A Good Idea Stretched Too Far: Amending the General Aviation Revitalization Act to Mitigate Unintended Inequities

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I. INTRODUCTION

The General Aviation Revitalization Act of 1994 (GARA), a federal statute of repose,¹ has generally been viewed by those in the aircraft manufacturing industry as an unqualified success.² Less than fifteen years after its passage, U.S. aircraft manufacturers, who were once all but defunct, are now employing large numbers of workers and selling a sizable number of new light aircraft.³

While it is easy to argue that GARA was both necessary and effective, it nevertheless has created much frustration for the victims of aircraft accidents and their attorneys.⁴ Ambiguities in GARA's language

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^{1. 49} U.S.C. § 40101 note (2000). GARA was enacted in response to widespread financial distress on the part of general aviation manufacturers. *See* Press Release, General Aviation Manufacturers Association, Ten Years Later - Tort Reform Benefits General Aviation (Feb. 14, 2005), http://www.gama.aero/mediaCenter/pr.php?id=80 ("Numerous lawsuits, some alleging design flaws in airplanes that had flown safely for more than 50 years, made liability costs unpredictable, driving up current product costs and draining research and development resources for future products.").

^{2.} See, e.g., Press Release, General Aviation Manufacturers Association, supra note 1.

^{3.} Id.

^{4.} Interview with Robert F. Hedrick, Partner, Hedrick Smith PLLC, and Adjunct Professor, Seattle Univ. Sch. of Law, in Seattle, Wash. (Sept. 7, 2006).

have lead to a series of questionable judicial decisions attempting to clarify textual vagaries in the law.⁵ These decisions have distorted GARA's application in ways never contemplated by Congress.⁶ Further, the language used in GARA's final draft gave it a substantially different scope than was contemplated during congressional hearings on the legislation.⁷

For passengers injured in aircraft accidents, owners of property damaged by an aircraft, and buyers and sellers of refurbished aircraft, GARA may shift liability in ways never discussed or even anticipated during the congressional hearings. An injured individual's otherwise valid claim should not be statutorily denied in the absence of a deliberative legislative process. Instead, claim limitations under GARA are often an unintended consequence. GARA, then, is a statute in great need of a congressional tuneup.

This Comment will examine the congressional intent that shaped GARA, evaluate the equitable implications of the statute's drafting language, discuss its significant judicial interpretations, and explore the author's recommendations aimed at minimizing GARA's inequities without negating its positive aspects. Part II begins with an analysis of GARA's legislative history, identifies stakeholders and their arguments, and examines issues given insufficient consideration by Congress. Part III assesses how GARA actually affected the aviation market when compared to the stakeholders' predictions. Part IV will survey a selection of important judicial decisions interpreting GARA. Finally, Part V evaluates the inequities created by the statute and offers recommendations that will remedy those inequities.

II. HISTORY OF GARA

This Part examines the arguments that led to GARA, how the aims of the interested parties were shaped during the congressional hearings, how the statute's drafting became the source of one of its major inequities, and how critical issues surrounding GARA's application were not scrutinized. First, GARA's background, including aviation manufacturers' alleged need for immunization against liability, will be examined. Next, the stakeholders behind the enactment of GARA and their particular interests will be identified. Third, the Part explains how changes in GARA's draft language expanded its coverage far beyond the scope contemplated in congressional debates. Finally, the Part evaluates GARA's alleged necessity.

^{5.} See infra Part IV.

^{6.} See infra Parts IV-V.

^{7.} See infra Part II.C.

A. Legislative History and Intent

In the early 1980s, general aviation⁸ manufacturers began to lobby congressional representatives from Kansas for statutory relief from the yoke of unlimited product liability. In 1994, over a decade of such lobby-ing paid off, and President Clinton signed GARA into law.⁹

The driving force behind GARA was the failure of the U.S. pistonpowered aircraft market.¹⁰ U.S. general aviation aircraft production had declined from 18,000 units in 1978 to only 928 units in 1994.¹¹ The Cessna Aircraft Company, which has sold more civilian piston-powered single-engine aircraft than any other company in history,¹² completely shut down its single-engine production lines in 1986.¹³ Industry analysts estimated that this decline resulted in the loss of approximately 100,000 jobs.¹⁴ These numbers stood in stark contrast to those of other segments of the aerospace industry, where the U.S. market share remained strong. In particular, the United States remained a world leader in the production and sale of business jets.¹⁵

Manufacturers unanimously cited the cost of settling, defending against, and insuring against litigation as the ultimate cause of the failure in this segment of the aerospace market, which had, until recently, been dominated by the United States.¹⁶ Beech Aircraft Company, for example, defended itself against 203 accident suits filed between 1983 and 1986 and reported that its average cost per case was \$530,000.¹⁷ Yet according to the National Transportation Safety Board, not one of these accidents was attributable to manufacturing and design defects.¹⁸

^{8.} The term "general aviation" can be defined as the subset of aircraft not used for public, military, or scheduled commercial use. DICTIONARY OF AERONAUTICAL TERMS 238–39 (Dale Crane ed., 3d ed. 1997). The term may also collectively refer to small private aircraft. *See infra* Part II.C.

^{9.} See Statement by President William J. Clinton upon Signing S. 1458, 30 WEEKLY COMP. PRES. DOC. 1678 (Aug. 22, 1994).

^{10.} See supra note 1. In the author's experience, piston-powered single-engine light aircraft are generally two- to six-seat, owner-flown planes that weigh less than 4,000 pounds loaded, fly at a speed of 80 to 200 miles per hour, and are powered by reciprocating gasoline-powered engines with four to six cylinders and no more than 300 horsepower.

^{11.} U.S. GEN. ACCOUNTING OFFICE, PUBL'N NO. GAO-01-916, GENERAL AVIATION STATUS OF THE INDUSTRY, RELATED INFRASTRUCTURE, AND SAFETY ISSUES 24 (2001), *available at* http://www.gao.gov/new.items/d01916.pdf.

^{12.} In its eighty-year history, Cessna has produced more than 152,000 single-engine piston aircraft. *The 7000th Single-Engine Piston Aircraft Is Built at Independence*, AVBUYER, http://www.avbuyer.com/Articles/Article.asp?Id=547.

^{13.} Ken Vandruff, *Cessna Delivers 5,000th Single-Engine Piston Airplane*, WICHITA BUS. J., Mar. 25, 2004, http://wichita.bizjournals.com/wichita/stories/2004/03/22/daily31.html.

^{14. 140} CONG. REC. S2438, S2438-39 (1994).

^{15.} Id. at S2442.

^{16.} Id. at S2438-39.

^{17.} Id. at S2441.

^{18.} Id.

GARA is a statute of repose that, with certain exceptions, bars a lawsuit against any manufacturer of a general aviation aircraft for design and manufacturing defects, if the accident leading to the cause of action occurred more than eighteen years after the aircraft was first delivered from the factory.¹⁹ In the case of parts manufacturers, GARA sets the start of the repose period as the date that a part was first installed on an aircraft.²⁰

A statute of repose is very different from a statute of limitations, which limits claims based on the time elapsed *after* the occurrence of the incident in question.²¹ With a statute of repose, the clock typically starts ticking on the *delivery date* of the product that is later alleged to be defective.²² The policy behind such statutes is that, without proper maintenance, manufactured items will deteriorate over time; thus, after a certain point, owners should inherit responsibility from manufacturers when maintaining these older products.²³

For a manufacturer to qualify for GARA protection, the aircraft involved in the accident must satisfy three requirements. First, it must be a general aviation aircraft, meaning that it must have been issued a type certificate or airworthiness certificate before the accident occurred.²⁴ Second, the aircraft must have been originally certificated for no more than twenty seats. Finally, the aircraft must not be engaged in scheduled passenger carriage at the time of the accident.²⁵

Four exceptions apply to GARA's provisions. GARA will not protect manufacturers if (1) it is proven that the manufacturer knowingly misrepresented, or concealed or withheld, required information relating to a dangerous condition regarding an aircraft or part, and that condition was causally related to the accident; (2) the deceased or injured claimant was on board the aircraft because of a medical or other emergency; (3)

^{19. 49} U.S.C. § 40101 note (2000).

^{20.} Id. § 2(a)(2).

^{21.} See Wikipedia, Statute of limitations, http://en.wikipedia.org/wiki/Statute_of_limitations (last visited May 11, 2008).

^{22.}SeeStatuteofRepose,http://www.colorado.edu/engineering/civil/db/DBS/glossary.cgi?word=Statute+of+Repose(lastvisited May 11, 2008).

