Horak, Press Secretary to Senator Nancy Kassebaum (Nov. 10, 1994) [hereinafter Horak].

¹⁴⁷ Pub. L. No. 103-298, 108 Stat. 1552 (1994); Clinton, *supra* note 138, at 1678, reprinted in 1994 U.S.C.A.N. 1654.

¹⁴⁸ 140 CONG. REC. H8698 (daily ed. Aug. 19, 1994) (statement of Rep. Glickman).

¹⁴⁹ 140 CONG. REC. H5001 (daily ed. June 27, 1994) (statement of Rep. Glickman).

¹⁵⁰ The theory behind a statute of repose is that after a product has been safely used for a specified number of years, it is reasonable to assume that the product was adequately designed and manufactured. Supporters of statutes of repose argue that after such time has passed, it is no longer fair to hold manufacturers liable for accidents or injuries sustained by users of their products. See, e.g., 140 CONG. REC. H4999 (daily ed. June 27, 1994) (statement of Rep. Fish). As many as 14 states currently have statutes of repose, some as long as 12 years and others as short as six years. S. REP. NO. 202, *supra* note 7, at n.12. See, e.g., ARIZ. REV. STAT. ANN. § 12-551 (1992) (12 years); OR. REV. STAT. § 30.905 (1988) (eight years); TENN. CODE ANN. § 29-28-103 (Supp. 1994) (10 years).

In *Carr v. Beech Aircraft Corp.*, 758 F. Supp. 1330, 1333 (D. Ariz. 1991), a federal district court upheld the constitutionality, at both the state and federal levels, of Arizona's product liability statute of repose. The language of the Arizona statute is similar to that of many existing statutes of repose:

A product liability action . . . shall be commenced [within the state's two year statute of limitations], except that no product liability action may be commenced and prosecuted if the cause of action accrues more than twelve years after the product was first sold for use or consumption, unless the cause of action is based upon the negligence of the manufacturer or seller or a breach of an express warranty provided by the manufacturer or seller.

ARIZ. REV. STAT. ANN. § 12-551 (1992).

¹⁵¹ The 1994 Act provides that:

a component part in an aircraft is replaced with a new component part, the replacement part is assigned a new eighteen-year limitation period, independent of the limitation period covering the rest of the aircraft.¹⁵²

The statute's eighteen-year limitation period contains several exceptions. For example, the statute of repose does not apply if a manufacturer knowingly misrepresented, concealed, or withheld safety information from the FAA during the certification process of the aircraft in question.¹⁵³ There is also an exception for passengers transported for medical emergencies and persons injured by the aircraft while on the ground or in other aircraft.¹⁵⁴ The statute preserves liability for actions based on breach of an express warranty by excepting from its limitation period actions brought pursuant to a written and enforceable warranty.¹⁵⁵

Subsection 2(d) of the 1994 Act preempts state statutes of repose, providing that the new federal statute of repose "supersedes any State law to the extent that such law permits a civil action . . . to be brought after the applicable limitation period for such civil action established by subsection (a)."¹⁵⁶ The 1994 Act took effect on August 17, 1994, the date President Clinton signed it into law.¹⁵⁷ However, the 1994 Act does not apply to civil actions commenced prior to that date.¹⁵⁸

By the time President Clinton signed the 1994 Act into law, it had survived an attempt at amendment by the House of Representa-

[N]o civil action for damages for death or injury to persons or damage to property arising out of an accident involving a general aviation aircraft may be brought against the manufacturer of the aircraft or the manufacturer of any new component, system, subassembly, or other part of the aircraft, in its capacity as a manufacturer if the accident occurred . . . after the applicable limitation period beginning on . . . the date of delivery of the aircraft to its first purchaser or lessee . . . or . . . the date of first delivery of the aircraft to a person in the business of selling or leasing such aircraft.

§ 2(a), 108 Stat. at 1552. Section 3(3) of the Act defines the "limitation period" as 18 years.
 § 3(3), 108 Stat. at 1553.

¹⁵² § 2(a)(2), 108 Stat. at 1552. The 18-year period of limitation extends to new component parts installed as replacements for original, or added, component parts—hence, the "rolling" statute of repose. A new component that is added to a new aircraft receives the same limitation period as the aircraft on which it is installed. Although the 1994 Act does not expressly address used replacement parts (or rebuilt parts, for that matter), Representative Glickman insists that a used component part which had, say, five years left on its original limitations period would maintain its five-year limitation period if installed on a different aircraft. 140 CONG. REC. H5001 (daily ed. June 27, 1994) (statement of Rep. Glickman).

¹⁵³ § 2(b)(1), 108 Stat. at 1552-53.

¹⁵⁴ § 2(b)(2)-(3), 108 Stat. at 1553.

¹⁵⁵ § 2(b)(4), 108 Stat. at 1553.

¹⁵⁶ § 2(d), 108 Stat. at 1553.

¹⁵⁷ See § 4(a), 108 Stat. at 1554; Clinton, *supra* note 138, at 1678, *reprinted in* 1994 U.S.C.A.N. 1654.

¹⁵⁸ § 4(b), 108 Stat. at 1554.

tives,¹⁵⁹ had managed to gain the support of several consumer groups,¹⁶⁰ and had even been labelled as a "job-creating and job-restoring measure."¹⁶¹ Though this simple piece of tort reform legislation was viewed as a major triumph for small aircraft manufacturers, it was not the only piece of tort reform legislation introduced into Congress in 1993 on behalf of the general aviation industry.

2. *Senate Bill 67*

On January 21, 1993, Senator Nancy Kassebaum of Kansas introduced the General Aviation Accident Liability Standards Act¹⁶² (Senate Bill 67) into its fifth consecutive term of Congress.¹⁶³ Senate Bill 67 is a considerably more comprehensive tort reform measure that, until the passage of the 1994 Act, garnered significant support from general aviation aircraft manufacturers. If passed, the bill would purportedly "replace the current patchwork of unpredictable and inconsistent State general aviation liability laws with uniform, fair, and reasonable Federal standards of liability."¹⁶⁴ In other words, unlike the more narrowly focused approach to tort reform found in the 1994 Act, Senate Bill 67 would essentially create a unique federal law of products liability, applicable only to lawsuits involving general aviation accidents, that would supplant existing tort law in each of the fifty states as applied to general aviation accident cases.

While proponents of the 1994 Act claim that it will save general aviation manufacturers millions of dollars in settlements, judgments, and defense costs stemming from accidents involving their older products, Senator Kassebaum's Senate Bill 67 proposes to do this, and

¹⁵⁹ Instead of the uniform 18-year statute of repose imposed by the 1994 Act, an amendment introduced by Representative Rick Boucher of Virginia proposed a sliding scale, trifurcated approach. See 140 CONG. REC. H4998 (daily ed. June 27, 1994). For piston-powered aircraft, the amendment provided a statute of repose of 15 years; for turbo-prop-powered aircraft, the statute of repose would have been 18 years; and for jet-powered and other remaining general aviation aircraft, the statute of repose would have been 22 years. *Id.* The amendment was intended to target the production of piston-powered aircraft. 140 CONG. REC. H4999 (daily ed. June 27, 1994) (statement of Rep. Brooks). This area has not only traditionally generated the most jobs, but is also the industry's greatest source of liability. *Id.*

¹⁶⁰ It seems odd that the persons most likely to be injured in a general aviation accident—the consumers who purchase and fly the planes—would support such a law. However, these consumers are also the individuals most directly impacted by the high cost of general aviation aircraft, allegedly the result of excessive products liability lawsuits. Consumer supporters of the General Aviation Revitalization Act of 1994 included the Aircraft Owners and Pilots Association, the Experimental Aircraft Association, the National Business Aircraft Association, and the National Air Transport Association. 140 CONG. REC. H5000 (daily ed. June 27, 1994) (statement of Rep. Oberstar).

¹⁶¹ Clinton, *supra* note 138, at 1678, reprinted in 1994 U.S.C.C.A.N. 1654.

¹⁶² S. 67, 103d Cong., 1st Sess. (1993) [hereinafter S. 67].

¹⁶³ Horak, *supra* note 146; see, e.g., S. 640, 101st Cong., 1st Sess. (1989).

¹⁶⁴ 139 CONG. REC. S195 (daily ed. Jan. 21, 1993) (statement of Sen. Kassebaum).

much more.¹⁶⁵ Most significantly, section 5(b)(1) of Senate Bill 67 sets forth a uniform standard of liability that would be applied in actions for damages resulting from an alleged defect in an aircraft or one of its component parts. Under the proposed standard, a plaintiff would be required to establish certain elements in order to recover damages from a general aviation manufacturer:

(A) the product, when it left the control of the manufacturer, was in a defective condition unreasonably dangerous for its intended purpose, according to engineering and manufacturing practices which were reasonably feasible;

(B) the defective condition is a proximate cause of the claimant's harm; and

(C) the general aviation aircraft was being used at the time of the accident for a purpose and in a manner for which it was designed and manufactured.¹⁶⁶

Unlike Tentative Draft 1 and current trends in products liability law, this vague standard makes no distinction between actions based on manufacturing defects and those based on design defects.¹⁶⁷

In addition to the liability standard set forth above, Senate Bill 67 would provide a basis for liability for failure to warn by requiring that manufacturers warn consumers about any dangers the manufacturer was aware of, or reasonably should have been aware of, either at the time of sale or after the product was sold.¹⁶⁸ The proposed legislation would also impose liability for breach of an express warranty.¹⁶⁹ If a manufacturer was to make an express warranty about its product, and the product, in failing to conform to such warranty, was determined to be the "proximate cause of the claimant's harm," the manufacturer could be held liable for breach of its express warranty.¹⁷⁰ Although Senate Bill 67 would not change existing law with respect to express warranties, one commentator claims such legislation would prevent recovery under a theory of implied warranty.¹⁷¹

¹⁶⁵ When introduced by Senator Kassebaum, S. 67 included a 20-year statute of repose. The shorter period of limitations of the 1994 Act (18 years) is more favorable to manufacturers. Future general aviation tort reform legislation (such as a reintroduced S. 67) may attempt to shorten the current 18-year period of limitations. The original version of S. 67, for example, introduced by Senator Kassebaum in 1989, included a 12-year statute of repose. S. 640, 101st Cong., 1st Sess. (1989).

¹⁶⁶ S. 67, *supra* note 162, § 5(b)(1)(A)-(C).

¹⁶⁷ For criticisms of the bill's misguided justification, its failure to recognize the distinction between manufacturing and design defects, and the overwhelming bias it would provide to manufacturers in lawsuits involving general aviation accidents, see *infra* part II.A.3; see also Wells, *supra* note 8, at 905-12.

¹⁶⁸ S.67, *supra* note 162, § 5(b)(2)(A)-(B).

¹⁶⁹ *Id.* § 5(b)(3)(D).

¹⁷⁰ *Id.*

¹⁷¹ Wells, *supra* note 8, at 916-17.

Another major provision of Senate Bill 67 mandates the use of comparative responsibility analysis in all actions for harm arising out of general aviation accidents.¹⁷² Under the principles of comparative responsibility, liability is apportioned between the parties involved in a lawsuit based on each party's responsibility for the harm caused: "The trier of fact shall determine comparative responsibility by making findings indicating the percentage of total responsibility for the claimant's harm attributable to the claimant, each defendant, each third-party defendant, and any other person not a party to the action."¹⁷³ Unlike the law of contributory negligence—where a plaintiff recovers nothing if he or she is at all contributorily negligent—a plaintiff under Senate Bill 67's comparative responsibility rule could recover a defendant's "share of liability" despite the fact that the plaintiff was responsible for "a share" of his injuries.¹⁷⁴

While implementing comparative responsibility, Senate Bill 67 would also do away with joint and several liability—defendants could be severally but not jointly liable.¹⁷⁵ The proposed legislation would, however, retain two exceptions to this rule. First, a general aviation airframe manufacturer could be jointly and severally liable for harm caused by components installed by it as part of an aircraft's "original type design."¹⁷⁶ Second, general aviation component manufacturers could be jointly and severally liable for harm caused by subassemblies or other parts of their components.¹⁷⁷

Like many aspects of tort law, the rules regarding the apportionment of liability vary greatly from state to state, with over forty-three states embracing some form of comparative fault analysis.¹⁷⁸ The majority of states embrace one of several forms of "modified" comparative fault,¹⁷⁹ under which a plaintiff is barred from recovery if his or her proportion of responsibility exceeds a certain percentage.¹⁸⁰

¹⁷² S. 67, *supra* note 162, § 6(a).

¹⁷³ *Id.*

¹⁷⁴ Wells, *supra* note 8, at 918-19. While lay juries are arguably not qualified to decide the complex technical issues often involved in general aviation lawsuits, asking such juries to make findings indicating "the percentage of total responsibility for the claimant's harm attributable to the claimant," see S. 67, *supra* note 162, § 6(a), seems even more difficult to justify. For a forceful argument that problems of conscious product design choices are inherently unsuited to determination by courts, see James A. Henderson, Jr., *Design Defect Litigation Revisited*, 61 CORNELL L. REV. 541, 555-57 (1976); James A. Henderson, Jr., *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1540 (1973).

¹⁷⁵ S. 67, *supra* note 162, § 6(b).

¹⁷⁶ *Id.* § 6(c)(1).

¹⁷⁷ *Id.* § 6(c)(2).

¹⁷⁸ See, e.g., HENDERSON & TWERSKI, *supra* note 74, at 316-19.

¹⁷⁹ *Id.* at 317.

¹⁸⁰ *Id.* In Colorado, for example, a partially negligent plaintiff may recover damages from a defendant proportionate to the defendant's fault unless the plaintiff's fault reaches 50%; once the plaintiff is more responsible for his or her harm than the defendant, the

Most other states employ a simpler variation known as “pure” comparative fault.¹⁸¹ Under this rule, unless a plaintiff is 100% responsible for his or her harm, the plaintiff’s recovery will be reduced commensurate to his fault, but never eliminated.¹⁸² With the passage of legislation such as Senate Bill 67, however, “pure” comparative responsibility would be the rule in every state with respect to general aviation accident liability.¹⁸³ No matter how egregious a pilot’s error may be, Senate Bill 67 would allow a jury to determine that a small percentage of what is usually a very large amount of damages must be borne by the aircraft’s manufacturer.

Not surprisingly, the other major provisions of Senate Bill 67 seem heavily biased in favor of general aviation aircraft manufacturers. These provisions include: (1) limiting the admissibility of evidence of any remedial measures made by the manufacturer following an accident that, if made before the accident, might have prevented the accident;¹⁸⁴ (2) allowing punitive damages only in situations where the actions of the responsible party constituted a “conscious, flagrant indifference to the safety of those persons who might be harmed by use of the . . . aircraft”;¹⁸⁵ (3) creating a two-year statute of limitations running from the time of the accident;¹⁸⁶ and (4) placing concurrent jurisdiction over cases involving general aviation accidents with federal and state courts.¹⁸⁷

It is not surprising that the more measured response found in the 1994 Act was able to pass both houses of Congress before the broader tort reform measures proposed by Senate Bill 67. The 1994 Act was comprised merely of one of several components—a statute of repose—that many more inclusive tort reform bills of the past had taken with them to their legislative graves.¹⁸⁸ General aviation aircraft manufacturers are now free from multimillion-dollar settlements or judgments—but only with respect to their older aircraft and components. Over 80,000 general aviation aircraft flying in the United States re-

plaintiff may not collect any damages from the defendant. COLO. REV. STAT. § 13-21-111(1) (1987); see *Graf v. Tracy*, 568 P.2d 467, 468 (Colo. 1977) (holding that jury finding of 70% plaintiff fault precluded recovery under state comparative negligence statute).

¹⁸¹ HENDERSON & TWERSKI, *supra* note 74, at 317.

¹⁸² *Id.* In Rhode Island, for example, “the amount of negligence attributable to the person injured” is used to reduce damages, but not to bar a recovery. R.I. GEN. LAWS § 9-20-4 (1985); see *Raymond v. Jenard*, 390 A.2d 358, 361 (R.I. 1978) (stating that state comparative negligence statute is necessary to abolish harshness of traditional contributory negligence rule).

¹⁸³ Wells, *supra* note 8, at 920.