^{23.} National Association of Manufacturers, Statute of Repose, http://www.nam.org/s_nam/doc1.asp?CID=453&DID=225290 (last visited May 11, 2008).

^{24. § 2(}c). Civil aircraft may not be flown without a valid airworthiness certificate. 14 C.F.R. § 91.203(a)(1) (2007). The Administrator of the Federal Aviation Administration will issue a type certificate to an aircraft, aircraft engine, propeller, or appliance when he or she finds that it is properly designed and manufactured, performs properly, and meets certain other regulations and minimum standards. 49 U.S.C. § 44704(a)(1) (2000).

^{25. § 2(}c).

the claimant was not onboard the aircraft; or (4) the deceased or injured party's claim sounds in contract pursuant to a written warranty.²⁶

B. The Stakeholders

The most important groups advocating for the enactment of GARA were (1) Kansas politicians, led by Senator Nancy Kassebaum;²⁷ (2) the General Aviation Manufacturers Association (GAMA)²⁸, most notably represented by Russ Meyer, Chairman and CEO of Cessna; (3) the International Association of Machinists and Aerospace Workers Union (IAM); and (4) the Aircraft Owners and Pilots Association (AOPA). The Association of Trial Lawyers of America (ATLA)²⁹ was the primary organizer of opposition to GARA's enactment.³⁰

Senator Kassebaum and Representative Dan Glickman were the congressional sponsors of GARA, championing its passage for roughly ten years.³¹ Aviation manufacturing interests represent a major constituency for Kansas politicians because the aerospace industry is one of the largest and most important employment sectors in Kansas.³² Supporters focused on the importance of general aviation to the U.S. economy and trade balance—the bill was advanced as a means to recreate lost jobs at "no cost"³³—as well as the support revitalized general aviation would provide to commercial aviation, through the provision of a training ground for future pilots.³⁴ Supporters noted that the lack of a federal statute of repose for the U.S. aviation industry put it at a competitive disadvantage globally because most European countries already had statutes

^{26. § 2(}b).

^{27.} See H.R. REP. NO. 103-883, at 73 (1995).

^{28.} GAMA represents the interests of manufacturers such as Cessna, Piper Aircraft, Hawker Beechcraft, Lycoming Engines, Teledyne Continental Motors, Bombardier Aerospace, Dassault Falcon Jet, and Pratt & Whitney Canada. General Aviation Manufacturers Association, Media Guide,

http://www.gama.aero/mediaCenter/mediaGuide/companies.php (last visited May 11, 2008).

^{29.} ATLA is now known as the American Association for Justice. American Association for Justice, http://www.atlanet.org/ (last visited May 11, 2008).

^{30. 140} CONG. REC. S2438, S2443 (1994).

^{31.} See H.R. REP. NO. 103-883, at 73.

^{32.} Kansas is the nationwide hub for light aircraft manufacturing in the United States. It is home to production facilities for Boeing Integrated Defense Systems, Airbus/North American Wing Design, Cessna, Hawker Beechcraft, Bombardier Aerospace, and Spirit AeroSystems, as well as numerous manufacturing companies that support the production efforts of these companies. Wings Over Kansas Aviation Employment Resource Page, http://www.wingsoverkansas.com/careers/ (last visited May 11, 2008).

^{33.} H.R. REP. NO. 103-525(II), at 6-7 (1994), reprinted in 1994 U.S.C.C.A.N. 1644.

^{34.} GEN. AVIATION MFRS. ASS'N, FIVE YEAR RESULTS: A REPORT TO THE PRESIDENT AND CONGRESS ON THE GENERAL AVIATION REVITALIZATION ACT (1999), available at http://www.gama.aero/pubs/getFile.php?catalogID=11.

of repose in effect, commonly with limitation periods of only ten years.³⁵ By eliminating this domestically imposed restriction on trade, manufacturers could reenter the market competitively and recapture their lost market share from their European competitors.³⁶

GAMA was a powerful industry advocate of GARA enactment. This organization of aircraft manufacturers represented the largest single group of businesses that would directly benefit from the passage of a statute of repose. GAMA members argued that the money spent insuring and defending against lawsuits was money that could be spent on research and development for the benefit of the industry.³⁷ A belief that tort liability was hindering technological advances and delaying or preventing safety improvements in general aviation was prevalent among pilots.³⁸ The oppressiveness of this liability made it difficult for manufacturers to obtain insurance for design or product defects—one Lloyd's was prepared to insure aviation risks, but not the risks of the American legal system.³⁹

The most noteworthy GAMA proponent was Russell Meyer, who gave extended testimony on the nature of the demise of general aviation in the United States, the shutdown of Cessna's piston-powered aircraft production lines, and his pledge to bring piston aircraft back into production at Cessna should a statute of repose be enacted.⁴⁰

The second influential industry proponent of GARA was the IAM. Much of the congressional testimony focused on the 100,000 lost jobs

^{35.} See Council Directive 85/374, On the Approximation of the Laws, Regulations and Administrative Provisions of the Member States Concerning Liability for Defective Products, art. 11, 1985 O.J. (L 210) 29 (EC).

^{36.} See The General Aviation Revitalization Act: Hearing on H.R. 3087 and S. 1458 Before the Subcomm. on Economic and Commercial Law of the H. Comm. on the Judiciary, 103d Cong. 41–53 (1994) (statement of Russell W. Meyer, Jr., Chairman and CEO, Cessna Aircraft Company), available at 1994 WL 233059.

^{37.} See, e.g., Preservation and Promotion of General Aviation Airports: Hearing Before the Subcomm. on Aviation of the H. Transportation and Infrastructure Comm., 106th Cong. (1999) (statement of Edward M. Bolen, President, GAMA), available at 1999 WL 377376; cf. Timothy S. McAllister, A "Tail" of Liability Reform: General Aviation Revitalization Act of 1994 & the General Aviation Industry in the United States, 23 TRANSP. L.J. 301, 316 (1995) (explaining that GARA could free up industry money for research and development investment in new and old piston-engine general aviation aircraft).

^{38.} James F. Rodriguez, Tort Reform & GARA: Is Repose Incompatible with Safety?, 47 ARIZ. L. REV. 577, 591-92 (2005).

^{39.} Id. at 579.

^{40.} H.R. REP. NO. 103-525(II), at 6-7 (1994), reprinted in 1994 U.S.C.C.A.N. 1644. True to his word, one day after the passage of GARA, Meyer confirmed that Cessna would restart some of its single-engine aircraft production lines. The grand opening of a new single-engine manufacturing facility in Independence, Kansas, occurred on July 3, 1996. General Aviation Revitalization Act Panel Discussion, 63 J. AIR L. & COM. 169, 171 (1997) [hereinafter Panel Discussion].

linked to the decline in general aviation manufacturing.⁴¹ On behalf of the IAM, John Goglia speculated that without the passage of GARA, job rates and productivity would soon decline even further.⁴²

The most vocal consumer group in favor of a statute of repose was the AOPA.⁴³ Interestingly, its members represent the most obvious group of people who would have their claims barred by a statute of repose.⁴⁴ One pilot described the AOPA position on GARA as "a delicate balance for AOPA members; they wanted fair compensation for victims of faulty products and at the same time, they wanted reasonable prices."⁴⁵ The AOPA negotiated this balance by endorsing a repose period of twenty years instead of the industry-preferred twelve-year period.⁴⁶ Ultimately, the groups settled on an eighteen-year repose period.⁴⁷

The lobby opposing GARA was somewhat harder to identify.⁴⁸ Most sources cite ATLA as the sole group opposed to GARA.⁴⁹

44. It is a pilot's family members (who were represented only by ATLA at the GARA hearings), and not the pilot him- or herself, who would likely face the difficult prospect of recovering damages under GARA. Interview with Franklin L. Smith, Partner, Hedrick Smith PLLC, in Seattle, Wash. (Sept. 7, 2006). Moreover, because GARA has shifted the target of litigation recovery from aircraft manufacturers to local maintenance organizations, flight schools, and the owner's own insurance policies, rising insurance costs for these new targets have threatened "grass roots" aviation. Interview with Robert F. Hedrick, *supra* note 4. In fact, "some aircraft maintenance and repair facilities [are] turning away aircraft older than 18 years of age because of insurance and liability concerns and because that age puts the aircraft beyond the statute of repose limits established in [GARA]." *Yingling Aviation Welcomes Older Aircraft*, AVIATION MAINTENANCE, Mar. 1, 2007, at 9, *available at* http://www.aviationtoday.com/am/categories/maintenance/8926.html; see also infra Part III.B.