¹⁸⁴ S. 67, *supra* note 162, § 8.

¹⁸⁵ *Id.* § 10.

¹⁸⁶ *Id.* § 11.

¹⁸⁷ *Id.* § 13.

¹⁸⁸ See, e.g., S. 67, *supra* note 162.

main unaffected by the new legislation.¹⁸⁹ Moreover, this figure does not include the thousands of new aircraft that manufacturers such as Cessna promised would be built following the passage of the 1994 Act. Although Senator Kassebaum's Senate Bill 67 was sidetracked in Congress again this year,¹⁹⁰ the momentum created by the passage of the 1994 Act will no doubt support a continuing campaign for more comprehensive general aviation tort reform.¹⁹¹

D. Federal Preemption in the General Aviation Industry

1. *The Two Faces of Federal Preemption*

Both pieces of tort reform legislation introduced into the 103d Congress on behalf of the general aviation industry included express preemption clauses. Section 2(d) of the 1994 Act establishes it as a uniform federal statute of repose governing all products liability actions brought against general aviation manufacturers, regardless of any state law to the contrary. Section 4(a) of Senate Bill 67 would, if such legislation was passed, similarly preempt any state law regarding recovery, under any legal theory, for harm arising out of a general aviation accident.

GAMA has consistently maintained that tort reform measures such as these, strengthened by their express preemption clauses, are needed to save the general aviation industry.¹⁹² However, general aviation manufacturers often adopt a different strategy when they enter a courtroom. Instead of attempting to persuade the courts to bend existing tort principles in their favor, general aviation manufacturers and their attorneys often frame their defenses around a slightly different concept of federal preemption.¹⁹³ This alternative federal preemption theory, however, is not mentioned in either piece of legislation recently supported by the general aviation industry.

Instead of concentrating on products liability law, the alternative theory of federal preemption often raised by manufacturers concentrates on federal regulatory law—namely, the federal regulations

¹⁸⁹ Thomas B. Chapman, *Working the Hill*, AOPA PILOT, Sept. 1994, at 2, 4 (graph).

¹⁹⁰ *Suits and Small Planes*, CHICAGO TRIB., Aug. 25, 1994, at 29.

¹⁹¹ Tort reform was a popular topic in Congress during the first several months of 1995. See Neil A. Lewis, *House Passes New Standards Limiting Awards in Civil Suits*, N.Y. TIMES, Mar. 11, 1995, at 1.

¹⁹² GAMA, *supra* note 2, at 1-2.

¹⁹³ See, e.g., *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1441 (10th Cir.) (discussing defendant's assertion that the Federal Aviation Act impliedly preempted the state tort claims being brought against it), *cert. denied*, 114 S. Ct. 291 (1993); *Holliday v. Bell Helicopters Textron, Inc.*, 747 F. Supp. 1396, 1398 (D. Haw. 1990) (discussing defendant's argument that "plaintiffs' crashworthiness claim [was] impliedly preempted by the Federal Aviation Act").

promulgated under the Federal Aviation Act.¹⁹⁴ Manufacturers often use a “slippery slope” argument to justify their position: “[I]f this court allows plaintiff’s claim to proceed, it will render federal regulations meaningless and invite ‘partisan experts retained for litigation’ to dictate aviation standards.”¹⁹⁵ Although this argument seems persuasive—i.e., why has Congress enacted safety regulations for general aviation manufacturers if everyone but the manufacturers themselves are allowed to ignore them?²—the Tenth Circuit in *Cleveland* made it clear that where the Federal Aviation Act is concerned, rates and routes are the only areas for which Congress has expressly authorized federal preemption.¹⁹⁶ However, the Tenth Circuit’s interpretation of Congress’ intent does not foreclose the possibility that the industry may benefit from regulatory reform legislation that would bestow preemptive status on federal air safety regulations.

2. *The Preemptive Effect of Federal Regulatory Standards*

Since the early 1930s, the number and importance of federal regulatory agencies in the United States has increased significantly.¹⁹⁷ As such agencies assume greater responsibility for regulating the production and use of products in this country, issues of federal preemption become increasingly more important.¹⁹⁸ Article VI of the United States Constitution provides that the laws of the United States “shall be the supreme Law of the Land; . . . any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.”¹⁹⁹ In cases involving the regulation of a product’s design, for example, federal preemption occurs when a court determines that pursuant to the Supremacy Clause of the United States Constitution, federal regulation concerning the product precludes nonconforming state regulation concerning the same aspect of the product.²⁰⁰

194 For an overview of the Federal Aviation Act and the regulations promulgated thereunder, see *supra* part I.A.1; see also *Cleveland*, 985 F.2d at 1442.

195 *Holliday*, 747 F. Supp. at 1399.

196 *Cleveland*, 985 F.2d at 1444.

197 See, e.g., CHARLES SCHULTZE, *THE PUBLIC USE OF PRIVATE INTEREST* 7-12 (1977), reprinted in WALTER GELLHORN ET AL., *ADMINISTRATIVE LAW* 7 (8th ed. 1987).

198 HENDERSON & TWERSKI, *supra* note 74, at 409. This is especially true for industries such as general aviation. According to Representative Dan Glickman, “There is no other industry selling products to the public in which all of its segments are exclusively regulated by the Federal Government.” 140 CONG. REC. H5001 (daily ed. June 27, 1994) (statement of Rep. Glickman).

199 U.S. CONST., art. VI, cl. 2.

200 See, e.g., *Wood v. General Motors Corp.*, 865 F.2d 395, 408 (1st Cir. 1988) (holding that the National Traffic and Motor Vehicle Safety Act impliedly preempted state common law claim (or a state statute requiring the same result) alleging that the failure to equip an automobile with airbags rendered its design defective).

When a court analyzes an issue of federal preemption, "[t]he purpose of Congress is the ultimate touchstone."²⁰¹ Federal preemption may be either "express" or "implied."²⁰² Upon examining the text of the statute in question, a court may find that Congress "expressly" preempted state law.²⁰³ Express preemption clauses, such as section 1305(a) of the Federal Aviation Act,²⁰⁴ exemplify the explicit congressional intent necessary for express preemption.²⁰⁵ In the absence of an express preemption clause, courts examine the "structure and purpose" of a statute to determine whether Congress intended it to "impliedly" preempt state law.²⁰⁶ Generally, state law must yield "if that law actually conflicts with federal law."²⁰⁷ In addition, a court may also find that state law is impliedly preempted if federal regulation is sufficiently pervasive in a particular field to support an inference that Congress left no room for state regulation.²⁰⁸ If a court finds either express or implied congressional intent to preempt, it must often additionally determine whether Congress intended state law to preempt state common law actions as well as state regulation.²⁰⁹

A recent Supreme Court decision, *Cipollone v. Liggett Group, Inc.*,²¹⁰ illustrates the unexpected difficulties often associated with the

²⁰¹ *Retail Clerks v. Schermerhorn*, 375 U.S. 96, 103 (1963).

²⁰² *Shaw v. Delta Air Lines, Inc.*, 463 U.S. 85, 95 (1983) (quoting *Fidelity Fed. Sav. & Loan Ass'n v. De la Cuesta*, 458 U.S. 141, 152-53 (1982)).

²⁰³ See, e.g., *Wood*, 865 F.2d at 401.

²⁰⁴ 49 U.S.C. app § 1305(a) (1988).

²⁰⁵ See, e.g., *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374 (1992).

²⁰⁶ *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977).

²⁰⁷ *Cipollone v. Liggett Group, Inc.*, 112 S. Ct. 2608, 2617 (1992); see also *Wood*, 865 F.2d at 402 (holding that to allow a product liability action for defective design would "stand as an obstacle" to the regulatory scheme of the National Traffic and Motor Vehicle Safety Act).

²⁰⁸ *Cipollone*, 112 S. Ct. at 2617 (quoting *Fidelity Fed. Sav. & Loan Ass'n v. De la Cuesta*, 458 U.S. 141, 153 (1982)); see also *Pennsylvania R.R. Co. v. Public Serv. Comm'n*, 250 U.S. 566, 569 (1919) (holding that the Interstate Commerce Commission so thoroughly regulated the safety of railroad car construction that state law could not even supplement such areas of regulation).

²⁰⁹ The First Circuit in *Wood* explicitly addressed this issue:

[A finding for the plaintiff on her defective design claim] is tantamount to announcing a state safety standard (vehicles must have airbags) that differs from the federal safety standard covering the same aspect of performance (viz., the relevant federal standard permits seat belts in lieu of air bags). Such a safety standard, if promulgated by state statute or regulation, would be preempted by the clear commands of § 1392(d). Is the same standard preempted even though created by lawsuit?

865 F.2d at 401 (citation omitted). The court held that the lawsuit was impliedly preempted by the federal statute. *Id.* at 408.

²¹⁰ 112 S. Ct. 2608 (1992). The procedural history of the case hints at the difficulties underlying the final decision. *Cipollone* began in a New Jersey federal district court, 593 F. Supp. 1146 (D.N.J. 1984), whose holding was reversed by the Third Circuit on an interlocutory appeal, 789 F.2d 181 (3d Cir. 1986). After the Supreme Court denied certiorari, 479 U.S. 1043 (1987), the district court again heard the case, 649 F. Supp. 664 (D.N.J. 1986), only to have it remanded back to them after a second appeal to the Third Circuit, 893 F.2d

application of the federal preemption doctrine. In *Cipollone*, the Supreme Court interpreted the preemption provision of the Federal Cigarette Labeling and Advertising Act of 1965 (Cigarette Act).²¹¹ Rose Cipollone smoked cigarettes from 1942 until she died from lung cancer in 1984.²¹² On August 1, 1983, she and her husband filed a complaint in federal district court alleging that Rose had developed lung cancer as a result of smoking cigarettes manufactured by the defendant.²¹³ The couple's theories of recovery, all predicated on New Jersey law, included claims of design defect²¹⁴ and failure to warn.²¹⁵

Since the enactment of the Cigarette Act, cigarette manufacturers have been fairly successful at using federal preemption as a shield against products liability actions based on state common law alleging failure to warn of the harmful effects of cigarette smoking.²¹⁶ The Cigarette Act's express preemption clause provides that "[n]o requirement or prohibition based on smoking and health shall be imposed under State law with respect to the advertising or promotion of any cigarettes the packages of which are labeled in conformity with the provisions of this chapter."²¹⁷ This provision, added to the Act in 1969, amended the 1965 Act's original preemption provision.²¹⁸ The amended provision bars not simply "statements," as the earlier provision did, but rather "requirement[s] or prohibitions . . . imposed under State law."²¹⁹

541 (3d Cir. 1990). By the time the Supreme Court finally granted certiorari, 499 U.S. 935 (1991), both of the original claimants had died.

²¹¹ 15 U.S.C. §§ 1331-1340 (1988). The Cigarette Act requires that a conspicuous label warning of the health hazards of smoking be placed on every package of cigarettes sold in the United States.

²¹² *Cipollone*, 112 S. Ct. at 2613.

²¹³ *Id.* at 2613-14.

²¹⁴ The plaintiffs alleged that the defendants' cigarettes were defectively designed as a result of the defendants' failure to employ a safer alternative design for a product that caused more harm to society than good. *Id.* at 2614.

²¹⁵ The plaintiffs alleged that "the product was 'defective as a result of [the defendants'] failure to provide adequate warnings of the health consequences of cigarette smoking' . . . and that [the defendants] 'were negligent in the manner [that] they tested, researched, sold, promoted, and advertised' their cigarettes." *Id.*

²¹⁶ See, e.g., *Roysdon v. R.J. Reynolds Tobacco Co.*, 849 F.2d 230, 234 (6th Cir. 1988) (holding that plaintiffs' state failure to warn claim was "implicitly preempted" because it conflicted with the purpose of the Cigarette Act); *Palmer v. Liggett Group, Inc.*, 825 F.2d 620, 626 (1st Cir. 1987) (holding that the Cigarette Act impliedly preempted plaintiffs' state failure to warn claim because it "disturb[ed] the federally calibrated balance of national interests").

²¹⁷ 15 U.S.C. § 1334(b) (1988).

²¹⁸ Pub. L. No. 91-222, § 5(b), 84 Stat. 87 (1970). The Cigarette Act's original preemption provision read: "No statement relating to smoking and health shall be required in the advertising of any cigarettes the packages of which are labeled in conformity with the provisions of this Act." Pub. L. No. 89-92, § 5(b), 79 Stat. 282 (1965).

²¹⁹ 15 U.S.C. § 1334(b) (1988).

Prior to the Supreme Court's grant of certiorari,²²⁰ the United States Court of Appeals for the Third Circuit upheld its earlier decision that "the [Cigarette] Act [impliedly] preempts those state law damage actions relating to smoking and health that challenge . . . the propriety of a party's actions with respect to the advertising and promotion of cigarettes."²²¹ As a result of the Third Circuit's earlier ruling, the district court had barred the plaintiffs' failure to warn, fraudulent misrepresentation, express warranty, and conspiracy to defraud claims "to the extent that they sought to challenge the defendants' advertising, promotional, and public relations activities" that took place after the enactment of the Cigarette Act.²²² Despite the plaintiffs' vehement protestations, the Third Circuit affirmed the district court's construction of its earlier preemption decision.²²³

Although the Supreme Court generally agreed with the Third Circuit that the Cigarette Act preempted state law damage actions, the Court arrived at its conclusion in a more direct fashion. First, the Supreme Court partially overruled the Third Circuit in holding that instead of impliedly preempting the claims brought by the Cipollone family, the Cigarette Act's preemption provision indicated an express congressional intent to preempt state authority.²²⁴

When Congress has considered the issue of pre-emption and has included in the enacted legislation a provision explicitly addressing that issue, and when that provision provides a "reliable indicium of congressional intent with respect to state authority," "there is no need to infer congressional intent to pre-empt state laws from the substantive provisions" of the legislation.²²⁵

Furthermore, unlike the Third Circuit, the Supreme Court found that the Cigarette Act's 1965 and 1969 preemption provisions differed substantially from one another.²²⁶ The Court, therefore, narrowed its fo-

²²⁰ *Cipollone v. Liggett Group, Inc.*, 499 U.S. 935 (1991).

²²¹ *Cipollone v. Liggett Group, Inc.*, 893 F.2d 541, 582 (3d Cir. 1990) (quoting *Cipollone v. Liggett Group, Inc.*, 789 F.2d 181, 187 (3d Cir. 1986)), *aff'd in part and rev'd in part*, 112 S. Ct. 2608 (1993). Before the Supreme Court granted certiorari, four federal courts of appeals followed the Third Circuit's original determination that the Cigarette Act preempts state law damage actions that challenge the propriety of a party's actions with respect to the advertising and promotion of cigarettes. *See Pennington v. Visitron Corp.*, 876 F.2d 414 (5th Cir. 1989); *Roysdon v. R.J. Reynolds Tobacco Co.*, 849 F.2d 230 (6th Cir. 1987); *Palmer v. Liggett Group*, 825 F.2d 620 (1st Cir. 1987); *Stephen v. American Brands, Inc.*, 825 F.2d 312 (11th Cir. 1987).

²²² *Cipollone*, 893 F.2d at 582; *see Cipollone v. Liggett Group, Inc.*, 649 F. Supp. 664, 668-75 (D.N.J. 1986).

²²³ *Cipollone*, 893 F.2d at 582.

²²⁴ *Cipollone*, 112 S. Ct. at 2618.

²²⁵ *Id.* (citations omitted) (quoting *Malone v. White Motor Corp.*, 435 U.S. 497, 505 (1978)).

²²⁶ *Id.* at 2619.

cus to the “domain expressly pre-empted” by each of the Act’s successive preemption clauses.²²⁷

As a result of its narrower wording, section five of the 1965 Cigarette Act was found by the Court to have preempted only “state and federal rule-making bodies from mandating particular cautionary statements.”²²⁸ In other words, the 1965 Act did not preempt state common law damages actions such as those brought by the Cipollone family.²²⁹ The Court found, on the other hand, that the Act’s 1969 preemption provision commanded a much broader preemptive effect.²³⁰ Such a change in scope, according to the Court, was evident from “substantial changes in wording” and the 1969 Act’s overall revisions to the law.²³¹ Unlike its 1965 predecessor, section five of the 1969 Act preempts more than state regulations mandating particular warning labels.²³² The critical question for the Cipollone family, therefore, was “how much more?”

Of particular importance to the question of whether section five of the 1969 Cigarette Act preempts products liability actions based on state common law is the fact that the provision does not expressly include common law within its preemptive reach.²³³ Equally important is the absence from the Act of a savings clause that expressly preserves common law actions.²³⁴ Nevertheless, the Court determined that

²²⁷ *Id.* at 2618.

²²⁸ *Id.*

²²⁹ *Id.* at 2619.

²³⁰ *Id.*

²³¹ *Id.*

²³² *Id.* In one of its more instructive comments, the Court emphasized that simply because the preemptive scope of the 1969 provision was not limited to state regulations did not mean that the section preempted all common law actions. *Id.* at 2621. “[The 1969 preemption provision] does not generally pre-empt state-law obligations to avoid marketing cigarettes with manufacturing defects or to use a demonstrably safer alternative design. . . .” *Id.*

See generally supra note 114 and part I.B.2. The Cigarette Act establishes federal warning requirements. Therefore, its preemptive effect does not reach claims based on manufacturing defects or claims based on defective design. Similarly, the federal air safety regulations under the Federal Aviation Act establish federal design standards. If these standards were to be given preemptive effect (as this Note proposes), the scope of their preemptive effect would not reach claims based on manufacturing defects or claims based on failure to adequately instruct or warn.

²³³ This fact would seem to favor the Cipollone family’s position that Congress did not intend the Act to preempt common law claims, or at least not the common law claims they were bringing before the Court.

As the Court points out in a footnote, Congress has expressly included common law rules within the preemptive reach of other statutes. *Cipollone*, 112 S. Ct. at 2621 n.22 (discussing 12 U.S.C. § 1715z-17(d) (1988), which states that shared appreciation mortgages for single family housing shall not be subject to any “State constitution, statute, court decree, common law, rule, or public policy”).

²³⁴ *Cipollone*, 112 S. Ct. at 2621 n.22. This fact would seem to favor the defendants’ position that Congress intended to preempt common law claims, or at least the claims being brought by the Cipollone family. Congress has, of course, included savings clauses

"Congress was neither pre-empting nor saving common law as a whole—it was simply pre-empting particular common law claims, while saving others."²³⁵ To determine which common law claims were within the scope of the Act's preemption clause, the Court set out a "central inquiry" through which it examined each category of damages actions in turn.²³⁶ Upon examining each claim, the Court simply asked "whether the legal duty that is the predicate of the common law damages action" satisfies the express terms of the preemption clause, giving those terms a "fair but narrow reading."²³⁷ Under the Court's "central inquiry," which focuses on both the precise wording of the preemption clause and the individual nature of each and every common law claim, a poorly drafted preemption clause would provide a manufacturer with only limited protection from liability.²³⁸

In applying this test to the Cipollones' failure to warn claims,²³⁹ for instance, the Court held that the "[p]etitioner's claims are pre-empted to the extent that they rely on a state law 'requirement or prohibition . . . with respect to . . . advertising or promotion.'"²⁴⁰ In other words, to the extent that the Cipollones' failure to warn claims required a showing that the defendants' "post-1969 advertising or promotions should have included additional, or more clearly stated, warnings, those claims [were] pre-empted."²⁴¹ Other common law claims, however, such as those attacking practices unrelated to "advertising or promotion," were not preempted by the Cigarette Act.²⁴² In the end, the *Cipollone* Court established a methodology which courts will use in future products liability actions to determine the breadth and applicability of express preemption clauses.

in other statutes—the Federal Aviation Act of 1958 is a prime example. See 49 U.S.C. app. § 1506 (1988).

²³⁵ *Cipollone*, 112 S. Ct. at 2621 n.22.

²³⁶ *Id.* at 2621.

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ The Cipollones offered two theories concerning the defendants' failure to warn: first, that the defendants "were negligent in the manner [that] they tested, researched, sold, promoted, and advertised' their cigarettes"; second, that the defendants "failed to provide 'adequate warnings of the health consequences of cigarette smoking.'" *Id.* (alteration in original).

²⁴⁰ *Id.* (incorporating the language of the Cigarette Act's preemption provision).

²⁴¹ *Id.* at 2621-22.

²⁴² *Id.* at 2622. The Court considered the Cipollones' numerous other claims under this rubric, with varying results. *Id.* at 2623-25. While the Court's specific findings with respect to these additional claims are instructive as to the application of the Court's "central inquiry," they are not crucial to this part of this Note. These additional holdings are discussed in greater detail in this Note's analysis. See *infra* part II.B.4.

3. *Federal Preemption and the Federal Aviation Act*

As the Tenth Circuit emphasized in *Cleveland*,²⁴³ "Congress may reserve for the federal government the exclusive right to regulate safety in a given field, yet permit the states to maintain tort remedies covering much the same territory."²⁴⁴ According to the Tenth Circuit, Congress intended such a mutual coexistence of state common law remedies with federal regulation when it structured the Federal Air Safety Regulations.²⁴⁵ Thus, in applying the "central inquiry" of *Cipollone* to the Federal Aviation Act, the *Cleveland* court concluded that it was not the intention of Congress to preempt products liability lawsuits that allege an aircraft was defectively designed.²⁴⁶

On appeal, Piper argued that the district court in *Cleveland* "erred in denying its motion for summary judgment on preemption grounds."²⁴⁷ In light of the Federal Aviation Act's lack of an express preemption clause governing general air safety, Piper's argument was based on implied preemption.²⁴⁸ The district court, however, cited the plain language of the Act as evidence that Congress did not intend to exclude state common law actions from the field of general aviation safety.²⁴⁹ Citing the Supreme Court's holding in *Cipollone*, the Tenth Circuit affirmed the district court's denial of summary judgment.²⁵⁰

According to the Tenth Circuit, the Federal Aviation Act's lack of an express preemption clause governing general air safety affects the issue of federal preemption in three significant ways. First, it affects the interpretation of the Act's savings clause.²⁵¹ While the effect of a savings clause will be restrictively interpreted "if it is superseded by a more specific substantive provision, such as a preemption clause,"²⁵² the clause will otherwise be viewed as leaving existing state common law or statutory remedies intact.²⁵³ Because the Federal Aviation Act only contains an express preemption provision that "relat[es] to rates,

²⁴³ *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438 (10th Cir.), *cert. denied*, 114 S.Ct. 291 (1993). For an account of the facts of this case, see *supra* notes 56-58 and accompanying text.

²⁴⁴ *Id.* at 1441 (citing *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 253 (1984)).

²⁴⁵ *Id.* at 1444 (stating that "Congress has intended to allow state common law to stand side by side with the system of federal regulations it has developed").

²⁴⁶ *Id.* at 1444 n.17.

²⁴⁷ *Id.* at 1441.

²⁴⁸ *Id.* Piper argued that the regulations promulgated under the Federal Aviation Act impliedly preempt state products liability actions by comprehensively governing the field of airplane safety. *Id.*

²⁴⁹ *Id.* at 1442 (summarizing the district court's ruling).

²⁵⁰ *Id.* at 1443-44.

²⁵¹ *Id.* at 1443; see *supra* part I.A.2 for the text of, and a discussion regarding, the Federal Aviation Act's savings clause.

²⁵² *Cleveland*, 985 F.2d at 1443 n.11 (citing *Morales v. Trans World Airlines, Inc.*, 112 S.Ct. 2031, 2037 (1992)).

²⁵³ *Id.*

routes, or services of any air carrier,"²⁵⁴ and not to tort claims such as those brought by Cleveland, the court viewed the Act's savings clause as evidence of the Act's nonpreemptive effect on state tort actions.²⁵⁵

Second, the Tenth Circuit also viewed the Act's lack of a preemption provision governing general air safety in conjunction with the Act's express but limited preemption clause to deny Piper the defense of implied preemption.²⁵⁶ The court cited *Cipollone* for the rule that implied preemption is generally not applicable to "a federal statute that contains an express preemption provision."²⁵⁷ Although the Federal Aviation Act governs two broad areas of congressional concern, the Act's express preemption clause governs only one of these areas—the rates and routes of commercial air carriers. According to the rule announced by the Supreme Court in *Cipollone*, this implies that the Act does not have preemptive effect on the other broad area of congressional concern—general air safety.²⁵⁸ Cleveland's claims of defective design, in other words, were neither expressly nor impliedly preempted by the design safety regulations promulgated under the Federal Aviation Act.

Finally, the Federal Aviation Act's lack of an express preemption clause governing general air safety affects the interpretation of the "minimum" standards designation given to the Act's safety regulations.²⁵⁹ The district court determined that by designating federal air safety regulations as minimum standards, "Congress indicated that it did not want to bar states from adopting additional or more stringent standards."²⁶⁰ On appeal, Piper attempted to counter this determination by directing the court's attention to a line of cases holding that the National Traffic and Motor Vehicle Safety Act (NTMVSA)²⁶¹ and its corresponding regulations "preempt state tort claims for failure to install air bags."²⁶² In response, the Tenth Circuit emphasized that

²⁵⁴ 49 U.S.C. app. § 1305 (1988).

²⁵⁵ *Cleveland*, 985 F.2d at 1443-44.

²⁵⁶ *Id.*

²⁵⁷ *Id.* at 1443. The implication behind such a preemption clause is that when enacted, Congress had the opportunity to fix the scope of such a clause. Therefore, any action that later falls beyond the preemptive reach of such a clause is, by definition, not preempted. See *Cipollone v. Liggett Group, Inc.*, 112 S. Ct. 2608, 2618 (1992).

²⁵⁸ *Cleveland*, 985 F.2d at 1444 (citing *Cipollone*, 112 S. Ct. at 2618).

²⁵⁹ *Id.* at 1445.

²⁶⁰ *Id.* (summarizing the district court's ruling).

²⁶¹ 15 U.S.C. §§ 1381-1431 (1988).

²⁶² *Cleveland*, 985 F.2d at 1446 (citing *Pokorny v. Ford Motor Co.*, 902 F.2d 1116 (3d Cir.), *cert. denied*, 498 U.S. 853 (1990); *Taylor v. General Motors Corp.*, 875 F.2d 816 (11th Cir. 1989), *cert. denied*, 494 U.S. 1065 (1990); *Kitts v. General Motors Corp.*, 875 F.2d 787 (10th Cir. 1989), *cert. denied*, 494 U.S. 1065 (1990); *Wood v. General Motors Corp.*, 865 F.2d 395 (1st Cir. 1988), *cert. denied*, 494 U.S. 1065 (1990)).

The federal safety regulations at issue in these cases can be found in 49 C.F.R. § 571.208 (1994) (Standard No. 208). Deciphering them, however, is a different prospect altogether. According to the Tenth Circuit—although it is not at all determinable from a

while there are key similarities between the NTMVSA and the Federal Aviation Act, "there are also key differences."²⁶³

The NTMVSA, like the Federal Aviation Act, authorizes a regulatory agency of the federal government to issue minimum safety standards with respect to the design of a product.²⁶⁴ Unlike the Federal Aviation Act, however, the NTMVSA contains an express preemption clause governing motor vehicle safety standards.²⁶⁵ This provision forbids any state-established safety standard "which is not identical to the Federal standard."²⁶⁶ By preempting those state laws requiring a standard of performance different from the federal standard, the NTMVSA's express preemption clause bestows upon the NTMVSA's minimum standards a meaning different from that of the minimum standards of the Federal Aviation Act. As a result, the Tenth Circuit held that the Federal Aviation Act's lack of an express preemption clause governing general air safety prohibited Piper from asserting a defense of preemption based on the FAA's certification of the aircraft's design.²⁶⁷

II.

ANALYSIS

A. Tort Reform is an Inefficient Solution to the General Aviation Crisis

1. *The Main Case Against Tort Reform*

Perhaps the biggest opponent to tort reform for the general aviation industry is the American Trial Lawyers Association (ATLA). Unlike general aviation manufacturers, ATLA attributes the industry's

cursory glance at the regulations themselves—Standard No. 208 gives automobile manufacturers "a choice of equipping cars with any of three types of passenger restraints," one of which includes air bags. *Cleveland*, 985 F.2d at 1446. The cases cited above held, in general, that "a state common law rule that would, in effect, remove the element of choice authorized in Safety Standard 208 would frustrate the federal regulatory scheme." *Id.* (quoting *Taylor*, 875 F.2d at 827). In other words, if a jury found an auto manufacturer liable for a crash victim's injuries because the manufacturer failed to install airbags in the automobile in question, it would establish a state safety standard that conflicted with the federal standard. *Id.* (citing *Kitts*, 875 F.2d at 789).

For an expanded analysis suggesting an amendment to the Federal Aviation Act based on the express preemption clause found in the NTMVSA, see *infra* part II.B.1.

²⁶³ See *Cleveland*, 985 F.2d at 1447.

²⁶⁴ *Id.* (citing 15 U.S.C. § 1391(2) (1988)).

²⁶⁵ 15 U.S.C. § 1392(d) (1988).

²⁶⁶ *Id.*

²⁶⁷ *Cleveland*, 985 F.2d at 1447. The court reached this decision despite Piper's repeated assertions that it had complied with the federal air safety regulations as they existed at the time of the plane's production—the plane's "tailwheel" design was approved by the FAA, and the FAA seat belt requirements in place when the agency approved the design of the plane did not require shoulder harnesses. *Id.* at 1445.

decline to factors other than products liability lawsuits.²⁶⁸ Not surprisingly, the organization is opposed to revamping the nation's tort system on behalf of the general aviation industry.²⁶⁹ Targeted members of Congress allegedly received \$2.5 million in campaign contributions last year from ATLA, along with subtle requests to keep tort reform off their agendas.²⁷⁰ In a 1989 statement before the Senate Committee on Commerce, Science and Transportation, ATLA's message was loud and clear: "The primary incentive to build safe airplanes which meet today's technology is coming from the civil liability system."²⁷¹ Apparently someone was listening—nearly ten months later, the Senate Committee on the Judiciary recommended that Senator Kassebaum's Senate Bill 640 not pass.²⁷² Shortly thereafter, the General Aviation Accident Liability Standards Act failed to become law for the third consecutive session of Congress.²⁷³

In support of its position concerning the incentives provided by the civil liability system, ATLA emphasizes that the minimum standards of the Federal Aviation Act are "antiquated," often based on technology from the World War II era.²⁷⁴ Furthermore, ATLA points to section 1355 of the Act, which authorizes the Secretary of Transportation to delegate examination and inspection responsibilities to "properly qualified" private individuals.²⁷⁵ According to ATLA, such "self regulation," combined with the use of outdated standards, counsel against the enactment of a "relaxed liability standard" that tort reform legislation would create.²⁷⁶

ATLA also insists that supply and demand have had a tremendous impact on the general aviation industry. As evidence of a shrinking demand for small aircraft, Charles T. Hvass, Jr., a spokesman for ATLA, points to the decline in student starts over the past several years.²⁷⁷ In 1978, when the industry was at its peak, the FAA issued

²⁶⁸ Charles T. Hvass, Jr., Testimony before the National Conference of State Legislatures Concerning General Aviation Liability 6-11 (December 12, 1991) (transcript available from ATLA) [hereinafter Hvass].

²⁶⁹ *Id.* at 1.

²⁷⁰ Hoffner, *supra* note 145, at 3277. Of these "donations," most were of the maximum allowable amount, with 95% going to Democrats. *Id.*

²⁷¹ Charles T. Hvass, Jr., Statement of the Association of Trial Lawyers of America Before the U.S. Senate Comm. on Commerce, Science and Transportation on S. 640 "General Aviation Accident Liability Standards Act of 1989" 3 (June 21, 1989) (transcript available from ATLA) [hereinafter ATLA Statement].

²⁷² S. REP. NO. 303, 101st Cong., 2d Sess. 2 (1990).

²⁷³ *Id.* The provisions S. 640, introduced by Kansas Senator Nancy Kassebaum, were essentially identical to those contained in Senate Bill 67. See *supra* part I.C.2.

²⁷⁴ ATLA Statement, *supra* note 271, at 3.

²⁷⁵ *Id.* at 2-3 (citing 49 U.S.C. app. § 1355 (1988)).

²⁷⁶ *Id.* at 2.