45. Nathan A. Ferguson, Surviving an Industry Nightmare: The Commercial Insurance Crisis Hits Home, AOPA PILOT MAG., Mar. 2001, http://aopa2.org/pilot/features/2001/feat0103.html?PF.

46. Id.

47. 49 U.S.C. § 40101 note § (3)(3) (2000).

48. Witnesses testifying in opposition to the enactment of GARA chose not to identify themselves as being members of any particular organization. See Timothy S. McAllister, A "Tail" of Liability Reform: General Aviation Revitalization Act of 1994 & the General Aviation Industry in the United States, 23 TRANSP. L.J. 301, 309 (1995) (stating that ATLA chose not to participate in the hearings in an official capacity).

49. E.g. 140 CONG. REC. S2438, S2441 (1994).

^{41.} See, e.g., The General Aviation Revitalization Act of 1993: Hearing on S. 1458 Before the Subcomm. on Aviation of the S. Comm. on Commerce, Science and Transportation, 103d Cong. (1993) (statement of Russell W. Meyer, Jr., Chairman and CEO, Cessna Aircraft Company), available at 1993 WL 747632. This figure was cited repeatedly throughout the hearings; its accuracy, however, has been questioned. See, e.g., Jennifer L. Anton, A Critical Evaluation of the General Aviation Revitalization Act of 1994, 63 J. AIR L. & COM 759, 807–08 (1998).

^{42.} General Aviation Revitalization Act of 1993: Hearing Before the Economic and Commercial Law Subcomm. of the H. Comm. on the Judiciary, 103d Cong. 68–74 (1994) (statement of John Goglia, Member, International Association of Machinists and Aerospace Workers), available at 1994 WL 233073.

^{43.} See The General Aviation Revitalization Act of 1993: Hearing Before the Subcomm. on Economic and Commercial Law of the H. Comm. on the Judiciary, 103d Cong. 54–68 (1994) (statement of Phil Boyer, President, Aircraft Owners and Pilots Association), available at 1994 WL 233066.

Although ATLA did not present testimony under its own name at the hearings, it did organize witnesses who gave testimony regarding aircraft accidents where the victims' otherwise viable claims would have been barred by the proposed statute of repose.⁵⁰

Witnesses also argued that GARA should not be characterized as a "no cost" job program, but should more accurately be described as an industry subsidy—paid for by the victims of aircraft accidents.⁵¹ Damages, the argument goes, will ultimately be paid by some segment of society, and a just legal system will lay the burden on those most responsible and best able to bear the cost. Thus, denying victims compensation from manufacturers of faulty products will not further the interests of a just society, even if such denial results in the creation of jobs.

Critics of GARA were at a distinct disadvantage when trying to discredit the proponents' optimistic projections. GARA supporters could cite the sales and employment statistics generated during the 1970s, arguably the golden years of general aviation, thereby implying that sales and employment numbers would return to these levels under the new GARA regime.⁵² The critics, however, were left with the difficult task of trying to concretely explain why production resurgence was unlikely to happen. There was little that critics could offer to persuasively show that the advocates' numbers were overly optimistic, beyond their opinions that times had changed and that there was no longer such a robust market for light aircraft.

GARA opponents did manage to give particularly potent testimony regarding how latent design defects could remain hidden beyond the repose period, thereby allowing a negligent manufacturer to avoid accountability for any resulting deaths. The most powerful testimony described the history surrounding the infamous Beechcraft V-tail Bonanza,⁵³ an aircraft that incorporated a design flaw in its novel tail which resulted in a structural in-flight failure rate "twenty-four times higher" than its "straight tail" cousins.⁵⁴ Over a period of more than twenty years, almost

^{50.} See infra notes 53-59 and accompanying text.

^{51.} Panel Discussion, supra note 40, at 184-85.

^{52.} See, e.g., Statement by President William J. Clinton upon Signing S. 1458, 30 WEEKLY COMP. PRES. DOC. 1678 (Aug. 22, 1994).

^{53.} Limiting Liability for Small Aircrafts: Hearing Before the Economic and Commercial Law Subcomm. of the H. Comm. on the Judiciary, 103d Cong. 119–30 (1994) [hereinafter Stearman Hearing] (statement of Ronald O. Stearman, Professor in Engineering, The University of Texas at Austin), available at 1994 WL 233061.

^{54.} The "twenty-four times higher" assertion was the subject of much debate during litigation involving the V-Tail. Beechcraft lawyers argued that the V-tail was really "only" eight times more likely to break up in flight, and that the accident disparity between the two models was actually due to the unusually safe design of the straight-tail Bonanza design. See generally Kurt Hoover & Wallace T. Fowler, The University of Texas at Austin, Texas Space Grant Consortium, Studies in Ethics,

250 V-tails experienced fatal in-flight breakups.⁵⁵ Beechcraft representatives continually denied the existence of a design flaw, instead claiming the accidents resulted from pilot error.⁵⁶ In the end, the Federal Aviation Administration (FAA) issued an Airworthiness Directive (AD)⁵⁷ that mandated the addition of structural supports to the tail section of the entire V-tail fleet, virtually ending the structural failures.⁵⁸ In the case of the V-tails, opponents contended, a statute of repose could have wrongfully denied the victims' families rightful recovery from those responsible for their injuries.⁵⁹

C. Confusion over the Definition of "General Aviation"

Ironically, one of the least discussed issues during the congressional hearings was which aircraft GARA would ultimately cover. Throughout the hearings, most testimony reflected an assumption that GARA was conceived to give relief solely to the light, piston-powered, single-engine market.⁶⁰ The bill that was eventually signed into law, however, covered far more than that small segment of the aviation market.⁶¹

The term "general aviation" can have two very distinct meanings in the aviation community. In a legal sense, "general aviation" "describes any aircraft other than a military or scheduled airline flight, ranging from gliders to large, non-scheduled cargo jets."⁶² Informally, "general aviation" can also connote the much smaller subset of civil aviation aircraft that is typified by the light, piston-powered, single-engine aircraft, typically flown by its owner (or a renter), primarily for pleasure.⁶³

During the legislative hearings, witnesses and sponsors almost exclusively relied on the more narrow definition of "general aviation."⁶⁴

Safety, and Liability for Engineers, http://www.tsgc.utexas.edu/archive/general/ethics/vtail.html (last visited May 11, 2008).

^{55.} Id.

^{56.} Id.

^{57.} An AD is a regulatory notice issued by the FAA that informs operators of possible unsafe conditions that may be present in aircraft and prescribes mandatory steps to address the issues. 14 C.F.R. 39.3–.11 (2007).

^{58.} Airworthiness Directives; Beech Aircraft Corporation 35 Series Airplanes, 59 Fed. Reg. 49,785-02 (Sept. 30, 1994).

^{59.} Stearman Hearing, supra note 53.

^{60.} See, e.g., 140 CONG. REC. S2438 (1994).

^{61.} See 49 U.S.C. § 40101 note § (2)(c) (2000).

^{62.} DICTIONARY OF AERONAUTICAL TERMS, supra note 8, at 238.

^{63.} See, e.g., Press Release, Aircraft Owners and Pilots Association, General Aviation and Homeland Security (Jan. 23, 2004), http://www.aopa.org/whatsnew/newsitems/2002/020621_homeland_security.html ("More than 70% of the [general aviation] fleet are small, single-engine aircraft with six or fewer seats.").

^{64.} E.g. H.R. REP. NO. 103-525(II), at 6-7 (1994), reprinted in 1994 U.S.C.C.A.N. 1644 (statement of Cessna CEO Meyer that "[i]f we don't get this legislation it [production of piston

Yet mysteriously, the drafters used the much more expansive definition when the bill was finally approved.⁶⁵ By defining "general aviation aircraft" as any aircraft originally⁶⁶ type-certificated for nineteen passengers or less, not engaged in scheduled passenger-carrying operations, Congress immunized an enormous segment of manufacturers against liability.⁶⁷ For instance, because GARA did not mention the type of aircraft known as powerplant, virtually every manufacturer of business jets qualifies for GARA protection.⁶⁸ The enactment of this broader language was an incredible stroke of fortune for manufacturers. For example, in the case of Textron, the parent company of Cessna, Lycoming Aircraft Engines, and Bell Helicopter, the scope of the liability limitation now extended beyond just the piston-powered line of Cessna single-engine aircraft, to include the entire range of Cessna business jets, as well as Bell Helicopter's complete line of civil rotorcraft—a result never debated during the hearings.⁶⁹

D. Was Unfettered Liability Really the Cause of General Aviation's Decline?

Another area only minimally explored during the hearings was whether the downturn in piston-powered light aircraft manufacturing was purely the result of extraordinary litigation costs, or whether there were other market factors at work. Because turbine-powered business aircraft were changing the face of the aviation market at the time, it was an open question whether the proposed legislation would have the desired effect of revitalizing the light plane industry.⁷⁰ The incorporation of ever more complex technology has resulted in revolutionary transformations in the civil aviation market; the costs associated with these technological

aircraft] is all academic. We are not going to go back into production of single engine aircraft. We will stay building jets and build turbine aircraft where that is not a factor.").

^{65.} Mr. Meyer apparently had a hand in the actual drafting of the final version of the bill. Nathan J. Rice, Comment, *The General Aviation Revitalization Act Of 1994: A Ten-Year Retrospective*, 2004 WIS. L. REV. 945, 969.

^{66.} See infra Part IV.C.

^{67.} See Panel Discussion, supra note 40 (76% of all general aviation aircraft were immunized upon GARA's passage).

^{68.} Only a few exceptionally large business jets fall outside of GARA's coverage. For example, Gulfstream's 550 business jet, a turbine-powered aircraft that weighs 90,000 pounds, flies at an approximate speed of 550 miles per hour, has a range of more than 6,500 miles, and costs more than \$35 million, would be covered by GARA in its typical interior configuration.

^{69.} Bell Helicopter received an additional windfall following the Kennedy decision. See infra Part IV.A.

^{70.} See Anton, supra note 41, at 795 (arguing that GARA simply freed up industry funds that could be used to produce more profitable turbine and jet aircraft rather than to restart the production of light piston aircraft).

advances could have been a major factor in the decline in the U.S. light plane market.

Until the 1960s, aircraft operated for business purposes were almost exclusively piston-powered.⁷¹ With the advent of affordable, turbine-powered engines suitable for small- and mid-size aircraft, buyers who would have purchased a piston-powered aircraft by necessity now have the option of purchasing a turbo-prop or jet aircraft that can fly higher, farther, and faster. Purchasers often justify the increased cost of these aircraft by the increased utility they provide.⁷² Turboprop aircraft are more reliable than piston-powered aircraft; moreover, they are faster by a wide margin; haul more weight; fly higher; and offer a smoother, quieter ride, greater safety, and more prestige.⁷³ Jet aircraft offer performance that is even better than the turbo-props.⁷⁴ This market change could conceivably have been just as responsible for the decline in the American light plane market as was unfettered product liability.⁷⁵

Another important factor to consider when evaluating the changes that occurred in the light aircraft market during the 1980s was the proliferation of more advanced avionics.⁷⁶ Progress in air navigation was the result of not only more reliable engines and more capable airframes but also better navigation, communication, weather monitoring, and collision avoidance equipment. These improved electronic accessories, however, elevated the costs of newer aircraft exponentially over earlier-generation aircraft.⁷⁷ For example, in 1958, the base model Cessna 172 sold for \$8,995,⁷⁸ or \$66,337.25 when corrected for inflation.⁷⁹ In contrast, a base

73. See AirCharterGuide.com, Aircraft Choices, http://www.aircharterguide.com/AircraftTypes.aspx (last visited May 11, 2008).

^{71.} One of the first turboprop business aircraft brought to market, the Gulfstream I, was put into production in the mid-1950s. The first small jet aircraft produced on a mass scale was the Learjet 23, which was first offered to the public in 1964. Roger Guillemette, U.S. Centennial of Flight Commission, Business Aircraft,

http://www.centennialofflight.gov/essay/GENERAL_AVIATION/business/GA14.htm (last visited May 11, 2008).

^{72.} Justifying Private Jets for Business, CNN.COM, Feb. 6, 2005, http://www.cnn.com/2005/TRAVEL/02/02/bt.business.jets/index.html.

^{74.} Id.

^{75.} See Guillemette, supra note 71.

^{76.} Avionics is defined as "the branch of technology that deals with the design, production, installation, use, and servicing of electronic equipment mounted in aircraft." DICTIONARY OF AERONAUTICAL TERMS, *supra* note 8, at 47. In this Comment, the term is used to refer to the integrated electronic equipment of an aircraft.

^{77.} Today, the cost of an aircraft's avionics can exceed the cost of the airframe and engine combined.

^{78.} Wikipedia.com, Cessna 172, http://en.wikipedia.org/wiki/Cessna_172 (last visited May 11, 2008).

^{79.} Tom's Inflation Calculator, http://www.halfhill.com/inflation.html (last visited May 11, 2008).

model 2007 Cessna 172R Skyhawk, the least expensive aircraft Cessna now sells, currently lists for \$234,500.⁸⁰ Adding four factory avionics upgrades to an already impressive avionics suite can increase that price to approximately \$260,000.⁸¹ This dramatic increase in entry level cost could also have had seriously depressed aircraft sales; thus, technology costs, not product liability costs, might have been the driving force behind the economic downturn that created the impetus for GARA.

Manufacturers, of course, claimed that prices were climbing chiefly due to the oppressive cost of liability insurance, not because of the more advanced equipment being integrated into newer aircraft.⁸² The manufacturers, however, refused to disclose their insurance costs to Congress. Instead, Congress was asked to take the actual cost of manufacturers' liability insurance premiums on faith.⁸³ When asked directly what Cessna's insurance costs were, CEO Russ Meyer responded that actual costs were a corporate secret and disclosure of this sensitive information would put the company at a competitive disadvantage.⁸⁴ Mr. Meyer did say, however, that Cessna was self-insured for the first \$30 million of any claim.⁸⁵ An unfortunate side effect of the nondisclosure of actual manufacturer insurance premiums was that Congress was denied the most direct measure of the ultimate effectiveness of GARA. If manufacturers' insurance costs have decreased post-GARA, the statute's costs cannot be balanced against its benefits.

III. GARA IN HINDSIGHT

This Part will examine how the arguments made by GARA's proponents and opponents have fared after the passage of more than a decade. The first Section will focus on the proponent's arguments, while the second will examine the arguments made by GARA's opponents and whether these latter voices have any legitimate claims in light of the rebound of the U.S. light plane market after GARA.

^{80. 2008 172}R Skyhawk Price List, http://se.cessna.com/pdf_pricing/172R_Skyhawk_Pricelist_Equipment.pdf (last visited May 11, 2008).

^{81.} Id. (adding the following optional equipment: TAWS-B Terrain, ADF KR87, DME KN63, and C406N).

^{82.} See 140 CONG. REC. S3006, S3007 (1994) (Sen. Danforth citing Beechcraft's estimation that litigation costs added \$70,000 to the price of each new aircraft); John H. Boswell & George Andrew Coats, Saving the General Aviation Industry: Putting Tort Reform to the Test, 60 J. AIR L. & COM. 533, 537 (1995).

^{83.} See Anton, supra note 41, at 809.

^{84.} See id.

^{85.} Id.

A. The Proponent's Arguments

When aviation manufacturing advocates evaluate the effects of the GARA tort reform experiment, one success almost universally attributed to the its passage is the reopening of the Cessna piston aircraft production line.⁸⁶ Just as Russ Meyer promised, with the end of the indefinite product liability, Cessna restarted its production of single-engine piston aircraft.⁸⁷ Only two years after GARA was signed into law, the first new Cessna 172R rolled off the assembly line in Independence, Kansas.⁸⁸ Production numbers have approached the industry predictions given during the hearings. As of 2005, U.S. piston-engine production had climbed to 2,024 units, almost precisely the amount Cessna predicted it would sell within five years of GARA's passage.⁸⁹

Proponents of GARA were also successful in predicting the job growth the statute would stimulate. The General Accounting Office estimates 25,000 new jobs have been created, precisely the number predicted at the hearings. Few could point to these statistics as being anything less than an unqualified indication of GARA's success.

B. The Opponent's Arguments

In spite of the vindication that GARA's advocates may claim, the voices in opposition to GARA were also largely accurate in their predictions as well. The savings that the manufacturers were to reap had to come from somewhere. GARA was supposed to shift the risks of light aircraft production from manufacturers to operators and maintenance organizations, which, after eighteen years of using, maintaining, and modifying the manufacturers' products, arguably deserved a larger proportion of liability for accidents.⁹⁰ GARA may have been costless, as far as requiring expenditures from Congress, but removing the manufacturer as the primary target of most aircraft accident litigation has changed the landscape for plaintiffs dramatically. Now, parts manufacturers have become "the new deep pockets" for suits involving GARA-protected aircraft.⁹¹ Maintenance organizations, fixed base operators,⁹² flight schools,

^{86.} See, e.g., Panel Discussion, supra note 40, at 171.

^{87.} Id.

^{88.} Id.