²⁷⁷ Hvass, *supra* note 268, at 10.

over 200,000 new student certificates.²⁷⁸ In 1988, issuance of new student certificates fell to a low of 125,000.²⁷⁹ Hvass juxtaposes this fall in demand with a corresponding increase in supply. In 1974, general aviation pilots in the United States were supported by a base of about 100,000 aircraft.²⁸⁰ By 1981, according to Hvass, "over 115,000 additional new aircraft were manufactured and added to [this] fleet."²⁸¹ Thus, as Hvass concludes, the general aviation industry matched a declining population of American pilots with a fleet of aircraft that nearly doubled in size over a seven-year period.²⁸² Even a cursory application of basic economic principles to such opposing trends suggests a troubled industry.

2. *Criticisms of the General Aviation Revitalization Act of 1994*

According to the president of the American Bonanza Society, (which publishes a magazine for Beech aircraft owners), the general aviation tort reform legislation introduced to the 103d Congress represents "a reasonable attempt to strike a better balance between the parties of a general aviation liability suit."²⁸³ Similar talk of "striking a balance" was heard in Congress when Representative Synar of Oklahoma, like many other congressional supporters of the statute of repose, announced that Congress "must strike a balance between the manufacturers as well as the consumers," and that "[s]uch a balance was struck with [the 1994 Act]."²⁸⁴ Careful examination of the 1994 Act, however, suggests that "two wrongs don't make a right." While the views espoused by GAMA portray an industry beset by products liability lawsuits, shifting the law unreasonably in favor of manufacturers does not achieve a "reasonable balance." In fact, as this Note illustrates, the 1994 Act is not only detrimental to legitimate products liability claimants, but it simultaneously fails to provide the general aviation industry with sufficient relief from illegitimate products liability lawsuits.

The statute of repose mandated by the 1994 Act exemplifies the tremendous bias that general aviation tort reform legislation creates in favor of manufacturers. As a result of this bias, many general aviation accident victims will be unable to recover damages from manufacturers whose aircraft were legitimately defective. Numbers alone illustrate the law's prejudicial impact. The 1994 Act exempts general

²⁷⁸ *Id.*; see also *id.* attached chart (detailing decline in total pilots and new student certificates from 1974 to 1989).

²⁷⁹ *Id.* at 10 & attached chart.

²⁸⁰ *Id.* at 10.

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ Hoffner, *supra* note 145, at 3277.

²⁸⁴ 140 CONG. REC. H5004 (daily ed. June 27, 1994) (statement of Rep. Synar).

aviation aircraft manufacturers from any future civil liability with respect to over sixty-two percent of the general aviation aircraft in use in the United States today.²⁸⁵ In other words, over half of the small plane pilots (and their passengers) in this country are now unable to recover damages from an aircraft manufacturer in the event of a crash or other injury, even if the cause of the accident is due to a legitimate defect in the aircraft's design, manufacture, or marketing.

Apart from the sheer number of aircraft affected, however, the inherent bias of the 1994 Act is best illustrated by the justification for the statute of repose. According to House Report 525(I), "[i]t is extremely unlikely that there will be a valid basis for a suit against the manufacturer of an aircraft that is more than 18 years old. *Nearly all defects are discovered during the early years of an aircraft's life.*"²⁸⁶ It is because of this "justification" that the various proponents of the legislation were able to claim that it was fair to both consumers and manufacturers.²⁸⁷ This justification, however, is based on a misguided presumption regarding products liability law—that all product defects will surely surface within the first eighteen years of an aircraft's life. Although this presumption may be true for manufacturing defects, it is by no means accurate where design defects are concerned.

Professors Henderson and Twerski make this point when discussing the interconnectedness of design and manufacturing defects:

When a product fails during normal use in the *early part of its life span*, the reason for the failure can almost always be attributed to a *manufacturing* defect. Responsible manufacturers do not *design* their products to fail so close to the starting line.²⁸⁸

With twenty-five years representing the average age of general aviation aircraft in this country,²⁸⁹ and forty or fifty years often representing the useful life of such aircraft,²⁹⁰ the eighteen-year statute of repose contained in the 1994 Act may be said to cover only "the early part" of an aircraft's life span. If this is true, the misguided presumption upon which the 1994 Act is based will leave many legitimate design defect claimants without legal recourse.

²⁸⁵ Telephone Interview with Shelley Snyder, Manager of Communications, General Aviation Manufacturers Association (Nov. 10, 1994) [hereinafter Snyder].

²⁸⁶ H.R. REP. NO. 525(I), *supra* note 6, at 3, *reprinted in* 1994 U.S.C.C.A.N. at 1640 (emphasis added).

²⁸⁷ *Id.*

²⁸⁸ HENDERSON & TWERSKI, *supra* note 74, at 564 (emphasis added).

²⁸⁹ Estimates of average age vary depending on the source. *See, e.g.*, 140 CONG. REC. H4999 (daily ed. June 27, 1994) (statement of Rep. Fish) ("[A]bout 120,000 Cessnas are still in operation and their average age is 27 years."); 139 CONG. REC. S195 (daily ed. Jan. 21, 1993) (statement of Sen. Kassebaum) (estimating average age of "over 22 years"); GAMA, *supra* note 2, at 1 ("The average single engine aircraft in the U.S. is 28 years old.").

²⁹⁰ H.R. REP. NO. 525(I), *supra* note 6, at 2, *reprinted in* 1994 U.S.C.C.A.N. at 1639.

The facts of *Mickle v. Blackmon*,²⁹¹ a products liability case decided by the South Carolina Supreme Court in 1969, demonstrate that although the passage of time may preclude a jury from reasonably finding that a product contained a manufacturing defect, it does not necessarily preclude a reasonable finding that the same product contained a design defect.²⁹² Janet Mickle was injured in an automobile accident when she was impaled by a gearshift lever which entered her body behind her left armpit, damaged her spinal cord, and caused permanent paralysis.²⁹³ She sued the Ford Motor Company, alleging that the manufacturer was negligent in its design of the gearshift lever and the white knob affixed to the end of it.²⁹⁴

The gearshift lever on the 1949 Ford in which Janet Mickle was injured was mounted on the right side of the steering shaft.²⁹⁵ Without an adequate protective knob mounted on its end, the thin steel lever could easily pierce the body of a passenger who might be thrown against it.²⁹⁶ Thus, Ford fitted the end of these levers with plastic knobs, available in assorted colors.²⁹⁷ In its 1949 models, Ford used a white knob.²⁹⁸ In 1950, the company switched to black knobs.²⁹⁹ After exposure to sunlight for an undetermined length of time, the white knobs would deteriorate and develop hairline cracks; Ford was aware of this tendency.³⁰⁰ These cracks “destroyed the force distribut-

²⁹¹ 166 S.E.2d 173 (S.C. 1969).

²⁹² This case also illustrates that statutes of repose like the one mandated by the 1994 Act completely ignore the doctrine of crashworthiness, which focuses on the capacity of a vehicle to protect its occupants from additional or enhanced injuries during a survivable accident. If a general aviation aircraft makes it to the age of 18, it is probably safe to assume that it has never been involved in an accident. It is also safe to assume, therefore, that the design of such an aircraft, with respect to its crashworthiness, has never been questioned. (One may dispute this conclusion by positing that a large number of aircraft sharing the same design features is bound to produce a crash in which the integrity of the model's crashworthiness is tested. For the purposes of this analysis, however, the author assumes that no two crashes are alike, and that different aspects of an aircraft's crashworthiness are involved in every such accident.) This would not be a problem for general aviation aircraft pilots and passengers in the past: if they were subsequently injured due to a design defect that minimized the crashworthiness of an aircraft, they could bring a legitimate products liability action against its manufacturer. With the passage of the 1994 Act, however, a crash that comes 18 years and one day after an aircraft was first purchased may mean the difference between damage compensation and arbitrary injustice. Suddenly, within a period of 24 hours, the legitimate design defect that caused injury to the occupants of the plane becomes legally nonexistent.

²⁹³ *Mickle*, 166 S.E.2d at 178.

²⁹⁴ *Id.* at 179. Although a jury originally rendered a verdict in favor of the plaintiff, the trial court granted the defendant's motion for judgment notwithstanding the verdict and the plaintiff appealed. *Id.*

²⁹⁵ *Id.* at 187.

²⁹⁶ *Id.*

²⁹⁷ *Id.*

²⁹⁸ *Id.*

²⁹⁹ *Id.* at 188.

³⁰⁰ *Id.*

ing quality" of the white knobs and caused them to "shatter easily on impact."³⁰¹ After developing such cracks, a white knob was of no value as a protective guard, although it remained useful as a handhold.³⁰² Janet Mickle claimed this defect caused her injury.

Among its many arguments, Ford urged that the judgment in its favor should be affirmed because the gearshift lever and knob were not defective when they left the manufacturer, and Ford could not reasonably be held liable, after thirteen years, for injuries caused by the deterioration of the knob.³⁰³ The appellate court noted that thirteen years was a considerable length of time for a manufacturer to remain responsible for the design of its product.³⁰⁴ Nevertheless, the court found that a jury could reasonably infer that the age of the knob was merely coincidental with its failure, and that the knob would have shattered similarly had the accident occurred earlier in the life of the car.³⁰⁵

In reversing the lower court and entering judgment for the plaintiff, the appellate court issued what is perhaps the opinion's most enduring language: "*The important inquiry is not how long the knob lasted but what caused its failure. Mere passage of time should not excuse Ford if its negligence was the cause.*"³⁰⁶ This language illustrates that the passage of time does not affect all potential products liability claims equally. The passage of time seems to have supported the manufacturer's position that no manufacturing defect existed; however, the passage of time did not preclude a reasonable finding that the product contained a design defect.

If an analogy is made between the facts of *Mickle* and those of a typical general aviation accident, it becomes evident that the justification cited by proponents of the 1994 Act for the fairness of a general aviation statute of repose is based on a misguided presumption regarding products liability law. The passage of time does not, as supporters of the legislation insist, affect all products liability actions equally. Despite what Congressman Synar may believe, the 1994 Act did not strike a balance between manufacturers and consumers of general aviation aircraft. Instead, by mandating a uniform eighteen-year statute of repose, the 1994 Act will prevent many general aviation accident victims from recovering damages from manufacturers whose aircraft are defectively designed.

301 *Id.*

302 *Id.* The black 1950 knobs never developed such cracks because the agent used to produce their black color, carbon, was highly resistant to ultraviolet rays. *Id.*

303 *Id.* at 188-89.

304 *Id.* at 190.

305 *Id.*

306 *Id.* (emphasis added).

The statute of repose contained in the 1994 Act not only leaves many legitimate products liability claimants without legal recourse, but also fails to provide the general aviation industry with a realistic "cure" for its crisis. The statute's extremely narrow focus, limited to general aviation aircraft and component parts over eighteen years old,³⁰⁷ will, in all likelihood, prevent it from adequately protecting general aviation manufacturers from illegitimate products liability lawsuits. If, as GAMA argues, large products liability judgments and litigation defense costs are the cause of the industry's decline,³⁰⁸ then what is going to protect manufacturers from the 80,000 to 100,000 general aviation aircraft that are too young to be affected by the statute of repose? Furthermore, if and when manufacturers like Cessna begin manufacturing thousands of new aircraft each year, what will protect manufacturers against the eighteen years of liability attached to each new aircraft? Finally, how will the industry respond when state courts and juries look beyond the "deep pocket" aircraft manufacturer and find the "deep pocket" engine manufacturer, or other component part manufacturer, whose products are found on virtually every general aviation aircraft old enough to be affected by the 1994 Act? With a rolling statute of repose that applies to new replacement parts, sympathetic juries will still have a scapegoat. Cases such as *Datskow*³⁰⁹—where despite NTSB findings of no defect, the jury awarded the largest products liability judgment in the history of general aviation against the manufacturer of the aircraft's rebuilt engine—will continue unabated.

Because Congress chose tort reform (as opposed to regulatory reform as this Note proposes) as the means by which to provide relief to the general aviation industry, the narrow focus of the 1994 Act will create a need for broader tort reform legislation. As one source emphasized at the Washington D.C.-based Legislative Action branch of the Aircraft Owners and Pilots Association, the recent statute of repose is "not a panacea."³¹⁰ Other supporters of general aviation aircraft manufacturers share such feelings and nervously await future battles over broader legislation. After passage of the 1994 Act, GAMA admitted that while it supports broader tort reform legislation, the narrower measure "was all we could get."³¹¹ Congressional opposition to broader tort reform legislation may be dwindling, however, as the Republicans take control of both houses of Congress for the first time

³⁰⁷ See *supra* note 151 and accompanying text.

³⁰⁸ See GAMA, *supra* note 2, at 4.

³⁰⁹ 826 F. Supp. 677 (W.D.N.Y. 1993). For discussion of *Datskow*, see *supra* notes 63-67 and accompanying text.

³¹⁰ Telephone Interview with AOPA Legislative Action representative who wished to remain anonymous (Nov. 10, 1994).

³¹¹ Snyder, *supra* note 285.

in forty years.³¹² With fewer opponents in Congress and a “constructively” revitalized industry realizing its need for further protection, broader tort reform legislation like Senator Kassebaum’s ill-fated Senate Bill 67 may soon be introduced into Congress as the “second step” necessary to save the general aviation industry.³¹³

3. *Criticisms of Senate Bill 67*

General aviation manufacturers and their congressional allies will soon likely be supporting broader tort reform legislation. Extensive revisions to substantive law, such as those proposed by Senate Bill 67, will likely become the focus of their campaign. Such revisions, however, would provide general aviation manufacturers with an even greater advantage over legitimate products liability claimants than the 1994 Act. With respect to actions seeking damages for harm caused by a defective aircraft or component part, the proposed legislation would establish a uniform federal standard of liability. This standard would supersede the law of each of the fifty states and would essentially create a separate chapter of products liability law applicable only to lawsuits involving general aviation accidents.³¹⁴ Unlike the eighteen-year statute of repose, this “special” products liability law would apply uniformly to *all* general aviation accident lawsuits, whether involving a thirty year-old Cessna 182, or a Beech Starship fresh from its manufacturer.

Based on yet another misguided assumption regarding products liability law, the justification put forth in support of Senate Bill 67 illustrates how ill-suited the bill is to deal with the crisis it seeks to remedy. Like the statute of repose, Senate Bill 67 ignores the primary question of whether or not an aircraft was in fact defective in its design, and instead focuses on curtailing products liability lawsuits, regardless of whether plaintiffs’ claims are legitimate or not. According to the drafters of Senate Bill 67, “the increase in the number of liability claims and the size of awards and settlements, and the excessive time and expense devoted to the resolution of such claims, impose a substantial economic burden on general aviation manufacturers and their dealers.”³¹⁵ This statement may very well be true. However, as the drafters of the new Restatement of Products Liability emphasize in the comments to Tentative Draft 1, the negative effect liability may have on an industry’s economic health does not provide an adequate justification for rewriting products liability law unreasonably in favor

³¹² See Horak, *supra* note 146 (indicating that “[m]ostly Democrats opposed Senate Bill 67 in the past”).

³¹³ See Lewis, *supra* note 191, at 1.

³¹⁴ S. 67, *supra* note 162, § 4.

³¹⁵ *Id.* § 2(5).

of manufacturers. Rather, standards of liability should be based on “whether a product is reasonably designed.”³¹⁶

Another shortcoming of Senate Bill 67 is the failure of its primary liability standard to distinguish between manufacturing and design defects. Section 5(b)(1) of Senator Kassebaum’s bill would allow a person to recover against a manufacturer if “the product, when it left the control of the manufacturer, was *in a defective condition unreasonably dangerous* for its intended purpose, according to engineering and manufacturing practices which were reasonably feasible.”³¹⁷ The italicized phrase is taken verbatim from section 402A of the Restatement (Second) of Torts.³¹⁸ Tentative Draft 1 of the new Restatement, however, acknowledges that section 402A was originally drafted to deal

³¹⁶ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. d. Whether a product is reasonably designed depends on whether it measures up to predetermined design standards. *See, e.g., O’Brien v. Muskin Corp.*, 463 A.2d 298, 304 (N.J. 1983) (“Implicit in the term ‘defect’ is a comparison of the product with a standard of evaluation; something can be defective only if it fails to measure up to that standard.”). If the product meets such standards, a plaintiff should be precluded from bringing a lawsuit—this is the effect federal preemption would have on the federal air regulations. If, on the other hand, a manufacturer did not meet the required design standards, or represented that it did when in reality it did not, then an accident victim should be allowed to proceed with his or her action. In the first instance, the general aviation industry will be protected from the damaging effects of *illegitimate* products liability lawsuits. These are, after all, the types of lawsuits the industry complains about. In the second case, an injured plaintiff will be able to recover from a manufacturer whose product was *legitimately* defective. This is the type of situation ATLA argues must be preserved. The essential point of this Note is that only if Congress introduces federal preemption into the products liability system as it applies to the general aviation industry will the system be truly “balanced” with respect to manufacturers and consumers. Without the implementation of such a system, the extensive framework of federal design standards will never be utilized in the manner it was intended—or updated if found to be lacking. Without such a system, the risks of flying will never be spread equitably between those who manufacture the aircraft and those who fly them.

³¹⁷ S. 67, *supra* note 162, § 5(b)(1) (emphasis added). The full text of § 5(b)(1) reads as follows:

(b) Actions Against General Aviation Manufacturers.—

(1) Defective Condition.—Any person claiming damages for harm arising out of a general aviation accident may bring an action against a general aviation manufacturer of a product and may recover damages from such general aviation manufacturer if—

(A) the product, when it left the control of the manufacturer, was in a defective condition unreasonably dangerous for its intended purpose, according to engineering and manufacturing practices which were reasonably feasible;

(B) the defective condition is a proximate cause of the claimant’s harm; and

(C) the general aviation aircraft was being used at the time of the accident for a purpose and in a manner for which it was designed and manufactured.

Id.

³¹⁸ *See* RESTATEMENT 2D, *supra* note 77, § 402A(1).

only with manufacturing defects.³¹⁹ If Senate Bill 67 were passed, it would thrust upon each state an outdated standard of liability which fails to take into account that "the rule developed for manufacturing defects is inappropriate for the resolution of claims of defective design."³²⁰

More significant, however, than the bill's misguided justification or its failure to recognize the distinction between manufacturing and design defects, is the overwhelming bias it would provide to manufacturers in lawsuits involving general aviation accidents. The nature and extent of such bias would depend on whether the plaintiff's claim was based on a manufacturing defect, or a defect in the product's design. With respect to manufacturing defects, pro-manufacturer prejudice would occur simply as a result of the bill's appropriation of the outdated language of section 402A. In *Cronin v. J.B.E. Olson Corp.*,³²¹ the California Supreme Court rejected section 402A's requirement that a product defect must be "unreasonably dangerous" to the consumer in order to invoke strict liability.³²² Concerned that the requirement "rings of negligence,"³²³ the court held that the showing of a defect that proximately caused injury is sufficient to justify application of strict liability.³²⁴ While the draft of the new Restatement does not follow *Cronin* with respect to liability for products that are defectively designed or sold without adequate warnings or instructions,³²⁵ it does follow *Cronin* with respect to claims for manufacturing defects.³²⁶

³¹⁹ TENTATIVE DRAFT 1, *supra* note 1, § 1 cmt. a; *see also* Henderson & Twerski, *supra* note 80, at 1526 & n.7 (citing WILLIAM L. PROSSER, HANDBOOK OF THE LAW OF TORTS § 96 (3d ed. 1964)).

³²⁰ TENTATIVE DRAFT 1, *supra* note 1, § 1 cmt. a.

³²¹ 501 P.2d 1153 (Cal. 1972).

³²² *Id.* at 1163.

³²³ *Id.* at 1162.

³²⁴ *Id.* at 1163.

³²⁵ Although § 2 of Tentative Draft 1 slightly alters the 402A language "in a defective condition unreasonably dangerous," it retains the "ring of negligence" the *Cronin* court attempted to avoid. For example, § 2(b) of the new draft outlines the liability standard for design defects and provides that a product is defective in design if the omission of a reasonable alternative design rendered the product "not reasonably safe." TENTATIVE DRAFT 1, *supra* note 1, § 2(b).

³²⁶ The *Cronin* court applied its formulation to "the full range of products liability situations, including those involving design defects." 501 P.2d at 1162. According to the court, a distinction between manufacturing and design defects was "not tenable." *Id.* at 1163. Tentative Draft 1, however, reaches exactly the opposite conclusion: "In general the rationale offered for imposing strict liability for harm caused by manufacturing defects do not apply in the context of imposing liability for defective design and defects based on inadequate instruction or warning." TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. a. As a result of such reasoning, Tentative Draft 1's liability standard for manufacturing defects is devoid of any language that might be interpreted by a court to require an application of negligence principles: "A product contains a manufacturing defect when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product." *Id.* § 2(a).

Under the direction of Tentative Draft 1, a plaintiff bringing a manufacturing defect claim merely “bears the burden of establishing that such a defect existed in the product when it left the hands of the manufacturer.”³²⁷ Unlike the Restatement (Second) of Torts, the draft of the new Restatement does not require a plaintiff to prove that a defectively manufactured product is “unreasonably dangerous.” By retaining such language, therefore, Senate Bill 67 could subject a plaintiff seeking recovery for a manufacturing defect to a “bifurcated standard” of proof.³²⁸ Such a standard—having to convince the finder of fact that “the product is, first, defective and, second, unreasonably dangerous”—is, by definition, more difficult for plaintiffs to meet than the unitary standard contained in Tentative Draft 1.³²⁹ Senate Bill 67 would thus provide manufacturers with an unfair advantage over plaintiffs bringing manufacturing defect claims.

The proposed liability standard in Senate Bill 67 would also give manufacturers an unfair advantage over products liability claimants bringing actions for defective design. This advantage would come not as a result of borrowing language directly from section 402A, but rather from adding to such language outdated products liability doctrine. For example, by inserting the caveat “according to engineering and manufacturing practices which were reasonably feasible,”³³⁰ Senator Kassebaum introduced into the bill’s uniform standards of liability a requirement that some commentators refer to as “state of the art.”³³¹

An “overwhelming majority” of the jurisdictions that have adopted section 402A of the Restatement (Second) of Torts admit state-of-the-art evidence in design defect cases.³³² Some states admit such evidence as a measure of consumer expectations.³³³ Other states

³²⁷ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. b.

³²⁸ *Cronin*, 501 P.2d at 1162.

³²⁹ *Id.*

³³⁰ S. 67, *supra* note 162, § 5(b)(1).

³³¹ See, e.g., Wells, *supra* note 8, at 909. For a general discussion of state-of-the-art evidence in products liability cases, see Gary C. Robb, *A Practical Approach to Use of State of the Art Evidence in Strict Products Liability Cases*, 77 Nw. U. L. REV. 1 (1982). According to Robb, state of the art is meant to define the level of scientific knowledge and technological expertise associated with a given product at the time of the design and manufacture of the product. *Id.* at 5. Robb is also of the opinion that state of the art should not to be confused with the customs of an industry, which may at any given time lag behind the technological development associated with a product. *Id.* at 4-5. But see Jerry J. Phillips, *The Standard for Determining Defectiveness in Products Liability*, 46 U. CIN. L. REV. 101, 115 n.71 (1977) (“State of the art refers to customary practice in the industry . . .”).

³³² HENDERSON & TWERSKI, *supra* note 74, at 620. State-of-the-art evidence is never relevant in lawsuits alleging manufacturing defects because state-of-the-art technology has no bearing on the issue of whether a product measures up to its manufacturer’s own standards of production. See Robb, *supra* note 331, at 10-11.

³³³ See Robb, *supra* note 331, at 11 (citing *Bruce v. Martin-Marietta Corp.*, 544 F.2d 442, 447 (10th Cir. 1976)). In *Bruce*, 32 of the 40 passengers aboard a Martin 404 were killed when, after a successful crash landing, seats which had broken loose from the floor

admit state-of-the-art evidence as part of a risk-utility test.³³⁴ Several states have even enacted statutes that provide for state-of-the-art defenses.³³⁵ The salient point, however, is that "state-of-the-art" has been variously defined by a multitude of courts.³³⁶ Some courts define "state of the art" as industry custom or practice.³³⁷ Other courts define the phrase as the most advanced technology available that has been generally adopted for a particular use.³³⁸ Professors Henderson and Twerski probably view the phrase as a buzzword, a doctrinal term that impedes a rational analysis of the underlying issues.³³⁹

Regardless of whether the phrase "state of the art" is employed, a manufacturer being sued for selling a defectively designed product would prefer that evidence suggesting the feasibility of a suggested design alternative be measured against industry custom or practice.³⁴⁰ As Judge Learned Hand stated in the famous case, *The T.J. Hooper*.³⁴¹

[A] whole calling may have unduly lagged in the adoption of new and available devices. [The industry] never may set its own tests,

blocked the exit and prevented escape from the ensuing fire. 544 F.2d at 444. The Tenth Circuit upheld summary judgement in favor of the manufacturer. *Id.* at 448. Of principle weight in the court's decision was the fact that the plaintiffs did not show that an "ordinary consumer would expect a plane made in 1952 to have the safety features of one made in 1970." *Id.* at 447. State-of-the-art evidence was essential to the determination of what an ordinary consumer would expect. *Id.* See *supra* note 109 and accompanying text for a discussion of the rejection by Tentative Draft 1 of the use of a consumer expectations test as an independent standard for judging the defectiveness of product designs. The draft encourages courts to adopt a risk-utility balancing approach in which consumer expectations are one factor, among many, to be considered. See TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. e.

³³⁴ See, e.g., *McLaughlin v. Sikorsky Aircraft*, 195 Cal. Rptr. 764, 767 (Cal. Ct. App. 1983) (holding there was no error in admitting state-of-the-art evidence to show the feasibility and cost of alternative designs).

³³⁵ HENDERSON & TWERSKI, *supra* note 74, at 621; Robb, *supra* note 331, at 11-12. Statutes cited by both sources include: ARIZ. REV. STAT. ANN. § 12-683(1) (West 1992) (listing state of the art as an affirmative defense to defendants accused of inadequate design or fabrication); KY. REV. STAT. ANN. § 411.310(2) (Baldwin 1994) (rebuttable presumption that a product is not defective if its "design, methods of manufacture, and testing" conformed to the "state of the art").

³³⁶ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. c(3) reporters' note.

³³⁷ See, e.g., *Sturm, Ruger & Co. v. Day*, 594 P.2d 38, 44 (Ala. 1979) ("Generally speaking, 'state of the art' refers to customary practice in the industry.")

³³⁸ See, e.g., *Heath v. Sears, Roebuck & Co.*, 464 A.2d 288, 298 (N.H. 1983) ("It has long been recognized that because entire industries may lag behind in the development of safer and technologically feasible alternatives, 'custom and usage' is an unsound standard of liability.")

³³⁹ Henderson & Twerski, *supra* note 80, at 1546.

³⁴⁰ Recall that according to Tentative Draft 1, "a product is defective in design if the omission of a reasonable alternative design renders the product not reasonably safe." TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. d. A plaintiff is not required to produce a "prototype" of a reasonable alternative design in order to make out a prima facie case. Qualified expert testimony will suffice "if it reasonably supports the conclusion that a reasonable alternative design could have been adopted at the time of sale." *Id.* cmt. c.

³⁴¹ 60 F.2d 737 (1932).

however persuasive be its usages. Courts must in the end say what is required; *there are precautions so imperative that even their universal disregard will not excuse their omission.*³⁴²

The design standards employed by the manufacturers of any given industry, therefore, may routinely be lower than those technologically feasible. Allowing an industry to set its own standards as to whether a suggested alternative design is reasonably feasible may thus be extremely biased against plaintiffs in design defect cases.

By requiring that the defectiveness of the product in question be measured "according to engineering and manufacturing practices which were reasonably feasible,"³⁴³ Senate Bill 67 could work to hold general aviation manufacturers to a lower standard of liability in products liability actions. The language certainly suggests the lower standard of "industry custom or practice" when compared to the language of other products liability statutes defining state-of-the-art: "state of scientific and technological knowledge available to the manufacturer . . . at the time the product was placed on the market."³⁴⁴

Senate Bill 67 also appears to reserve for manufacturers a lower standard when compared to the language of Tentative Draft 1: "State of the art' refers to the safest technology developed and in commercial use at a given time."³⁴⁵ When discussing the difficulty a plaintiff may have in proving that a manufacturer could have adopted a reasonable alternative design, Tentative Draft 1 declares that "compliance with state of the art does not preclude a finding that a safer alternative was practically feasible."³⁴⁶ Such a standard presents a considerably less biased alternative than Senate Bill 67's so called state-of-the-art standard, which one commentator argues would provide general aviation manufacturers with an absolute defense in products liability lawsuits.³⁴⁷

The language in Senate Bill 67 would bestow upon manufacturers yet another unfair advantage over products liability claimants bringing actions for defective design. The third element of Senate Bill 67's primary liability standard requires a plaintiff to prove that "the general aviation aircraft was being used at the time of the accident for a purpose and in a manner for which it was designed and manufac-

³⁴² *Id.* at 740 (emphasis added).

³⁴³ S. 67, *supra* note 162, § 5(b)(1)(A).

³⁴⁴ ARK. CODE ANN. § 16-116-104(a)(1) (Michie 1987).

³⁴⁵ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. c.

³⁴⁶ *Id.* Recall that under Tentative Draft 1's proposed risk-utility balancing test, conformity of a product design to state of the art technology is one factor that a court will take into account when considering whether a manufacturer should have adopted a suggested alternative design. *Id.* See *supra* note 109 for a nonexhaustive list of factors that may be considered when determining whether an alternative design is reasonable and whether its omission rendered a product "not reasonably safe."

³⁴⁷ See Wells, *supra* note 8, at 909.

tured."³⁴⁸ By inserting this additional caveat into the language borrowed from section 402A, Senator Kassebaum introduced into the bill's primary standard of liability a requirement known as "intended use."³⁴⁹

In order to be fair, most courts will not hold a manufacturer liable for injuries a consumer suffered as a result of using a product in an unforeseeable or unreasonable manner.³⁵⁰ For example, the manufacturer of an aircraft is not liable for the destruction of the aircraft when such destruction resulted from the pilot's failure to do a pre-flight check of the aircraft and his attempt to take off with the aircraft's gust locks still in place.³⁵¹ The same reasoning would apply to prevent the user of a knife from suing its manufacturer because the user employed the knife as a toothpick and was subsequently injured.³⁵²

In order to adopt a reasonable product design, however, manufacturers must foresee and guard against a certain amount of foreseeable, albeit foolish, behavior on the part of consumers.³⁵³ For example, in *Larsen v. General Motors Corp.*,³⁵⁴ a manufacturer claimed that it had no duty to design a car to be safer in the event of a collision, especially when such a collision was the fault of the driver.³⁵⁵ The Eighth Circuit disagreed. The court reasoned that whether or not it is the fault of the driver, a collision is foreseeable from the point of view of an automobile manufacturer.³⁵⁶ As a result, the court explicitly rejected the narrow intended use rule urged by the manufacturer—that an automobile crash is foreseeable, but definitely not intended.³⁵⁷

Much like auto accidents, general aviation accidents are foreseeable, and even inevitable, from a manufacturer's point of view.³⁵⁸ But

³⁴⁸ S. 67, *supra* note 162, § 5(b)(1)(C).

³⁴⁹ See, e.g., Wells, *supra* note 8, at 910-11. As was the case with the phrase "state of the art," professors Henderson and Twerski would probably view "intended use" as a buzzword, a doctrinal term that impedes a rational analysis of the underlying issues. See HENDERSON & TWERSKI, *supra* note 74, at 669-70.

³⁵⁰ TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. 1(1) reporters' note.

³⁵¹ *Kroon v. Beech Aircraft Corp.*, 465 F. Supp. 1223, 1225 (M.D. Fla. 1979). Gust locks are used when a plane is tied down in order to stabilize the plane's aileron and elevator. *Id.*; see also *Kay v. Cessna Aircraft Co.*, 548 F.2d 1370, 1372-73 (9th Cir. 1977) (holding that decedent's failure to realize that rear engine had ceased prior to take-off, despite warnings in pre-flight checklist, was not a reasonably foreseeable harm from the manufacturer's standpoint).