^{89.} GEN. AVIATION MFRS. ASS'N, 2007 GENERAL AVIATION STATISTICAL DATABOOK & INDUSTRY OUTLOOK 16 (2007), available at http://www.gama.aero/events/air/dloads/2007GAMADatabookOutlook.pdf. Additionally, the events of September 11, 2001, together with the economic downturn that followed, must be taken into consideration when evaluating general aviation's comeback.

^{90. 140} CONG. REC. H4998, H4999 (1994) (statement of Rep. Fish).

^{91.} Phillip J. Kolczynski, *GARA: A Status Report*, AVWEB, Jan. 14, 2001, http://www.avweb.com/news/avlaw/181905-1.html.

and owner's insurance policies and assets are also new targets for plaintiffs in accident litigation.⁹³ As a result, insurance premiums for these segments of the aviation community have risen dramatically.⁹⁴ Over the past ten years, for example, some flight schools have reported roughly a threefold increase in their insurance costs.⁹⁵ For businesses with tight profit margins, like flight schools, these added costs threaten their very existence.⁹⁶ Plaintiffs will also face situations where adequate recovery may be very difficult, especially in cases alleging wrongful death, because most small aircraft insurance policies are exhausted long before the claims are satisfied.⁹⁷

In the end, then, it is difficult to say that GARA was a complete success or a complete failure. The answer probably lies somewhere in between. The light aircraft manufacturing industry has experienced a dramatic recovery, close to the levels anticipated by GARA's proponents during the hearings.⁹⁸ Yet the costs of purchasing, operating, and maintaining these new aircraft have continued to rise, pushing a once-feasible aspiration of a middle-income family, purchasing a new piston-powered aircraft, out of the realm of reality.⁹⁹ Without a doubt, the advanced technology promised by the manufacturers after GARA's passage is also having a dramatic effect on the costs of new aircraft.¹⁰⁰ Advents like the owner-flown very light jet¹⁰¹ mark the first viable intersection of jet technology with small personal aircraft, signaling a new age in personal air transportation, albeit only for the wealthiest consumers.¹⁰² Ultimately, it may not be possible to say whether the post-GARA light aircraft market boom was actually created by GARA, or if this result in fact had little

98. Press Release, General Aviation Manufacturers Association, supra note 1.

^{92.} A fixed base operator is a retail firm that sells general aviation products or services at an airport. Avjobs.com, Airport FBO Jobs, http://www.avjobs.com/careers/detail.asp?RecID=47 (last visited May 12, 2008).

^{93.} Interview with Robert F. Hedrick, supra note 4.

^{94.} See Rodriguez, supra note 38, at 598.

^{95.} See id.

^{96.} For example, the former owner of a flight school, at which the author once trained, now only provides instruction in aircraft provided by his students, solely because of oppressive insurance premiums.

^{97.} Can Aircraft Owners Avoid Personal Liability for Air Crashes?, AVIATION L. NEWSL. (Phillip J. Kolczynski Law Corp., L.A., Cal.), Sept. 1998, http://www.aviationlawcorp.com/content/newsltr3.html.

^{99.} See supra Part II.D.

^{100.} See supra notes 76-81 and accompanying text.

^{101.} Very light jets generally weigh less than 10,000 pounds and are certified for single-pilot operation. Wikipedia, Very light jet, http://en.wikipedia.org/wiki/Very_light_jet (last visited May 12, 2008).

^{102.} See David Collogan, Cessna Targets Entry-Level Market with Mustang, SHOWNEWS ONLINE, http://www.aviationweek.com/shownews/02nbaa/topsto2_20.htm (pricing Cessna's new "entry-level" very light jet at approximately \$2.3 million).

to do with manufacturer liability, but instead was caused by the numerous factors at work in this complex market.

IV. JUDICIAL INTERPRETATION OF GARA

One of the measures that any thorough evaluation of GARA must include is the statute's cost to society. Though it did not affect the federal budget, GARA had a huge effect on at least one class of citizens—litigants.¹⁰³ With its passage, Congress rewrote the book on case strategy for both plaintiffs and defendants. Nowhere is this effect seen more clearly than in decisions where courts have acted to clarify and define the actual scope, meaning, and application of GARA.

In this Part, three cases will be examined. First, *Estate of Kennedy* v. *Bell Helicopter Textron, Inc.*¹⁰⁴ discusses the controversial role the issuance date of an aircraft's type certificate plays regarding GARA applicability and is critical in clarifying how certain elements of GARA should be interpreted in the Ninth Circuit. Second, *Hiser v. Bell Helicopter Textron Inc.*¹⁰⁵ analyzes the effect on the GARA repose period when elements of an aircraft's systems are replaced with new parts or the system is reconfigured by movement of the original parts. Finally, *Croman Corp. v. GE Co.*¹⁰⁶ examines what an "original" airworthiness certificate actually is.

A. Estate of Kennedy v. Bell Helicopter Textron, Inc.

Estate of Kennedy v. Bell Helicopter Textron, Inc. is a Ninth Circuit case concerning the fatal crash of a TH-1L helicopter involved in quick-turnaround, heavy-lift logging operations.¹⁰⁷ The accident occurred when the aircraft experienced a catastrophic structural failure at treetop level while carrying a heavy load of timber slung underneath the aircraft.¹⁰⁸ The proximate cause of the failure was fatigue-induced cracking of the left-hand forward spar of the vertical fin of the tail boom, the structure which supports the aircraft's tail rotor assembly.¹⁰⁹

^{103.} Interview with Robert F. Hedrick, supra note 4.

^{104. 283} F.3d 1107 (9th Cir. 2002).

^{105. 4} Cal. Rptr. 3d 249 (Cal. Ct. App. 2003).

^{106.} No. 2:05-cv-0575-GEB-JFM, 2006 WL 3201099 (E.D. Cal. Nov. 2, 2006).

^{107.} Kennedy, 283 F.3d at 1109. Helicopter logging involves the lifting of cut logs from inaccessible areas like steep slopes onto logging trucks. Interview with Franklin L. Smith, *supra* note 44. 108. Kennedy, 283 F.3d at 1109.

^{109.} Id. One critical purpose of the tail rotor is to counteract the torque of the main rotor. DICTIONARY OF AERONAUTICAL TERMS, *supra* note 8, at 502. Without this offsetting force, the hull of the helicopter would freely rotate in the opposite direction of the rotor. If more power is added to the main rotor, an equivalent amount of antitorque force must be added with the tail rotor. Every-thing₂, Helicopter yaw control (May 29, 2003), http://everything2.com/e2node/Helicopter%2520yaw%2520control. In heavy-lift situations, the

Bell delivered the helicopter in question to the Navy in 1970 as a public aircraft.¹¹⁰ In 1984, the Navy declared the aircraft surplus; Garlick Helicopters Inc., an organization that specializes in refurbishing exmilitary helicopters for heavy-lift operations, ultimately purchased it.¹¹¹ In 1986, the aircraft successfully completed a conformity check¹¹² conducted by the FAA and was issued its first airworthiness certificate.¹¹³ The crash occurred ten years later.¹¹⁴

The question presented in *Kennedy* was when the repose period began to run in the case of a public aircraft delivered without an airworthiness certificate yet in possession of one at the time of the accident.¹¹⁵ GARA covers only "general aviation" aircraft, i.e., those that have at one time been issued an airworthiness certificate, where the original certificate indicates the aircraft has less than twenty passenger seats, and where the aircraft is not carrying scheduled passengers at the time of the accident.¹¹⁶ According to the *Kennedy* court, the statutory language of GARA indicates that the eighteen-year period should begin to run at the aircraft's delivery to its first owner, even if the aircraft was not yet legally a part of the general aviation fleet.¹¹⁷ The statutory period, the court said, looks back to the aircraft's first delivery date, as long as the aircraft in question is part of the general aviation fleet *at the time the accident occurs*.¹¹⁸

Thus, according to the *Kennedy* decision, an aircraft manufacturer has no real control over future GARA applicability to any aircraft it manufactures without an airworthiness certificate, e.g., public aircraft. GARA protection will ultimately be determined not only by the elapsed time between the date of the aircraft's delivery and the accident, but also

loads carried by the fin and tail boom assemblies are considerable. Adding to the stress that the fin spar must endure is the heavy cycling inherent in helicopter logging, where loads are lifted and dropped many times per hour. These load cycles eventually cause work hardening, which reduces the structural integrity of the fin spar. This work hardening effect can be simply demonstrated by repeatedly bending a paperclip until it snaps.

^{110.} *Kennedy*, 283 F.3d at 1112. A public aircraft is defined as an aircraft used only in governmental service; government-owned aircraft engaged in carrying persons or property for commercial purposes fall outside of the definition. 14 C.F.R. § 1.1 (2007).