³⁵² See *General Motors Corp. v. Hopkins*, 548 S.W.2d 344, 349 (Tex. 1977).

³⁵³ HENDERSON & TWERSKI, *supra* note 74, at 669.

³⁵⁴ 391 F.2d 495 (8th Cir. 1968).

³⁵⁵ *Id.* at 496.

³⁵⁶ *Id.* at 502.

³⁵⁷ *Id.* at 501-02.

³⁵⁸ See *Larsen v. General Motors Corp.*, 391 F.2d 495, 502 (8th Cir. 1968).

as the *Larsen* court determined nearly thirty years ago, manufacturers should not be allowed to escape liability for a defectively designed product by asserting that they did not intend for it to be involved in an accident. The intended use language of Senate Bill 67, however, could allow general aviation manufacturers to do just that.³⁵⁹ Not only would such a result be unfair to defective design plaintiffs, but it would be in direct opposition to the mandate of section 2(b) of Tentative Draft 1, which provides that manufacturers are liable for “foreseeable risks of harm” that could have been reduced by the use of a reasonable alternative design.³⁶⁰ Senate Bill 67, in other words, could reserve for manufacturers a narrower standard of liability than that required by general products liability law.

4. *Finding an Efficient Solution to the General Aviation Crisis*

Congressional consideration and adoption of tort reform legislation on behalf of the general aviation industry has, at the very least, clarified the two distinct interests involved in the general aviation crisis. ATLA wants to preserve products liability as a means of ensuring safety in the general aviation industry.³⁶¹ Its main complaint is that defectively designed planes are getting off the ground, crashing, and often killing the passengers within them. As plaintiffs’ attorneys, members of ATLA want to make sure that clients who are injured because of a defectively designed plane have a means of being compensated. Ostensibly, ATLA represents the interests of public health and safety.³⁶²

GAMA, on the other hand, is possessed with the singular desire of saving the general aviation industry. As is evident from the federal legislation it has sponsored over the past eight years, manufacturers of general aviation aircraft believe that tort reform is the only solution to their industry’s problems. GAMA’s main complaint is that federal air safety regulations and state tort law are leading manufacturers in different directions, ultimately leaving them without security and vulner-

³⁵⁹ In other words, aircraft crashes, under the proposed standard, could be viewed as producing harm that was not intended, rather than harm that was clearly foreseeable.

³⁶⁰ TENTATIVE DRAFT 1, *supra* note 1, § 2(b). The new draft of the restatement provides that liability will not attach in a defective design action unless “the seller or a predecessor in the chain of distribution knew or should have known of the risks of harm or the risk avoidance measures.” *Id.* cmt. i.

³⁶¹ The author is well aware that as trial lawyers, members of ATLA arguably have other, less altruistic motivations behind lobbying against tort reform legislation—namely, their pocketbooks. As an attorney-to-be, however, the author respectfully leaves such arguments for those more inclined to “lawyer-bashing.”

³⁶² Because of ATLA’s typical alignment with the injured party bringing suit, this analysis will refer to its position as the consumer interest.

able to products liability lawsuits. GAMA and its members represent the interests of economic and industrial health.³⁶³

Each of these substantial and competing interests have compelling arguments as to why the U.S. general aviation industry has degenerated to its present state. The purpose of this Note is not to suggest which of these causal arguments is correct, but rather to propose an efficient solution that addresses both the consumer interest and the manufacturer interest. Essential to this purpose is the fact that these two competing interests share a common objective. Oddly enough, this common objective was emphasized by a plaintiffs' attorney shortly after his client was awarded the largest products liability judgment in aviation history. According to Arthur Alan Wolk, the plaintiff's attorney in *Datskow*,³⁶⁴ "If you prevent the accident, there is no lawsuit, and the product liability problem, as you call it, goes away."³⁶⁵ Preventing accidents—not lawsuits—is the one objective shared by both sides of the general aviation crisis. It is the one objective which, if met, would ostensibly satisfy both the consumer interest and the manufacturer interest.

Laws can do little to prevent accidents caused by pilot error.³⁶⁶ Laws can, however, have a marked effect on preventing accidents caused by defectively designed aircraft.³⁶⁷ It is ironic, therefore, that neither the 1994 Act nor Senate Bill 67 will prevent small airplanes from crashing as a result of defects in their design. Regardless of the 1994 Act's new statute of repose, every potentially fatal, but as yet undetected, design defect on any general aviation aircraft in the United States will still be there tomorrow. In fact, each such fatal defect will remain on its respective aircraft until it causes the aircraft, along with

³⁶³ Because of GAMA's typical alignment with the defendant in a general aviation lawsuit, this analysis will refer to its position as the manufacturer interest.

³⁶⁴ 826 F. Supp. 677 (W.D.N.Y. 1993).

³⁶⁵ Wolk, *supra* note 62, at 119.

³⁶⁶ Regulations concerning the training and certification of pilots may, if strictly enforced, drastically reduce the incidence of such accidents. This is a separate issue indeed worthy of independent exploration. The fact that, according to the NTSB, design and manufacturing defects are the cause of only 1% of all general aviation accidents, has been largely ignored by courts and juries. See H.R. REP. NO. 525(I), *supra* note 6, at 3, reprinted in 1994 U.S.C.C.A.N. at 1640. Accidents of this nature—or perhaps more accurately, *allegedly* of this nature—are the focus of this Note.

³⁶⁷ If aircraft manufacturers have predetermined federal design standards to follow, and such standards have preemptive effect over nonidentical state standards, compliance with such standards will greatly reduce (if not eliminate) the occurrence of accidents caused by design defects. If determinations of compliance are given the weight of law, as this Note suggests, injured plaintiffs and the families of individuals killed in general aviation accidents will not be able to sue the aircraft's manufacturer for defectively designing the plane if the manufacturer complied with federal design standards. While insurance might provide compensation for such individuals, no longer will they be able to gamble that a sympathetic jury might find a defect in the plane's design.

its pilot and passengers, to go down.³⁶⁸ When this happens, the survivors and families of those killed in certain aircraft accidents will be able to obtain compensation from those responsible for the defect that caused the accident. Many others, however, will be left without legal recourse. Such arbitrary treatment will not result from anything the pilots or passengers did, or, for that matter, anything the manufacturer did. The reason for such arbitrary treatment, as someone will inevitably have to explain to those who are denied an opportunity to recover damages, is simply the age of the aircraft involved. This is the “balance” Congress struck when it passed the 1994 Act.³⁶⁹

In the real world, while a statute of repose or uniform federal liability standards may curtail some illegitimate lawsuits, neither form of legislation will solve the problem regarding which design safety standards manufacturers should follow. As a result, neither form of legislation will provide general aviation aircraft manufacturers with incentives to build safer airplanes. Why should a manufacturer spend time and money to meet every federal design standard when compliance with such standards is often ignored by juries?³⁷⁰ By simply shielding manufacturers from liability, such legislation fails to address the one common objective both sides of the general aviation crisis support—the prevention of accidents. This critical shortcoming renders both the 1994 Act and Senate Bill 67 inefficient as means of solving the general aviation crisis.

B. A Proposed Solution: Regulatory Reform

1. *First Step: Amending the Federal Aviation Act to Include an Express Preemption Clause*

Although general aviation is one of the most heavily regulated industries in the United States, neither its manufacturers nor its consumers currently receive the potential benefits afforded by federal regulation. The *Cleveland* and *Datskow* cases illustrate that it is often impossible to reconcile jury verdicts with the regulations promulgated by the FAA and the findings of other federal agencies such as the

³⁶⁸ The author uses the term “fatal” to distinguish between design defects which by themselves have the potential of causing accidents, such as an inadequately designed fuel line, and design defects which will not, in and of themselves, cause an aircraft to crash, such as inadequately designed seats or seatbelts. The latter type of design defect may expose a manufacturer to liability for “increased harm” to a pilot or passenger involved in an accident. In contrast to “fatal” design defects, however, incidence of such harm is dependant upon a non-defect-related crash (i.e., an accident resulting from pilot error). See, e.g., TENTATIVE DRAFT 1, *supra* note 1, § 6 (titled “Defect-Related Increases in Harm”).

³⁶⁹ See *supra* text accompanying notes 283-84.

³⁷⁰ See, e.g., *Wilson v. Piper Aircraft Corp.*, 577 P.2d 1322, 1325 (Or. 1978) (stating that compliance with statutory or administrative safety standards is not conclusive on the question of tort liability).

NTSB. One commentator, who is convinced that juries often ignore "scientific reality" when arriving at verdicts in general aviation lawsuits, explains the predicament created by such an inconsistent regulatory environment as follows:

[General aviation aircraft manufacturers] invest enormous sums in an effort to design and manufacture new and better products and to comply with the directives, regulations, and objectives of the executive branch of government, only to be told, after the fact, by lawyers and judges, and occasionally by juries, that despite best efforts and faithful compliance, their products were poorly designed and dangerous and their behavior so inappropriate that punitive damages, in the millions of dollars, can be awarded against them.³⁷¹

With the executive branch mandating one standard and the judicial branch creating numerous others, it is not surprising that the general aviation industry is on the verge of collapse. What is surprising is that juries are allowed to flagrantly disregard the extensive regulatory scheme mandated by Congress.

Greater certainty as to which safety standards general aviation manufacturers are required to follow would obviously benefit the industry as a whole. Manufacturers would be able to concentrate on meeting one set of design standards and feel confident that their good faith compliance with such standards meant that their aircraft, by definition, did not contain design defects that would later come back to haunt them. Greater certainty with respect to design standards would also ultimately benefit the consumers of general aviation aircraft. Not only would exclusive use of the federal safety standards require federal agencies to bring those standards up-to-date, but it would also ensure that every aircraft consumer in the country benefits from technological improvements that facilitate increased safety standards.³⁷²

Assuming that FAA scientists, engineers, and test pilots are better qualified than juries to determine whether the design of a particular aircraft is safe, it seems reasonable to allow their word to govern when the design of an aircraft is questioned. Amending the Federal Aviation Act to include an express preemption clause governing general air safety would achieve such a result. The Supreme Court's opinion in *Cipollone* is instructive in this regard because it illustrates the meth-

³⁷¹ Martin, *supra* note 3, at 490.

³⁷² Under the current system, a higher design standard applied in California courts will not help a consumer who is injured in an aircraft crash in New York. The existence and enforcement of different standards in each of the 50 states not only induces forum shopping but also keeps higher standards in one state from (a) influencing manufacturers in another state to change their designs, and (b) benefiting plaintiffs who happen to crash their aircraft in different jurisdictions mandating lower standards of safety.

odology a modern court would use when deciding an issue of federal preemption.³⁷³

In *Cleveland*, the *Cipollone* methodology was applied to the Federal Aviation Act. Although most general aviation manufacturers might look at *Cleveland* negatively—i.e., as an example of why a particular defense will not immunize them from liability—the decision should be viewed as a beacon of hope—i.e., as a roadmap of how manufacturers could use their compliance with the Federal Aviation Act's safety standards to immunize them from products liability lawsuits.

As discussed in Part I.D.3. of this Note, the *Cleveland* court reviewed a line of cases holding that the NTMVSA³⁷⁴ and its corresponding regulations preempt products liability actions alleging that a manufacturer defectively designed an automobile because it failed to equip the automobile with an airbag.³⁷⁵ Shortly after distinguishing the cases, the court emphasized the differences between the Federal Aviation Act and the NTMVSA:

[W]hile there are, without question, similarities between the NTMVSA and the Federal Aviation Act, there are also key differences. Like the Act in question here, the NTMVSA contains a savings clause preserving state tort remedies. Similarly, the NTMVSA authorizes the regulatory agency to issue only minimum standards. *However, unlike the Federal Aviation Act, the NTMVSA contains an express preemption provision governing safety. This provision forbids any state-established "safety standard . . . which is not identical to the Federal standard." . . . In this case, however, the Federal Aviation Act contains no express preemption provision governing safety.*³⁷⁶

Inadvertently, however, by distinguishing the NTMVSA from the Federal Aviation Act, the *Cleveland* court described the one tool general aviation manufacturers might be able to use to immunize themselves from products liability lawsuits—namely, an express preemption provision governing safety like that found in the NTMVSA.³⁷⁷

³⁷³ For an overview of the Court's holding in *Cipollone* and a description of the methodology it employed to resolve an issue of federal preemption, see *supra* part I.D.2.

³⁷⁴ 15 U.S.C. §§ 1381-1431 (1988).

³⁷⁵ *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1446 (10th Cir.), *cert. denied*, 114 S. Ct. 291 (1993).

³⁷⁶ *Id.* at 1447 (quoting 15 U.S.C. § 1397(k) (1988)) (citations omitted) (emphasis added).

³⁷⁷ The NTMVSA's preemption clause reads:

Whenever a Federal motor vehicle safety standard established under this subchapter is in effect, no State or political subdivision of a State shall have any authority either to establish, or to continue in effect, with respect to any motor vehicle or item of motor vehicle equipment any safety standard applicable to the same aspect of performance of such vehicle or item of equipment which is not identical to the Federal standard. Nothing in this section shall be construed as preventing any State from enforcing any safety standard which is identical to a Federal safety standard. Nothing in this section shall be construed to prevent the Federal Government or the government

The type of preemption scheme included by Congress in the NTMVA permits a state to regulate any aspect of the product not regulated by the federal government. A state may not, however, create a nonidentical standard which would apply to any aspect of the product actually regulated by the federal government.³⁷⁸ In this manner, "Congress has balanced the public safety interest, protected by [the federal] standards, with the needs of a nationwide manufacturing industry for predictability and uniformity of safety requirements for [the] manufacture and design of its products."³⁷⁹ Unlike the general aviation tort reform legislation, this preemption provision allowed Congress to satisfy the interests of both automobile manufacturers and automobile consumers.

While worded somewhat differently, the Federal Aviation Act's preemption clause governing rates and routes of commercial air carriers was enacted to achieve the same goals of uniformity and predictability.³⁸⁰ Specifically, section 1305(a)(1) was intended to "prevent conflicts and inconsistent regulations."³⁸¹ The House of Representatives observed that in the absence of such a provision, federal and state authorities had required passengers traveling between two cities to pay different fares depending on whether they were flying interstate or intrastate.³⁸²

Today, Congress has found similar problems with the system for determining liability for individuals injured in general aviation accidents:

[A]lthough the incidence of injuries to passengers in general aviation accidents has decreased, the number of general aviation accident liability claims against general aviation aircraft manufacturers and the amount of damages sought in such claims is increasing at

of any State or political subdivision thereof from establishing a safety requirement applicable to motor vehicles or motor vehicle equipment procured for its own use if such requirement imposes a higher standard of performance than that required to comply with the otherwise applicable Federal standard.

15 U.S.C.A. § 1392(d) (1988).

³⁷⁸ Timothy Wilton & Richard P. Campbell, *Effect of Federal Safety Regulations on Crashworthiness Litigation*, 22 TORT & INS. L.J. 554, 561 (1987).

³⁷⁹ *Id.* at 561.

³⁸⁰ The full text of section 1305(a)(1) of the Federal Aviation Act reads:

Except as provided in paragraph (2) of this subsection, no State or political subdivision thereof and no interstate agency or other political agency of two or more States shall enact or enforce any law, rule, regulation, standard, or other provision having the force and effect of law relating to rates, routes, or services of any air carrier having authority under subchapter IV of this chapter to provide air transportation.

49 U.S.C. app. § 1305(a)(1) (1988).

³⁸¹ H.R. REP. NO. 1211, 95th Cong., 2d Sess. 16 (1978), *reprinted in* 1978 U.S.C.C.A.N. 3737, 3752.

³⁸² *Id.* at 15-16, *reprinted in* 1978 U.S.C.C.A.N. at 3751-52.

disproportionate rates, beyond any relationship to the quality of the aircraft manufactured and in use.³⁸³

Amending the Federal Aviation Act to include an express preemption clause governing the area of general air safety would, as similar actions did for the automotive and commercial airline industries, relieve both general aviation manufacturers and their consumers of the burdens caused by inconsistent federal and state regulation.