^{111.} Kennedy, 283 F.3d at 1111; Interview with Franklin L. Smith, supra note 44.

 ^{112.} A conformity check is a physical examination of the aircraft and its records, conducted to determine if the aircraft is in conformity with FAA regulations for a given status. National Business Aviation

 Association,
 Flight
 Department
 Operations, http://web.nbaa.org/public/ops/faq/cache/294.html (last visited May 12, 2008).

^{113.} Kennedy, 283 F.3d at 1112.

^{114.} Id.

^{115.} *Id*.

^{116. 49} U.S.C. § 40101 note § 2(c) (2000).

^{117.} Kennedy, 283 F.3d at 1112.

^{118.} See id.

by events not under manufacturer control: (1) whether an "original"¹¹⁹ airworthiness certificate specifying less than 20 passenger seats had been issued to the aircraft prior to the crash and (2) whether the aircraft is engaged in scheduled passenger carriage at the time of the accident.¹²⁰ The *Kennedy* holding broadened the scope of GARA immunity by absolving manufacturers from liability for any accident involving one of the thousands of surplus public aircraft now in the civil aviation fleet.

B. Hiser v. Bell Helicopter Textron Inc.

Hiser v. Bell Helicopter Textron Inc. is perhaps best known for its painstakingly thorough opinion regarding GARA's applicability to modifications of an aircraft's systems by the movement of existing parts within that aircraft.¹²¹ Courts in any jurisdiction facing an issue involving system modifications under GARA can reasonably be expected to utilize the *Hiser* court's exhaustive reasoning in fashioning a decision.

Hiser revolves around a Bell 206L-1 LongRanger helicopter that crashed when its engine suffered a flame-out in July 1997, eighteen years and seven days after delivery.¹²² The plaintiff's theory of the case focused on faulty fuel flow switches,¹²³ which had allegedly allowed the pilot to run out of fuel without notification. As early as 1981, Bell had received reports of engine flameouts from fuel starvation when fuel still remained in the aircraft's tanks.¹²⁴ These incidents prompted a series of modifications and additions to the fuel transfer system, including the relocation of two inline fuel filters, the replacement of the fuel transfer fuel flow switches, and revised operating procedures.¹²⁵ Eventually, these recommended changes became mandatory for all operators when, at Bell's request, the FAA issued an AD requiring compliance.¹²⁶

After methodically explaining how the LongRanger's fuel transfer system was designed to work, the court ruled that the plain language of GARA indicates that the eighteen-year clock should not restart if original parts are merely moved to new locations within the existing system. In

^{119.} See infra Part IV.C.

^{120. § 2(}c).

^{121. 4} Cal. Rptr. 3d 249, 251 (Cal. Ct. App. 2003).

^{122.} *Id.* at 252. A flame-out is a failure of a turbine engine caused by an interruption of the fuel supply or by faulty combustion. TheFreeDictionary, flame-out, http://www.thefreedictionary.com/flame-out (last visited May 12, 2008).

^{123.} Id. at 253. Fuel flow switches (or fuel flow transmitters) are devices used to measure the amount of fuel flowing within a fuel line. DICTIONARY OF AERONAUTICAL TERMS, *supra* note 8, at 232.

^{124.} Hiser, 4 Cal. Rptr. 3d at 254.

^{125.} Id.

^{126.} See Airworthiness Directives; Bell Helicopter Textron, Inc. (BHTI), Model 206A, 206B, 206B-1, 206L, 206L-1, and 206L-3 Helicopters, 54 Fed. Reg. 26,953-01 (June 27, 1989).

other words, a modification to a system, such as moving a fuel flow transducer to a new location, does not constitute a new or replaced system under GARA.¹²⁷ Moreover, the court held that the replacement of discrete parts in a system does not constitute a new or replaced system, even if causes the system to function in a completely different way.¹²⁸ The eighteen-year period, therefore, restarts only if new parts are installed in the aircraft; modifications do not restart the GARA repose period, no matter how the original parts are reemployed in the aircraft.

If the Hiser court's interpretation is correct, GARA actively promotes the juggling of parts over the issuance of a repair involving new parts. This result runs counter to the widely acknowledged public policy interest in the promotion of safety. The court's reasoning rests on a plain language analysis of the meaning of "replacement."¹²⁹ This analysis, while literally accurate, ignores the fact that a system's function and design is new if it is configured in a different way. To illustrate the absurd implications of the court's decision, consider that currently, a mechanic may not legally "approve for return to service"¹³⁰ any system that is not configured in accordance with "approved data,"¹³¹ such as the Manufacturer's Maintenance Manual. This rule prevents mechanics from experimentally reconfiguring an aircraft's systems. Thus, the FAA regards a mechanic's experimental shuffling of parts as an unacceptable reconfiguration because it is not in accordance with the type certificate.¹³² Why. then, should manufacturer-approved reshuffling be acceptable, when the manufacturer cannot be held liable for injuries that result from its negligent failure to fix an existing problem or its creation of a new hazard? Under this scenario, a plaintiff would inexplicably be denied the right to recover for injuries caused by a system that is negligently altered by a manufacturer after GARA's protection kicks in. The Hiser court did, at least, acknowledge this possibility, noting that Congress could add modifications to the list of actions that would restart the GARA repose period.¹³³ Plainly, Congress should do so as soon as practicable in order to eliminate this unjust loophole.

^{127.} Hiser, 4 Cal. Rptr. 3d at 257.

^{128.} Id.

^{129.} Id.

^{130. &}quot;Approval for return to service" is a term of art utilized by the FAA to signify acknowledgment of properly performed work on an aircraft. See 14 C.F.R. §§ 43.5, .9(a)(4) (2007).

^{131. &}quot;Approved data" is information approved by the FAA and is the only information that federal regulations allow to be used in maintaining aircraft. DICTIONARY OF AERONAUTICAL TERMS, *supra* note 8, at 36.

^{132.} See § 43.13 (requiring that aircraft maintenance be conducted using "methods, techniques, and practices . . . acceptable to the Administrator").

^{133.} Hiser, 4 Cal. Rptr. 3d at 257.

C. Croman Corp. v. GE Co.

The court in *Croman Corp. v. GE Co.*, in the context of a summary judgment ruling, had the opportunity to examine the meaning, under GARA, of the term "originally issued," as applied to an airworthiness certificate. ¹³⁴ The case involved a Sikorsky S-61A helicopter that lost power while performing logging operations. ¹³⁵ Investigation of the aircraft's records showed that the helicopter was first certificated in the experimental category, ¹³⁶ with no mention made of the aircraft's passenger capacity. The type certificate data sheet ¹³⁷ of certain models of the S-61 *series* of helicopter indicated that some models were approved for the carriage of more than twenty individuals. ¹³⁸ Later, operators of the aircraft changed the helicopter's category from experimental to restricted, adding the express limitation that no passengers were to be flown on the aircraft. ¹³⁹

The plaintiffs attacked GE's and Sikorsky's assertion that GARA protected them from suit, arguing that the helicopter was not a "general aviation" aircraft according to the statute and that therefore their case should survive summary judgment.¹⁴⁰ The plaintiffs noted that the aircraft was *initially* issued an experimental airworthiness certificate, which they believed supported their argument that GARA didn't apply, due to the passenger capacity of the aircraft.¹⁴¹

The court disagreed, interpreting GARA's "original issuance" provision to apply to situations in which the aircraft had later been converted to another category or classification that required a subsequent airworthiness certificate.¹⁴² Therefore, the earliest airworthiness certificate that brought the aircraft into *its current category* is the original certificate for GARA purposes, regardless of how many prior certificates were issued in other categories.

The Croman plaintiffs also lost their argument that GARA's reference to "passengers" meant the total number of persons the aircraft could

138. Croman, 2006 WL 3201099, at *3-4.

^{134.} No. 2:05-cv-0575-GEB-JFM, 2006 WL 3201099, at *3 (E.D. Cal. Nov. 2, 2006).

^{135.} Id. at *1.

^{136. &}quot;As used with respect to the certification of aircraft, [category] means a grouping of aircraft based upon intended use or operating limitations. Examples include: transport, normal, utility, acrobatic, limited, restricted, and provisional." § 1.1.

^{137.} A type certificate data sheet comprises "[t]he official specifications of an aircraft, engine, or propeller issued by the Federal Aviation Administration." DICTIONARY OF AERONAUTICAL TERMS, *supra* note 8, at 530.

^{139.} Id. at *2.

^{140.} Id.

^{141.} Id. at *3.