Borrowing language from both section 1305(a)(1) of the Federal Aviation Act and section 1392(d) of the NTMVSA, the following is an example of an amendment that could be made to the Federal Aviation Act to bestow preemptive effect upon the federal air safety standards promulgated under the authority of the Act:

Whenever a safety regulation of civil aeronautics, as established under subchapter VI of this Act, is in effect, no State or political subdivision thereof, no interstate agency or other political agency of two or more States, and no State or Federal court shall have any authority either to establish, or to continue in effect, with respect to any civil aircraft or item of civil aircraft appliance, any safety standard, law, court decree, common law, rule, regulation, or other provision having the force of law applicable to the same aspect of performance of such aircraft or item of appliance which is not identical to the Federal standard.

This type of express preemption clause would provide the "first step," in a two-step process, toward balancing the interests involved in the general aviation crisis. The effect of this first step would be to change the level of significance courts would require juries give to a manufacturer's compliance with the Federal Aviation Act's design safety standards.

2. *Effect of a Preemption Clause on the Act's Minimum Standards*

Congress originally designated the FARs promulgated under the Federal Aviation Act as minimum standards. Congress apparently made this designation because it "did not want to bar states from adopting additional or more stringent standards."³⁸⁴ Cases such as *Cleveland* and *Datskow*, along with the conflicts and inconsistencies they have created, prove that this is indeed what the states have done.³⁸⁵ While congressional intent to create minimum standards, as opposed to uniform standards, has been directed at other industries, seldom has it spawned such drastic economic consequences.³⁸⁶

³⁸³ S. 67, *supra* note 162, § 2(a)(2).

³⁸⁴ *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1445 (10th Cir.), *cert. denied*, 114 S. Ct. 291 (1993).

³⁸⁵ For a discussion of the *Cleveland* and *Datskow* cases, see *supra* part I.A.3.

³⁸⁶ See *Wilton & Campbell*, *supra* note 378, at 561 n.38 (citing *Hillsborough County v. Automated Medical Labs*, 471 U.S. 707, 722-23 (1985) (holding that in light of the federal

Because congressional intent is the touchstone of federal preemption, an express preemption clause governing general air safety would change the interpretation of the "minimum" designation given to the federal air safety regulations.³⁸⁷ Like the intent behind Congress' enactment of section 1305(a)(1) of the Federal Aviation Act and section 1392(d) of the NTMVSA, the congressional purpose in enacting an express preemption clause such as the one proposed in this Note would be to establish uniform requirements for the general aviation industry and to prohibit juries from holding manufacturers accountable to divergent standards.³⁸⁸

As a result of a new congressional mandate, states would no longer have the option to adopt additional or more stringent general aviation design standards. Instead, the FARs' minimum standards designation would be interpreted as allowing *manufacturers* to exceed the standards if they desired to do so.³⁸⁹ An example might be an aircraft manufacturer who, like the automobile manufacturer, Volvo, boasts of building planes safer than those of its competitors. Enhancement of safety standards by juries, on the other hand, would be precluded.

3. *Effect of a Preemption Clause on the Act's Savings Clause*

Adopting an express preemption clause such as the one proposed in this Note would also change courts' interpretation of the Federal Aviation Act's savings clause. As one commentator has asserted, "[t]he Supreme Court has repeatedly emphasized that savings clauses may not be applied literally so as to permit any state common law remedies, even those which conflict with the federal scheme."³⁹⁰ Instead, savings clauses should be read in conjunction with the rest of

interest to ensure compliance with minimum standards, county ordinances regulating the donation of blood plasma were not preempted by less stringent federal regulations under § 351 of the Public Health and Service Act); *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 144-53 (1963) (holding that, without an irreconcilable conflict between federal minimum standards and state standards or a congressional mandate of preemption, a California statute which gauged the maturity of avocados was not preempted by less stringent federal marketing orders issued by the Secretary of Agriculture)).

³⁸⁷ *Id.* at 561-62.

³⁸⁸ *Id.*

³⁸⁹ *Id.* at 562. See also *Cleveland*, 985 F.2d at 1445. The United States, which filed an amicus brief urging preemption in *Cleveland*, attempted to make this argument. The court, however, rejected it. See *id.*

³⁹⁰ *Wilton & Campbell*, *supra* note 378, at 565. According to Wilton and Campbell, the Supreme Court has refused to indulge in literal applications of savings clauses since as early as 1907. *Id.* at 565 n.61 (citing *Texas & Pac. Ry. v. Abilene Cotton Oil Co.*, 204 U.S. 426, 446 (1907) (holding that despite its savings clause, the Interstate Commerce Act preempted a state common law claim that conflicted with the federal regulatory scheme)). The Supreme Court revisited its holding in *Abilene Cotton Oil* 74 years later, and again rejected a plaintiff's argument that a state law cause of action could be brought against a shipper for behavior already approved by the Interstate Commerce Commission. *Id.* at 566

the legislation. Often, for example, such legislation will contain a preemption clause that indicates Congress' intent to regulate an area to the exclusion of the states. The only state common law actions that should be allowed to survive preemption under such circumstances are those that do not conflict with the objectives of the federal regulatory scheme.³⁹¹

The generally accepted rule on the interpretation of savings clauses was perhaps best stated in *International Paper v. Ouelette*,³⁹² where the Supreme Court reasoned that it did "not believe Congress intended to undermine this carefully drawn statute through a general savings clause."³⁹³ The Supreme Court quoted this language in *Morales* when it examined the Federal Aviation Act's Savings Clause.³⁹⁴ In the context of a challenge to state laws prohibiting deceptive advertising of air fares, the Court held that despite the Act's savings clause, the preemption provision of section 1305(a)(1) expressly preempted state truth-in-advertising laws.³⁹⁵ In other words, the Court limited the effect of the Federal Aviation Act's savings clause because it was superseded—in the area of rates and routes—by an express preemption clause.³⁹⁶

If the amendment proposed in this Note was enacted, the savings clause of the Federal Aviation Act would have to be read in conjunction with the express preemption provision governing general air safety.³⁹⁷ Products liability actions would be preempted only when they were premised on nonidentical state standards directed at the "same aspect of performance" as the federal air safety regulations. With the addition of the proposed preemption clause, therefore, states would still be free to regulate any aspect of general aircraft safety that is not covered by a federal standard.³⁹⁸ If no federal standard governed the strength of a propeller blade, for instance, states would be free to establish and enforce their own legal standards, through common law or statute, on that point.³⁹⁹ The preemption clause, however, would prohibit a jury from finding a manufacturer

n.61 (citing *Chicago & N.W. Transp. Co. v. Kalo Brick & Tile Co.*, 450 U.S. 311, 318, 331-32 (1981)).

³⁹¹ *Id.* at 565-66.

³⁹² 479 U.S. 481, 500 (1987) (holding that the Clean Water Act preempts state common law to the extent such law attempts to impose liability on a point source in another state).

³⁹³ *Id.* at 494.

³⁹⁴ *Morales v. Trans World Airlines, Inc.*, 112 S. Ct. 2031, 2037 (1992).

³⁹⁵ *Id.*

³⁹⁶ *Id.*

³⁹⁷ See *Holliday v. Bell Helicopters Textron, Inc.*, 747 F. Supp. 1396, 1400 n.2 (D. Haw. 1990) (reaching a similar conclusion with respect to the preemption and savings clauses of the NTMVSA).

³⁹⁸ *Wilton & Campbell, supra* note 378, at 566.

³⁹⁹ *Id.*

liable for failing to comply with any standard contrary to an applicable federal standard.

4. *Second Step: Modernizing Federal Air Safety Regulations*

As suggested above, amending the Federal Aviation Act to include an express preemption provision governing general air safety would only constitute the first step of an efficient solution to the general aviation crisis. While federal preemption would immunize manufacturers from lawsuits alleging defective design, consumers of general aviation aircraft would not, by these measures alone, also benefit. A second step would, therefore, have to be taken to balance the interests involved in the general aviation crisis.

Criticisms of the federal regulatory scheme governing general aviation, raised by ATLA and others, provide a touchstone for the second step of an efficient solution to the general aviation crisis—the modernization of federal air safety regulations. The first of the two most frequent criticisms of the federal regulatory scheme focuses on the substance of the existing FARs that govern the design of general aviation aircraft. Three arguments are commonly raised in opposition to the use of federal air safety regulations as standards of liability: first, the regulations are unsatisfactory because they are out of date; second, the regulations are vague; and third, the regulations establish only minimum standards.⁴⁰⁰

As outlined above, the enactment of an express preemption clause governing general air safety would enable the federal air safety regulations to become more than simply minimum standards. The standards would, with the addition of the proposed amendment, be interpreted as uniform standards. Despite this change, however, aircraft safety would not necessarily be enhanced without addressing the two remaining arguments against using the federal regulations as standards of liability.

If it is true that current federal air safety regulations are out-of-date and vague,⁴⁰¹ they will fail to provide courts with adequate guidance when complex aircraft liability issues arise. This was the case in *Cleveland*. Piper asserted that Cleveland's claims that the aircraft was designed with inadequate forward vision from the rear seat contravened the FAA's approval of the aircraft's tailwheel design.⁴⁰² However, as the Tenth Circuit was quick to point out, federal regulations

⁴⁰⁰ Lindvall, *supra* note 109, at 398-99.

⁴⁰¹ This unsatisfactory condition is to be expected of standards which everyone but the manufacturers themselves are allowed to disregard. Under the current system, the only standards that need to be up-to-date are those used in the courts, promulgated either by state statute or state common law.

⁴⁰² *Cleveland v. Piper Aircraft Corp.*, 985 F.2d 1438, 1445 (10th Cir.), *cert. denied*, 114 S. Ct. 291 (1993).

do not require the precise design Piper utilized.⁴⁰³ Rather, section 23.773(a)(1) of the Code of Federal Regulations requires that pilot compartments must be “[a]rranged with sufficiently extensive, clear and undistorted view to enable the pilot to safely taxi, takeoff, approach, land, and perform any maneuvers within the operating limitations of the airplane.”⁴⁰⁴ It is no wonder that the court agreed with Cleveland that Piper could have improved the plane’s forward visibility without conflicting with the pertinent federal design standard.⁴⁰⁵

An alternative adjudicative body comprised of representatives of existing governmental agencies and aircraft manufacturers may be able to provide courts with better guidance in complex aircraft litigation cases.⁴⁰⁶ The panel could include representatives from the Federal Aviation Agency, the National Transportation Safety Board, and the National Aeronautics and Space Administration.⁴⁰⁷ These representatives could work with aircraft manufacturers to promulgate compulsory uniform aircraft safety standards. In theory, such a panel would do a better job than the FAA of promulgating standards that are not only precise and easy to understand, but also more representative of modern technology.⁴⁰⁸

The main advantage of such a panel would be the allocation of authority across several agencies. This would help to prevent political favoritism toward aircraft manufacturers, an allegation often aimed at the FAA.⁴⁰⁹ It is also likely that if federal standards were used as a measure of liability in the adjudication of every general aviation products liability lawsuit in the country, democratic forces would facilitate more stringent and modern standards.⁴¹⁰ Regardless of their origin,

⁴⁰³ *Id.*

⁴⁰⁴ 14 C.F.R. § 23.773(a)(1) (1994). *See also Cleveland*, 985 F.2d at 1445 (discussing imprecision of this standard).

⁴⁰⁵ 985 F.2d at 1445.

⁴⁰⁶ Lindvall, *supra* note 109, at 404-05. Lindvall suggests that this alternative “adjudicative” body could also determine the reasonableness of manufacturers’ designs when crashworthiness disputes arise. *Id.* The author disagrees with this portion of Lindvall’s proposal. Once regulatory reform measures have been taken, there should be no reason why judicial bodies across the country could not competently adjudicate aircraft accident lawsuits themselves. *See also Bruce Landsberg, Frontal Assault: A Case Study of a Typical Accident Lawsuit*, AOPA PILOT, Mar. 1995, at 85 (proposing a nongovernmental oversight board of aeronautical personnel including pilots, engineers, maintenance technicians, air traffic control experts, and possibly attorneys to review the legitimacy of general aviation accident investigations).

⁴⁰⁷ Lindvall, *supra* note 109, at 404-05.

⁴⁰⁸ *Id.*

⁴⁰⁹ With the fervor and color one would expect from a good plaintiffs’ attorney, Arthur Alan Wolk asserts the following about the FAA: “The bottom line is the FAA is an incompetent agency of government, in bed with the manufacturers it is supposed to regulate and out to lunch when it comes to reliability.” Wolk, *supra* note 62, at 119.

⁴¹⁰ For example, instead of spending millions of dollars lobbying their congressional representatives to sponsor unpopular and inefficient tort reform legislation, groups such

new federal air safety regulations should be "up-to-date, clear, and precise."⁴¹¹ They should also be flexible enough to allow manufacturers to produce aircraft notwithstanding unanticipated design problems.⁴¹²

The second of the two most frequent criticisms of the federal regulatory scheme focuses on the procedure through which the existing federal air safety regulations governing general aviation are enforced. Section 1355(a) of the Federal Aviation Act authorizes the Secretary of Transportation to delegate inspection and certification responsibilities to "properly qualified" private individuals.⁴¹³ This provision creates a significant amount of self-regulation by the general aviation industry; an aircraft is certified when the results of tests performed by its manufacturer are submitted to the FAA. ATLA argues that the existence of such a loose federal regulatory structure does not justify replacing civil liability as the main incentive for manufacturers to build safer aircraft.⁴¹⁴

If the amendment proposed in this Note was enacted, states would retain primary responsibility for setting general aviation design standards until such time as the corresponding federal standards were brought up to date.⁴¹⁵ Any program designed to revamp the FARs would take time. Therefore, until all safety-oriented FARs were certified as up-to-date, states would be allowed to "plug the holes" in the federal regulations with either statutory or common law standards.

Even after the modernization of the FARs was completed, general aviation manufacturers could still be held liable for certain causes of action as a result of the savings clause of the Federal Aviation Act. While FARs would be exclusive when they applied, they would never be exhaustive. In *Cipollone*, for example, the Court found that the preemptive scope of the Cigarette Act's express preemption clause did not extend to all common law claims.⁴¹⁶ If this Note's proposed amendment was enacted, a general aviation plaintiff would not be prevented from alleging that an accident resulted from a manufacturing

as GAMA would spend their time working with federal authorities to improve specific FARs. Consumer groups, such as AOPA, would do the same. This time would be more constructively spent because it would be directed at the standards that the manufacturers would actually be judged against—not at a proposed piece of tort reform legislation that only promised to stop a percentage of the future products liability lawsuits brought against the industry's manufacturers.

⁴¹¹ Lindvall, *supra* note 109, at 405.

⁴¹² *Id.*

⁴¹³ 49 U.S.C. app. § 1355(a) (1988).

⁴¹⁴ ATLA Statement, *supra* note 271, at 2.

⁴¹⁵ This procedure would provide manufacturers with an incentive to assist in the process of bringing the federal standards up to date. Without a diligent effort on their part, manufacturers would be forced to wait longer for the preemptive protection the proposal in this Note would establish.

⁴¹⁶ *Cipollone v. Liggett Group, Inc.*, 112 S. Ct. 2608, 2621 (1992).

defect, or from a manufacturer's failure to adequately instruct or warn of foreseeable risks of harm associated with the use of its aircraft.⁴¹⁷ In addition, a general aviation plaintiff could still sue a manufacturer for negligence in its testing or research practices, or for breach of an express warranty.⁴¹⁸

According to *Cipollone*, general aviation plaintiffs would also have available to them a cause of action for fraudulent misrepresentation.⁴¹⁹ This would be especially significant if a plaintiff suspected that a manufacturer had either concealed from or failed to disclose to the FAA important material facts concerning the design certification of the aircraft in question. Furthermore, general aviation plaintiffs could recover in tort if they could prove that a "manufacturer was negligent or breached the implied warranty of merchantability by failing to comply with [a] federal standard."⁴²⁰ By preserving these potential claims for plaintiffs, regulatory reform offers consumers a built-in policing system that would ensure manufacturer compliance with federally mandated safety standards.