^{142.} Id.

carry, crew included.¹⁴³ The court noted that the number of "passengers" for GARA purposes would be consistent with the FAA's definition, which does not include required crewmembers.¹⁴⁴ Under GARA, then, a general aviation aircraft with more than nineteen *noncrewmember* seats cannot be certified.¹⁴⁵ The upshot in *Croman* was the entering of summary judgment in favor of the defendants.¹⁴⁶

It is doubtful whether, at the time of GARA's passage, Congress understood the subtle distinctions between common sense understandings of terms like "passengers" and "original issuance" and the FAA's more specialized definitions. In sum, *Croman* provides one more example of product defect victims and their attorneys being forced to struggle with the application of an unclear and unintuitive law.

V. RECOMMENDATIONS

Once GARA's flaws are recognized, the question becomes, "What can be done to correct its shortcomings?" This Part will both examine problematic areas of GARA that Congress should address in the interest of equity and recommend specific amendments that will minimize its deficiencies. Specifically, this Part recommends (1) the exemption of third party property damage claims from GARA's provisions; (2) the narrowing of GARA's definition of "general aviation aircraft"; (3) the inclusion of the issuance date of an aircraft's initial type certificate or airworthiness certificate in the calculus of whether to grant GARA immunity; (4) the implementation of a viable system of determining when a "used" part is covered by GARA; (5) the provision of notice to pilots and passengers if their aircraft is covered by GARA; and (6) the restarting of the repose period upon aircraft system modifications.

A. Third Party Property Damage Claims Should Be Exempted from GARA Protection

Although GARA's exceptions are generally well thought out, there is one glaring omission that could lead to great injustice: GARA does not contain an exception allowing third parties to recover for property damage.¹⁴⁷ Because of this omission, a property owner might have no viable

^{143.} Id. at *4.

¹**44**. *Id*.

^{145.} See id. at *1–5.

^{146.} Id. at *8.

^{147.} Robert F. Hedrick, A Close and Critical Analysis of the New General Aviation Revitalization Act, 62 J. AIR L. & COM. 385, 414 (1996).

means of recovery for property damage caused by the crash of a defective aircraft, merely because the aircraft is over eighteen years old.¹⁴⁸

The lack of a property damage exception is completely at odds with common notions of fairness and justice.¹⁴⁹ Equitable principles almost universally allow for the recovery of damages in situations where a third party's property is damaged by the negligent acts of another.¹⁵⁰ GARA allows *persons* on the ground to recover if they are injured or killed due to a design or manufacturing defect in a GARA-covered aircraft, yet the property of these same individuals is mysteriously left unprotected.¹⁵¹ Nothing in the legislative record indicates that Congress intended to bar property owners from recovering damages for harm to their belongings, and there is simply no argument or justification for such an outcome. Third party property claims are typically insubstantial when compared to claims for wrongful death. Moreover, no manufacturer cited property damage claims as being a form of liability from which they required relief. Adding third party property damage claims to the list of GARA exceptions would close a loophole that serves no logical purpose.

B. Amend GARA's Definition of "General Aviation Aircraft"

The congressional hearings preceding the enactment of GARA make plain that the final language of the statute created a scope of coverage that was far broader than its proponents indicated through their testimony. While there is no evidence of intentional misrepresentation on the part of these witnesses, the general aviation manufacturing industry got far more benefit at the expense of product liability plaintiffs than anyone present at the hearings could have reasonably expected.¹⁵² After the House hearings, the proposed bill was described as "a *narrow* and considered response to the 'perceived' liability crisis in the general aviation industry."¹⁵³ The version of GARA later signed into law, however, was drafted unreasonably broadly.¹⁵⁴

The *Kennedy* court's definition of a "general aviation aircraft" serves as a bellwether for the overbreadth of GARA's scope.¹⁵⁵ The general aviation industry may contend that Congress was fully informed when it enacted GARA, and that the statute expresses the clear intent of

^{148.} See supra Part III.B.

^{149.} See, e.g., WILLIAM L. PROSSER, TORTS CASES AND MATERIALS 548 (2005).

^{150.} *Id.*

^{151. 49} U.S.C. § 40101 note § 2(b)(3) (2000).

^{152.} See supra Part II.C.

^{153.} H.R. REP. No. 103-525(11) (1994), reprinted in 1994 U.S.C.C.A.N. 1644 (emphasis added).

^{154.} See supra Part II.C.

^{155.} See supra Part IV.A.

that body. But opponents of GARA's overbreadth can rightly rebut this claim by pointing to the fact that no one offered arguments at the hearings supporting the release of manufacturers from liability regarding turbine-powered, ex-military aircraft. The fact that GARA applies to the cargo version of Boeing's 747 jumbo jet, if operated as an on-demand charterer, for example, casts doubt on any industry claim that GARA's current scope was intended or warranted.

Congress needs to narrow GARA's scope to accurately reflect the statute's original intent; GARA should cover only piston-powered aircraft that weigh no more than 12,500 pounds.¹⁵⁶ If Congress believes that the rest of the aerospace manufacturing community requires relief from product liability, that issue should be decided on its merits, after open hearings.

C. The Issuance Date of an Aircraft's Initial Type Certificate or Airworthiness Certificate Should Be Included in the Calculus of Assigning Liability

The Ninth Circuit's decision in *Kennedy* has created a situation in which an aviation manufacturer has no control over which of its aircraft will eventually be covered by GARA.¹⁵⁷ In *Kennedy*, the court ruled that an aircraft's initial delivery date controlled the running of the repose period, irrespective of the existence of a valid airworthiness certificate at that time.¹⁵⁸ Adding to the confusion is the indeterminate status of aircraft rebuilders. Are they manufacturers under GARA? According to the *Kennedy* court, they would not be.¹⁵⁹ In that case, Bell unsuccessfully tried to claim that Garlick, not itself, was the legal manufacturer of the aircraft.¹⁶⁰ Because some rebuilders actually construct a "new" airplane around an existing data plate,¹⁶¹ while others merely compile the necessary paperwork for issuance of an airworthiness certificate for a surplus public aircraft, liability is not accurately apportioned to these "manufacturers" according to their likely fault in proximately causing an accident.¹⁶²

^{157.} See supra Part IV.A.

^{158.} Kennedy, 283 F.3d at 1112.

^{159.} Id.

^{160.} Id. at 1109.

^{161.} A data plate is a fireproof plate inscribed with certain FAA-mandated information that is required to be secured to certificated aircraft and their engines, propellers, and propeller blades. 41 C.F.R. § 102-33.20 (2008).

^{162.} Under Kennedy, a person who "builds" an aircraft around a data plate will never get the benefit of GARA protection. Thus, GARA does more to protect aircraft "designers" than aircraft

The confusion created by the *Kennedy* decision demands resolution. Part of the problem is GARA's overbreadth. Nevertheless, the issues of the amount of liability that should rightfully be placed on the certificating party and how the repose period should be adjusted for aircraft that have been in service for years before certification are, for now, dormant. Congress should hold additional hearings on this subject. Open debate would allow each side to argue its case in a public forum, thus facilitating a fairer assessment of the interests and consequences surrounding any proposed amendment of GARA.

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D. Create a System to Determine When a Used Part Is Covered by GARA

The lack of a method of determining the initial installation dates of the millions of previously installed parts currently flying in aircraft is a serious flaw in GARA. Beyond those specific aircraft accessories which generally carry their own individual logs, such as propellers rotors and engines,¹⁶³ there is absolutely no reliable means of determining prior installation dates of replacement parts, other than by review of the donor aircrafts' logs, if they can be found.¹⁶⁴

None of the witnesses testifying regarding the enactment of GARA anticipated the potential logistical problems that could confront those trying to determine the running of GARA's repose period for specific replacement parts. While no case has yet dealt with this issue directly, the *Hiser* court's analysis of whether a part or system caused the accident provides an inkling of the difficulties that lie ahead. Currently, we can only speculate about what a court might do when faced with the question of whether GARA forecloses a wrongful death action brought after a replacement part of indeterminate installation date has served as the clear proximate cause of a fatal aircraft crash. Assuming that a factual predicament of this nature would survive summary judgment and go to the jury, it would, nonetheless, prove impossible for a plaintiff to sustain his or her burden of proof due to the lack of a uniform system tracking the

[&]quot;builders." Experimental aircraft builders, however, should receive GARA protection (if they are named as the manufacturers on the data plate) that companies specializing in producing experimental designs and kits might not. Currently, it is not clear whether aircraft kit suppliers will qualify for GARA protection as parts manufacturers because their parts are not certified as "aircraft parts" prior to certification of the finished aircraft.