5. *Regulatory Reform is an Efficient Solution to the General Aviation Crisis*

As a solution to the general aviation crisis, regulatory reform, such as the express preemption clause proposed in this Note, would provide manufacturers with greater protection from illegitimate products liability lawsuits. Because it is not based on the age of an aircraft, regulatory reform, unlike tort reform, would exempt general aviation manufacturers from all illegitimate design defect lawsuits—not just claims involving aircraft that are over eighteen years old. In fact, unlike tort reform, regulatory reform would exempt general aviation manufacturers who complied with all pertinent federal design standards from any and all claims of design defect. For example, a plaintiff unable to reach an aircraft manufacturer because of the statute of repose would not instead be able to go after a replacement part manufacturer and hope for a sympathetic jury or a lucrative settlement.

As a solution to the general aviation crisis, regulatory reform is also a better alternative from a consumer's point of view. First, modernized federal air safety regulations will allow manufacturers to concentrate on one set of design standards instead of many. The safety standards will be higher, and thus will produce safer and more relia-

⁴¹⁷ See *id.* at 2621-22 (holding that Cigarette Act did not preempt all failure to warn claims).

⁴¹⁸ See *id.* at 2622-23 (holding that Cigarette Act did not preempt claims for breach of express warranty).

⁴¹⁹ *Id.* at 2623-24.

⁴²⁰ Wilton & Campbell, *supra* note 378, at 566.

ble aircraft. The process will also put aircraft accident victims on a level playing field across the country. No longer will the state in which an aircraft crashes play such a large role in determining whether or not its occupants are able to recover from a responsible manufacturer. Furthermore, injured parties will not be denied recovery merely because an aircraft was a month, a week, or a day too old.

Section two of Senator Kassebaum's Senate Bill 67 announces as one of Congress' findings that "the Federal Government has an interest in the general aviation accident liability system because the Federal Government has established a comprehensive system for regulating general aviation."⁴²¹ This declaration provides an ironic backdrop for proposing regulatory reform as an efficient, legal solution to the general aviation crisis. Unlike tort reform legislation—which promises to supplant an established and "comprehensive" system of regulation with a prophylactic federal tort system—regulatory reform would utilize the existing comprehensive regulatory system to achieve its goals. In other words, regulatory reform would "fix" the current system of federal law, as opposed to needlessly creating additional legislation to stack on top of existing federal regulations.

An efficient solution to the general aviation crisis, therefore, is one that balances the interests of both consumers and manufacturers of general aviation aircraft. If products liability lawsuits are truly the cause of the demise of America's general aviation industry, an efficient solution is not achieved by stacking the liability deck unevenly in favor of manufacturers. By first bestowing preemptive effect upon a manufacturer's compliance with a federal air safety regulation, and by next bringing the current standards up-to-date and ensuring manufacturer compliance by preserving for plaintiffs alternative causes of action, the regulatory reform this Note proposes represents an efficient solution to the general aviation crisis.

CONCLUSION

Over the past decade, the American general aviation industry has dissolved to a mere shadow of its former, robust self. Not only has yearly production of general aviation aircraft fallen by more than 17,000 aircraft per year, but thousands of industry employees have lost their jobs. Paralleling this economic downturn has been a marked increase in the number of products liability lawsuits brought against general aviation manufacturers. These manufacturers have claimed a causal connection between the two phenomena. Because they believe that juries have indiscriminately held them to safety standards higher than those required under federal law, general aviation aircraft manu-

⁴²¹ S. 67, *supra* note 162, § 2(6).

facturers have supported tort reform legislation intended to hamper consumers' ability to bring such lawsuits.

By focusing solely on the economic problems of the industry, however, both the 1994 Act and Senate Bill 67 are unfairly biased in favor of manufacturers. While this legislation promises to shield general aviation aircraft manufacturers from illegitimate products liability lawsuits, it will do little to prevent airplanes from crashing due to defects in their design. As a result, the legislation fails to take into account the consumer interest. Furthermore, as emphasized in Tentative Draft 1 of the Restatement (Third) of Products Liability, factors such as depressed industry earnings and widespread unemployment are not relevant to the determination of whether a product is reasonably designed.⁴²² It is for these reasons that tort reform is an inefficient solution to the general aviation crisis.

An efficient solution to the general aviation crisis would balance the interests of general aviation aircraft manufacturers with those of the industry's consumers. By first bestowing preemptive effect upon a manufacturer's compliance with a federal air safety regulation, and then bringing the current standards up to date and ensuring manufacturer compliance by preserving for plaintiffs alternative causes of action, the regulatory reform proposed in this Note provides an efficient and fair solution to the general aviation crisis. Accidents due to the defective design of an aircraft or one of its component parts would be greatly reduced, if not eliminated, under the proposed solution.

Regulatory reform is also an efficient solution to the general aviation crisis because it salvages the existing yet underutilized federal regulatory scheme rather than creating a prophylactic federal tort law to apply as a quick fix. Tort reform legislation, such as the 1994 Act and Senate Bill 67, unconditionally ignores the hundreds of thousands of hours drafters spent on creating comprehensive federal air safety standards. If general aviation manufacturers had their way, this federal regulatory scheme could indeed be forgotten forever, buried under additional and unnecessary federal tort law. An express preemption clause such as the one proposed in this Note would allow the underutilized federal regulatory scheme to be salvaged.

In the end, no one really knows for sure why the American general aviation industry has deteriorated, and the debate addressing such an issue could continue indefinitely. The tort reform legislation introduced to the 103d Congress falls prey to this debate and sides with general aviation manufacturers. Because it presupposes that tort liability is the culprit of the industry's demise, such legislation will do nothing to prevent defective aircraft from crashing. The tort reform

⁴²² TENTATIVE DRAFT 1, *supra* note 1, § 2 cmt. d.

measures will, however, arbitrarily prevent certain parties from recovering. Regulatory reform, on the other hand, avoids the causal debate, and instead focuses on preventing aircraft from crashing in the first place. Regulatory reform will not only shield manufacturers from illegitimate products liability lawsuits, but it will also save lives—a result that is, oddly enough, amenable to both manufacturers and consumers.

Patrick J. Shea†

† The author wishes to thank his father, James M. Shea, for not only introducing him to the topic addressed in this Note, but also for his much needed advice and consultation regarding the various arguments put forth. Thanks Dad! Special thanks also to fellow U.C. Davis alumnus and note editor Kent Streseman for his devoted efforts.

Cornell Journal of Law and Public Policy



The *Cornell Journal of Law and Public Policy* addresses current domestic legal issues and their implications in the fields of government, public policy, and the social sciences. The *Journal* publishes two issues (Fall and Spring) each academic year.

Issue 4:1 (available January 1995) includes articles from our *Journal*-sponsored symposium entitled: "Employee Participation Plans: The Key to U.S. Competitiveness or Erosion of Workers' Rights?"

Issue 4:2 (available June 1995) will include the Federalist Society Lawyers Convention featuring: Hon. Richard Arney, U.S. House of Representatives Majority Leader; Professor Nadine Strossen, President ACLU; Hon. Frank Easterbrook, U.S. Court of Appeals, Seventh Circuit.

Subscriptions: Subscriptions are \$16.00 per volume or \$8.00 per issue. Back issues are available from the *Journal*.

Manuscripts: The *Journal* invites the submission of unsolicited articles, studies and commentaries.

Contact the *Journal* at: *Cornell Journal of Law and Public Policy*, Cornell Law School, Myron Taylor Hall, Ithaca, New York 14853-4901, Telephone: (607) 255-0526; or via Internet: PUBPOL@LAW.MAIL.CORNELL.EDU.

THE CORNELL LAW SCHOOL

MYRON TAYLOR HALL

Officers of Administration

Russell K. Osgood, B.A., J.D., Dean of the Law Faculty and Professor of Law
Robert A. Hillman, Associate Dean for Academic Affairs and Professor of Law
Claire M. Germain, M.A., LL.B., M.C.L., M.L.L., Edward Cornell Law Librarian and
Professor of Law
John J. Hasko, B.A., M.A., J.D., M.S., Associate Law Librarian
Frances M. Bullis, B.A., M.A., Associate Dean for Development and Public Affairs
Anne Lukingbeal, B.A., J.D., Associate Dean and Dean of Students
Charles D. Cramton, B.A., M.A., J.D., Assistant Dean for Alumni and International Affairs
Richard D. Geiger, B.S., J.D., Assistant Dean and Dean of Admissions

Faculty

Kathryn Abrams, B.A., J.D., Professor of Law
Gregory S. Alexander, B.A., J.D., Professor of Law
John J. Barceló III, B.A., J.D., S.J.D., A. Robert Noll Professor of Law
H. Richard Beresford, B.A., J.D., M.D., Visiting Professor of Law (1994-95)
Thomas R. Bruce, B.A., M.A., Research Associate in Legal Technology
Kevin M. Clermont, A.B., J.D., James and Mark Flanagan Professor of Law
Steven P. Clymer, B.A., J.D., Assistant Professor of Law
Nancy L. Cook, B.A., J.D., M.F.A., Senior Lecturer (Clinical Studies)
Roger C. Cramton, A.B., J.D., Robert S. Stevens Professor of Law
Yvonne M. Cripps, LL.B., LL.M., Ph.D., Visiting Professor of Law (Fall 1994)
Janet L. Dolgin, B.A., M.A., Ph.D., J.D., Visiting Professor of Law (Spring 1995)
Theodore Eisenberg, B.A., J.D., Professor of Law
Cynthia R. Farina, B.A., J.D., Professor of Law
Glenn C. Galbreath, B.A., J.D., Senior Lecturer (Clinical Studies)
Stephen P. Garvey, B.A., M.Phil., J.D., Assistant Professor of Law
Michael J. Gerhardt, B.A., M.Sc., J.D., Visiting Professor of Law
Claire M. Germain, M.A., LL.B., M.C.L., M.L.L., Edward Cornell Law Librarian and
Professor of Law
Robert A. Green, B.A., M.S., J.D., Associate Professor of Law
Herbert Hausmaninger, Dipl. Dolm., Dr. Jur., Visiting Professor of Law (Spring 1995)
George A. Hay, B.S., M.A., Ph.D., Edward Cornell Professor of Law and Professor of Economics
James A. Henderson, Jr., A.B., LL.B., LL.M., Frank B. Ingersoll Professor of Law
Robert A. Hillman, B.A., J.D., Associate Dean for Academic Affairs and Professor of Law
Barbara J. Holden-Smith, B.A., J.D., Associate Professor of Law
Sheri Lynn Johnson, B.A., J.D., Professor of Law
Lily Kahng, B.A., J.D., LL.M., Associate Professor of Law
Robert B. Kent, A.B., LL.B., Professor of Law, Emeritus
David B. Lyons, B.A., M.A., Ph.D., Professor of Law and Philosophy
Jonathan R. Macey, B.A., J.D., J. DuPratt White Professor of Law
Peter W. Martin, A.B., J.D., Jane M.G. Foster Professor of Law
JoAnne M. Miner, B.A., J.D., Senior Lecturer (Clinical Studies) and Director of Cornell
Legal Aid Clinic
Hiroshi Oda, LL.D., Visiting Professor of Law (Fall 1994)
Aviva A. Orenstein, A.B., J.D., Visiting Associate Professor (Fall 1994)
Russell K. Osgood, B.A., J.D., Dean of the Law Faculty and Professor of Law
Larry I. Palmer, A.B., LL.B., Professor of Law
Jeffrey J. Rachlinski, B.A., M.A., J.D., Ph.D., Assistant Professor of Law
Ernest F. Roberts, Jr., B.A., LL.B., Edwin H. Woodruff Professor of Law
Faust F. Rossi, A.B., LL.B., Samuel S. Leibowitz Professor of Trial Techniques
Bernard A. Rudden, B.A., M.A., Ph.D., LL.D., DCL, Visiting Professor of Law (Fall 1994)
Sharon E. Rush, B.A., J.D., Visiting Professor of Law
Wojciech Sadurski, LL.M., Ph.D., Visiting Professor of Law (Spring 1995)
Stewart J. Schwab, B.A., M.A., J.D., Ph.D., Professor of Law
Robert F. Seibel, A.B., J.D., Senior Lecturer (Clinical Studies)
Howard M. Shapiro, B.A., J.D., Associate Professor of Law (on leave 1994-95)
Steven H. Shiffrin, B.A., M.A., J.D., Professor of Law
John A. Siliciano, B.A., M.P.A., J.D., Professor of Law
Gary J. Simson, B.A., J.D., Professor of Law
Katherine Van Wezel Stone, B.A., J.D., Professor of Law
Barry Strom, B.S., J.D. Senior Lecturer (Clinical Studies)
Robert S. Summers, B.S., LL.B., William G. McRoberts Research Professor in the Administration
of the Law
Winnie F. Taylor, B.A., J.D., LL.M., Professor of Law
Michele Taruffo, B.C.L., Visiting Professor of Law (Fall 1994)

Fernando R. Teson, J.D., S.J.D., Visiting Professor of Law
Tibor Varady, J.D., LL.M., Visiting Professor of Law (Spring 1995)
David Wippman, B.A., M.A., J.D., Associate Professor of Law
Charles W. Wolfram, A.B., LL.B., Charles Frank Reavis Sr. Professor of Law

Faculty Emeriti

Harry Bitner, A.B., B.S., L.S., J.D., Law Librarian and Professor of Law
W. David Curtiss, A.B., LL.B., Professor of Law
W. Tucker Dean, A.B., J.D., M.B.A., Professor of Law
W. Ray Forrester, A.B., J.D., LL.D., Robert S. Stevens Professor of Law
Jane L. Hammond, B.A., M.S. in L.S., J.D., Edward Cornell Law Librarian and Professor of Law
Milton R. Konvitz, B.S., M.A., J.D., Ph.D., Litt. D., D.C.L., L.H.D., LL.D., Professor, New York State
School of Industrial and Labor Relations
Robert S. Pasley, A.B., LL.B., Frank B. Ingersoll Professor of Law
Rudolf B. Schlesinger, LL.B., Dr. Jur., William Nelson Cromwell Professor of International and
Comparative Law
Gray Thoron, A.B., LL.B., Professor of Law

Elected Members from Other Faculties

Calum Carmichael, Professor of Comparative Literature and Biblical Studies, College of Arts
and Sciences
James A. Gross, Professor, School of Industrial and Labor Relations
Paul R. Hyams, Associate Professor of History, College of Arts and Sciences

STATEMENT OF PRICES

CORNELL LAW REVIEW

<u>VOLUME 80 (1994-95)</u>	<u>VOLUMES 1-79</u>
Single issue \$10.00 (allow 2-4 weeks for delivery or add \$2.50 for first-class postage)	These may be obtained from Fred B. Rothman & Co. 10368 West Centennial Road Littleton, CO 80127 (303) 979-5657
Subscription \$35.00 (foreign subscriptions add \$4.00 postage fees)	

Please enclose payment with your order.

SEND REQUESTS TO

CORNELL LAW REVIEW

Cornell Law School

Ithaca, New York 14853-4901

Published six times annually, in November, January, March, May, July, and September, at Lincoln, Nebraska, by the *Cornell Law Review* (ISSN 0010-8847). Second-class postage paid at Ithaca, New York and at additional mailing offices. Annual subscriptions: \$35.00. Single issue: \$10.00 for issues in the current volume (foreign subscriptions add \$4.00 postage fees). Dues-paying members of the Cornell Alumni Association receive subscriptions for \$10.00 per volume. Because back stock of the *Cornell Law Review* is turned over to a dealer, back issues are available to the *Review* for a short time only. Subscribers should therefore report the nonreceipt of copies within six months of the mailing date. Issues in volumes 1-77 are available through Fred B. Rothman & Co., 10368 West Centennial Road, Littleton, CO 80127. Please notify the *Cornell Law Review* of any change of address at least 30 days before the date of the issue for which it is to take effect. The Post Office will not forward copies unless extra postage is provided by the subscriber. Duplicate copies will not be sent free of charge.

POSTMASTER, please send change of addresses to: CORNELL LAW REVIEW, Myron Taylor Hall, Ithaca, New York 14853-4901.

Subscription renewed automatically unless notification to the contrary is received by the Cornell Law Review. Please address correspondence to the Cornell Law Review, Myron Taylor Hall, Ithaca, New York 14853-4901. The Cornell Law Review may be reached by telephone during normal business hours:

Articles Office (607) 255-8813

Managing Editors/Business Office (607) 255-3387.