^{163.} Engines, propellers, rotors, and appliances are required to have maintenance, preventative maintenance, and alterations recorded in a log. 14 C.F.R. § 91.417 (2008). In the author's experience, aircraft owners typically maintain separate logs for, at a minimum, engines, rotors, and propellers.

^{164.} Though certain life-limited parts must have tracking documentation regarding certain aspects of their service history, data regarding initial installation date is generally not required. See id.

first installation date of used parts. The plaintiff would be denied justly deserved relief because of a logistical flaw in the system underlying the statute.

Two obvious potential solutions to this problem are (1) restarting the repose period for the part itself when it is replaced or (2) requiring mandatory tracking of all aircraft parts. Conceivably, such a system could be implemented by including with every replacement part a tracking document that both lists the particulars of every installation and removal and follows the part until it is scrapped. Functionally, this would be the equivalent of requiring the establishment and maintenance of a log for every part removed or installed on an aircraft. Understandably, both of these solutions are far from ideal. Mandatory tracking would place a huge financial and logistical burden on the entire aviation community and would, therefore, likely be resisted by all of its members.

A less burdensome alternative would entail documenting part installation dates only as they are removed from the original aircraft. This option would reduce both paperwork and labor while solving the first installation date problem. Unfortunately, the lack of an adequate tracking procedure regarding parts that that are already in the system is a problem that will likely remain unsolved, regardless of which tracking method is ultimately selected.¹⁶⁵ With respect to such parts, an adequate tracking method may prove unobtainable.

E. Notice Should Be Provided to Pilots and Passengers if an Aircraft Is Protected by GARA

Currently, after an aircraft accident, injured passengers or pilots, for example, might discover that their otherwise valid claims against the aircraft's manufacturer are barred by GARA only upon the dismissal of their complaints. Passengers and pilots should be notified much earlier of GARA's limitation on liability. Passengers on commercial flights, for example, are given notice on their tickets if their potential accident recoveries are limited by the Warsaw¹⁶⁶ or Montreal¹⁶⁷ conventions. Also, federal regulations require owners of experimental aircraft to conspicuously post the fact that these aircraft do not comply with federal safety

^{165.} To reduce the potential administrative burden, the tracking requirement might take effect only as parts are removed from their original aircraft.

^{166.} The Warsaw Convention is an international convention regulating liability in the area of for-profit international carriage of persons, luggage, or goods by aircraft. Wikipedia, Warsaw Convention, http://en.wikipedia.org/wiki/Warsaw_Convention (last visited May 12, 2008).

^{167.} The Montreal Convention is a treaty, adopted in 1999, amending certain provisions of the Warsaw Convention concerning compensation for air disaster victims. Wikipedia, Montreal Convention, http://en.wikipedia.org/wiki/Montreal_Convention (last visited May 12, 2008).

regulations.¹⁶⁸ There is no reason not to warn occupants of any aircraft subject to GARA that their ability to recover damages may be severely limited. One cannot fairly expect a nonexpert passenger to determine the age of an aircraft in which he or she rides, and the consequent legal risk of nonrecovery in the event of injury, purely on the aircraft's general appearance.¹⁶⁹

One plausible solution to this problem is a requirement that a placard be conspicuously posted on the aircraft on or before its "eighteenth birthday." This placard could be affixed without a determination of whether GARA actually protects that particular aircraft. Instead, the placard could simply indicate that GARA will limit recovery when the statute's conditions are met. The placard would place aircraft occupants on notice, thus allowing them to determine the actual GARA status of that particular aircraft on their own volition.

One benefit that a GARA placard could provide to manufacturers is the stimulation of greater demand for newer products, due to a perceived loss of value regarding older aircraft. If owners, pilots, and passengers of older aircraft were clearly presented with the potentiality of an automatic "release of liability" under GARA, newer aircraft should become more attractive to the buying and flying public. In addition, the expense of such a program would be minimal—merely the cost of installing the placard, perhaps near the requisite display pouch containing the aircraft's airworthiness certificate. This installation could easily be incorporated into the annual inspection checklist¹⁷⁰ of any aircraft seventeen years or older.

While some may argue that this change would be inconsequential to the behavior of the flying public, such an argument is logically flawed. An empirical observation that most small aircraft passengers will not turn down a ride in an experimental aircraft would not effectively support an argument that experimental aircraft should not be conspicuously identified as such. Members of the public deserve notification of the potential GARA bar on recovery in the event they are injured by a defect in the aircraft in which they are about to fly.

^{168.} See 14 C.F.R. § 45.23(b) (2007) (requiring posted notice in letters no smaller than two inches near the cockpit entrance).

^{169.} The maxim that a new paint job hides a multitude of sins holds true for aircraft. Many aircraft have been in production, relatively unchanged, for decades. New paint, or a more recent color scheme, can easily hide the true age of an aircraft. Ladd Sanger, Note, *Will the General Aviation Revitalization Act of 1994 Allow the Industry to Fly High Once Again?*, 20 OKLA. CITY U. L. REV. 435, 463–64 (1995) (arguing that the statute is problematic from the perspective of informed consent because it is difficult for a passenger to determine whether the aircraft hc or she is traveling in is covered by GARA).

^{170.} In general, no person may operate an aircraft unless it has had an annual inspection within the previous year that meets federal guidelines. 91.409(a)(1).

F. System Modifications Should Restart the Repose Period

The *Hiser* court's ruling that system modifications do not restart the repose period is one of the most blatant examples of an unjust judicial interpretation of GARA. The court passed responsibility for its decision on to Congress:

Had Congress wished to draft GARA to cover the circumstances urged by plaintiff, it could easily have written the rolling statute of repose to commence anew whenever a component, system, subassembly, or other part is replaced or *modified*, provided that the replaced or modified component, system, subassembly, or other part caused the alleged damage.¹⁷¹

If Congress amended GARA to allow for rolling of the repose period for modified systems, manufacturers would lose the incentive to produce fixes that only involve the relocation of existing parts. Encouraging manufacturers to experiment with aircraft systems solely by moving parts, with no concomitant liability, is not in the public interest.

The fact that all systems must survive eighteen years at a minimum before manufacturers are immunized should provide a sufficient incentive to motivate manufacturers to initiate fixes. For aircraft systems already beyond the eighteen-year mark, the misrepresentation/concealment exception should dissuade manufacturers from knowingly ignoring defective systems out of fear of removing GARA's protection for them.¹⁷² In addition, an amendment to GARA providing for a rolling repose period for relocated parts would not create an incentive to leave substandard systems in an unsafe condition. Federal regulations impose a duty on manufacturers to report to the FAA serious failures, malfunctions, and defects in any product they manufacture.¹⁷³

V. CONCLUSION

When Congress passed GARA, it created a law with such vague and ambiguous language that any court would be hard pressed to divine its original intent from the statute's wording alone. The interpretation of GARA has inequitably burdened a small class of victims. Manufacturers now enjoy almost total immunity from suit for whole classes of aircraft—classes to which Congress never intended GARA to apply. Congress must shoulder most of the blame for this situation, for two reasons. First, based on the legislative history, it is abundantly clear that GARA

^{171.} Hiser v. Bell Helicopter Textron Inc., 4 Cal. Rptr. 3d 249, 257 (Cal. Ct. App. 2003).

^{172.} See 49 U.S.C. § 40101 note § 2(b)(1) (2000).

^{173. 14} C.F.R. § 21.3 (2008) (generally requiring such reporting within twenty-four hours of discovery).

was sold to Congress as a way to save the U.S. piston-powered, singleengine aircraft market, its attendant job base, and the flight training market that surrounds it—not to subsidize manufacturers of military aircraft or business jets. Second, our courts should not be forced to make resultsoriented decisions in order to avoid the inequities of a poorly drafted law. Reasonable interpretations of statutory language that lead to injustice signal that the statute may be the problem. Legislators cannot anticipate every possibility, and sometimes they just get it wrong. In this case, lawmakers have a duty to correct the injuries promulgated by their pens.

Statutes of repose like GARA serve a valuable purpose: they protect manufacturers from being held to unreasonable standards of liability, and they prevent *in terrorem* settlements grounded on frivolous claims. But the unintended consequences that flow from judicial interpretation of vague statutory language can pose a serious threat to the equitable administration of justice. The individuals wronged by these questionable extensions of GARA should not be written off as unfortunate casualties, justified by the greater good of some utilitarian calculus. When a system of justice has demonstrable faults that lead to injustice for certain groups, it is the duty of those working within that system to alleviate those inequities to the maximum extent possible. Congress must take a hard look at GARA and amend it, in the interest of justice.